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ARTICLES

CYBERDOCTORS: THE VIRTUAL HOUSECALL—THE ACTUAL PRACTICE OF MEDICINE ON THE INTERNET IS HERE; IS IT A TELEMEDICAL ACCIDENT WAITING TO HAPPEN?

BARBARA J. TYLER*

INTRODUCTION

Zhu Ling was suffering.¹ A twenty-one-year-old student in the Chemistry Department at China's Tsinghua University, Zhu became weaker day by day and was dying.² The medical experts who attended her in China were baffled with her array of symptoms.³ Zhu's friends who were studying in the Mechanics

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1. See Wang Chen, *China Expands Information Network*, BEIJING REV., July 1, 1996, available in 1996 WL 11664334. Some facts regarding Zhu Ling and her sudden illness were gleaned from this article.

2. See Naomi Craft, *No Touch Technique (Diagnosis and Treatment Via Internet)*, 312 BRIT. MED. J. 318 (1996). This article chronicles many details of Zhu Ling's 1995 illness and those who aided in its investigation and treatment.

3. *Id.* Zhu Ling initially experienced alopecia (baldness) and transient gastrointestinal distress. Subsequently, she developed a peripheral neuropathy and experienced a respiratory arrest before entering a deep coma. Following a short hospital stay, she recovered and returned to work in the university's industrial chemistry laboratory. However, Zhu once again relapsed and her condition deteriorated. She was readmitted to the hospital with a working diagnosis of Guillain-Barré syndrome. With her condition deteriorating, Zhu was then diagnosed with acute disseminated encephalomyelitis (an inflammation of the brain and nerve linings). Four months after the initial onset of her symptoms, her friends desperately consulted the Internet. *Id.*

Guillain-Barré syndrome is a neuropathy which causes a rapidly progressing inflammatory disease process characterized by muscular weakness and sensory loss that usually begins five days to three weeks after an infection, surgery, or immunization. See THE MERCK MANUAL OF DIAGNOSIS AND THERAPY § 11.131 (Robert Berkow, M.D. et al. eds., 16th ed. 1992) (visited June 25, 1997) <<http://www.merck.com/!t1VKOjwutTlbfOMBM/pubs/mmanual/html/jkifjfb.htm>>; see also TABER'S CYCLOPEDIA MEDICAL DICTIONARY 827-28 (Clayton L. Thomas ed., 18th ed. 1997). Guillain-Barré syndrome was named after two French neurologists, Georges Guillain and J.A.

Department at Peking University were determined to find help for her and decided to seek this help via the Internet.⁴ Zhu's friend, Bei Zhicheng, broadcast Zhu's symptoms asking for medical help and received the first reply within only three hours.⁵ Over the ensuing ten days, they received over 1000 email responses.⁶ World famous medical experts became involved and diagnosed Zhu Ling's puzzling problem as thallium poisoning.⁷ The diagnosis was confirmed after Zhu's parents arranged for appropriate samples to be tested.⁸ The international medical discussion that took place on the Internet allowed a consortium of the world's finest experts to reach a consensus and formulate a protocol for Zhu Ling's treatment which ultimately saved her life.⁹

In contrast, a world away in Portland, Oregon, Andy Peake searched the

Barré. *Id.*

The web site information located within this Article is not guaranteed to be accurate at the time of publication, because the Internet is always changing, adding, and removing sites. The sites are listed only to show the reader that information is available on every malady—even those that are very rare. In addition, entering the name of almost any disease in a server will access information about the malady.

4. See Chen, *supra* note 1. Sometime in Spring 1995, Zhu's friend, Bei Zhicheng, sent the SOS message on the Internet via the World-Wide Web asking for help. More than two-thirds of the replies were from doctors; the rest were from Chinese students living abroad and other well-wishers. See Craft, *supra* note 2; see also Henry H. Perritt, Jr., *Access to the National Information Infrastructure*, 30 WAKE FOREST L. REV. 51, 54 n.8 (1995) (pointing out that the Internet was designed as an interface which organizes information as a set of hypertext documents).

To access a computer network, a user needs a computer, modem, and a phone line. The computer user dials the computer service or "host." Once the host answers and connects, the user can communicate over the modem through the phone lines. The modem translates digital data from the sending computer into analog signals appropriate for phone lines. Note, *The Message in the Medium: The First Amendment on the Information Superhighway*, 107 HARV. L. REV. 1062, 1066 (1994).

5. See Craft, *supra* note 2; see also Chen, *supra* note 1.

6. See Chen, *supra* note 1.

7. *Id.* See, e.g., CECIL TEXTBOOK OF MEDICINE 72 (J. Claude Bennett & Fred Plum eds., 20th ed. 1996) [hereinafter CECIL]. Thallium is a trace metal and can enter the body through the skin, the respiratory system or the digestive system (ingestion). This work describes thallium poisoning as a sequelae of the use of pesticides and rodenticides which often contain this metal. Symptoms include a combination of nausea, vomiting and alopecia (hair loss), as well as other physical manifestations. Diagnosis is made through testing of blood and urine for thallium. Treatment consists of hemodialysis (filtering of the blood by artificial kidney). *Id.*

8. See Craft, *supra* note 2.

9. *Id.* Although thallium poisoning is recognized as an important part of Zhu Ling's clinical condition, her recovery has been slow and the subject of much debate. *Id.* However, medical texts state the prognosis after poisoning is not necessarily good. CECIL, *supra* note 7, at 72 ("As many as 30% of those poisoned suffer some residual effects. The neuropathy may persist for many months before resolving, and some are left with variable amounts of dementia, neuropathy, ataxia, visual impairment, alopecia, and myoclonus.").

Internet for answers to the mysterious disease that plagued his two children.¹⁰ For six years, Peake found no answers to his six-year-old son Ethan's limited energy and need to spend time indoors.¹¹ In addition, Peake had a one-year-old daughter, Annelise, who had serious trouble breathing and wore both heart and respiratory monitors. Peake wondered what mysterious illness his children suffered from and whether they suffered the same illness. The answer came from Peake's computer. "Linda, I know what Ethan has," Peake announced to his wife in October 1995.¹² Peake had finally abandoned databases dealing with metabolic problems and tried instead a search on his home computer in which he entered Ethan's symptoms: general weakness (particularly in the neck and shoulders); droopy eyelids; ophthalmoplegia (when eyes appear to float around); intermittent respiratory distress; and delayed motor development.¹³ Peake found four or five articles and discovered that there is a rare type of myasthenia gravis that most often shows up in children during the first two years of life. The disease, which affects siblings, is caused by genetic defects affecting neuromuscular transmission.¹⁴ Ethan could ride a bike and kick a soccer ball six months after his diagnosis and the institution of appropriate drug intervention.¹⁵

These two true stories of potential life-saving uses of the computer are only the genesis in the inaugural saga of the computer's technological prowess and beneficial medical resource potential. The reality of the 1990s is that we are faced with not only our own personal health problems, but also those of a chronically ill health care system.¹⁶ Intense rivalry for profits has caused

10. *Dad Diagnoses Children's Illness by Using Internet*, COLUMBIAN, May 24, 1996, available in 1996 WL 10310494 [hereinafter *Dad Diagnoses*]. After searching futilely through the medical library at Oregon Health Sciences University, as well as buying medical dictionaries and texts, Andy Peake began his search on the Internet in the fall of 1995.

11. *Id.*

12. *Id.* Peake spent weeks searching the Internet using different search engines and terms before he landed on the answer. A rare neuromuscular disease that strikes only one or two people per million had claimed his children. This disease is called congenital myasthenia gravis (CMG). *Id.* CMG is a serious life-threatening condition in which the muscles weaken with repetitious use. The disease is one that can be greatly helped with the proper medication. See CECIL, *supra* note 7, at 2171-73.

13. *Dad Diagnoses*, *supra* note 10.

14. *Id.* For a comprehensive medical discussion of myasthenia gravis, see CECIL, *supra* note 7, at 1017-18, 2171-73. This neuromuscular disease can be acquired or inherited. It is associated with abnormal muscle weakness and fatigability, which is especially noticeable by patients when they do repeated or sustained activity. There are several congenital myasthenic syndromes. *Id.*

15. *Dad Diagnoses*, *supra* note 10. Ethan was accepted into a clinical trial for a new drug at the University of California, Davis, Medical Center, although his success with the use of ephedrine has been great to date. Ethan's sister has not responded as dramatically to ephedrine, but doctors believe that as her nervous system develops, she too will improve. Doctors were extremely impressed with the time and effort Andy Peake invested in researching the symptoms of his children, and they listened to his findings. *Id.*

16. See Dr. Jerry Green, *Heal Thyself! Internet and PC Technologies Could Be Just the*

insurance providers, health maintenance organizations, private practice physicians, drug companies,¹⁷ and hospitals to fight furiously for their own piece of the lucrative health care pie.¹⁸ The former Surgeon General of the United States, C. Everett Koop, suggests that the rapidly proliferating leviathan, the primarily for-profit system known as "managed care," which often translates into health-maintenance organizations (HMO's), has changed its focus from the original laudable goals of preventive care and standardization of medical practice to one interested first and foremost in autocratic profit and only secondarily in maintaining health.¹⁹ Thus, with the baby-boomer generation beginning to turn fifty years of age and placing increased demands on our health care system, the aging population may be at the very bottom of the list when the decisions about its care are rendered.²⁰

Computers could be just the medicine the doctor ordered! The potential uses of the computer in the health care field are nothing short of phenomenal. Despite the scourge of AIDS, the Ebola virus, cancer, and cholesterol, developed and developing countries have experienced a twenty-five year increase in life expectancy since 1900; historically, that increase is the most rapid improvement ever in world health.²¹ One might think the improvement in world life expectancy to be due to newer and better drugs, medical diagnosis, treatment, and surgery.²² However, this remarkable accomplishment in increased longevity is, according to some commentators, the singular result of the practice of public

Medicine for Our Ailing Health Care System—and Even for Ourselves, TORONTO STAR, May 1, 1997, at J1 (exploring the uses of search engines as well as specific medical web sites available online).

17. See generally Barbara J. Tyler & Robert A. Cooper, *Blinded by the Hype: Shifting the Burden When Manufacturers Engage in Direct to Consumer Advertising of Prescription Drugs*, 21 VT. L. REV. 1073 (1997) (discussing at length the use of advertising directed to consumers (DTC) by drug companies for their prescription products). The authors suggest that DTC advertising places a burden on the physician-patient relationship and may result in ill-advised patients demanding inappropriate treatment. *Id.*

18. See C. Everett Koop, *Manage with Care*, TIME, Sept. 18, 1996, at 69 (stating that it "may take five or 10 years to find the right balance of managed care, physician autonomy and patient rights"). Former U.S. Surgeon General, C. Everett Koop is currently a professor of surgery at Dartmouth College and the medical director of Time Life Medical, an organization engaged in patient education. *Id.*

19. *Id.* Dr. Koop relates the current trend in which medical decisions are taken entirely away from doctors and patients. He relates the ludicrous tale of physicians who have "devoted a third of their lives to education and training being forced to get permission to do a necessary operation from an insurance clerk [who is] staring at a computer screen at the other end of an 800 number." *Id.*

20. *Id.*

21. See E. Boussard et al., *Sentiweb: French Communicable Disease Surveillance on the World Wide Web*, 313 BRIT. MED. J. 1381 (1996) (advocating and applauding the public health professionals who have made the favorable statistics and increased life-span possible).

22. *Id.*

health.²³ In the Twentieth Century, the two most significant developments heralding improved world health are sanitation and immunization.²⁴ In the next millennium, the new era of public health will begin. Commentators indicate that new era will necessarily include telepreventive medicine.²⁵

The benefits of computer use in the field of medicine cannot be overrated because computers can bring specialized, affordable access to any and all patients in every area of the world, even those patients in areas considered extremely remote and underserved.²⁶ The computer can offer a boon to all by empowering patients and by educating them to work with their physicians to effect better health. Information is power. Thus, computer use in the practice of medicine must be encouraged and expanded.

This Article explores some of the historical background and uses of the computer in the education and support of patients as well as some current World-Wide Web sites available to educate consumers and physicians. While professionals in the field of health are concerned about the sudden proliferation of over 10,000 Internet web sites devoted to health and medical information, the existence of these sites points out that people are intrigued by medical information.²⁷ The very strength of the Internet lies in the ability of users to freely express their views on any topic, including health care.²⁸

Also, this Article focuses on medical malpractice, dividing liability for medical malpractice into several discrete categories: very limited liability for simple patient education, arguably protected by the First Amendment; moderate liability for specialist's consultations and advice; and the potential for serious liability incurred by the actual practice of medicine, diagnosis, and treatment of patients on the Internet. However, this Article recommends adopting limits on

23. *Id.* Public health is defined in this article as the transfer and exchange of health information. *Id.* Public health professionals perform data collection, do surveillance, transmit information, and communicate with people. *Id.*

24. *Id.*

25. *Id.* The article suggests that telemedicine provides resources for only a small number of patients, allowing the transmission of slides, MRIs or other diagnostics, and facilitating consultation. However, teleprevention information specialists, trained in both public health and telecommunications, could be the backbone of public health in the twenty-first century by monitoring diseases on the worldwide web, improving monitoring and forecasting of disease patterns, and allowing statistical gathering and world-wide access. *Id.*

26. See generally Phyllis F. Granade & Jay H. Sanders, *Implementing Telemedicine Nationwide: Analyzing the Legal Issues*, 63 DEF. COUNS. J. 67 (1996) (exploring telemedicine in the advice aspect from long distances focusing on whether a physician-patient relationship exists, as well as licensing and litigation issues, and noting that no legal cases directly address telemedicine).

27. Peter Gorner, *Medicine on the Net: Lifesaving Tips or Twaddle?*, CHI. TRIB., May 18, 1997, at 1 (discussing several tips for the health care Web users, including the advice that the consumer weigh certain factors, such as whether the advice on the Net is timely, accurate, and backed by scientific data).

28. *Id.*

liability for physicians because of the public interest involved in allowing open access to health information and treatment. Finally, in the wake of this burgeoning computer health care industry, the liability issues for standards of care must be resolved, as well as jurisdictional issues regarding which state laws apply to consumer litigation of claims.²⁹

Medical malpractice cases that arise from use of the Internet must be decided on a case-by-case basis with courts deciding liability in a fair and uniform manner. To discourage forum shopping, courts should establish jurisdiction in the location in which the physician is licensed for any claims that arise.³⁰ Thus, it should be presumed that the patient is visiting the physician in his office in the state in which the physician is licensed.³¹ Federal licensing is unnecessary under this plan.³² Board certification by any medical specialty board could be found to provide *prima facie* evidence of federal licensing in any state jurisdiction.³³ Thus, the standards of care of that particular specialty area could be applied to the practitioner.³⁴ The goal of providing access for the consumer to the best and most educated health care practitioners should be paramount in the framework of Internet health law. The increase in managed care and the limitation of access to health resources demands that patients and their families take responsibility and actively seek information in order to participate in decision making regarding their own treatment.

29. Issues of legal jurisdiction over World-Wide Web publishing and standards of care for the medical practitioner in differing states or world jurisdictions are not dealt with in depth in this Article. Such issues are instead left for other writers on the subject matter.

30. See Granade & Sanders, *supra* note 26, at 72.

31. Stacey Swatek Huie, Note, *Facilitating Telemedicine: Reconciling National Access with State Licensing Laws*, 18 HASTINGS COMM. & ENT. L.J. 377, 404-05 (1996) (citing with approval Jay H. Sanders, *Telemedicine: Challenges to Implementation*, in *Telemedicine: An Information Highway to Save Lives: Hearing Before the Subcomm. on Investigations and Oversight of the House Comm. on Science, Space and Technology*, 103rd Cong. 48 (1994) (statement of Jay H. Sanders, M.D.) [hereinafter Sanders, Telemedical Hearing]). Dr. Jay Sanders is a leading authority, writer and lecturer in the field of telemedicine and has dealt with the issues of jurisdiction and standard of care which will not be addressed in depth in this work. Sanders proposes that state law be interpreted to deem the patient "electronically transported" to the physician rather than the physician transported to the patient. *Id.* at 405. Huie argues that the concept of "electronic transportation" would solve only the problem of unlicensed practice when a patient consults a physician who is in a state in which the physician is licensed. *Id.* While Huie disagrees, this author proposes that it also solves the problem of a physician who is out of his home state when he offers an opinion or consultation. States should, however, rewrite their laws to clearly facilitate telemedicine. *Id.* at 405-06.

32. *Id.*

33. *Id.*

34. *Id.*

I. THE PHYSICIAN-PATIENT RELATIONSHIP

New legal questions arise in the context of telemedicine and the Internet.³⁵ For example, telemedicine practitioners worry that they will be hailed into court in a remote jurisdiction for rendering advice to distant patients and their primary care physicians.³⁶ These consulting physicians lack legal guidance because there are no current cases involving telemedical practitioners and malpractice.³⁷ However, in any action against a physician for medical malpractice, the court allows recovery only where there is a doctor-patient relationship created as a result of a contract, either express or implied.³⁸ No written contract is necessary, nor is it usual in the medical field. One normally creates an implied contract with a physician as follows: (1) seek out a physician; (2) make an appointment at the office; (3) journey to see the practitioner, as scheduled, and submit to an examination at the office; and (4) furnish consideration in the form of some type of payment. The gravamen of the contractual relationship between physician and patient is that it is a consensual one.³⁹ Even when the physician has volunteered to serve the patient gratuitously, courts have recognized the creation of a

35. See Granade & Sanders, *supra* note 26. "Telemedicine" is defined as the "use of telecommunications technology to provide health care services to patients who are distant from a physician or other health care provider." *Id.* at 67. Thus, telemedicine has the clinical component of caring for a patient. This care may include use of telephone, fax machine, or more advanced high tech equipment such as audio-visual equipment and high resolution cameras-linked by fiberoptics. *Id.*

See also 3 Experts in Telemedicine Explore Issues Face-to-Face, HOUS. BUS. J., Jan. 24, 1997, available in 1997 WL 8297196. One panelist expert in this article, David Norton, Ph.D., who has held conferences on the subject of telemedicine as well as presentations on its use in manned space flight and health care issues, states: "In 20 years, we may not even refer to 'telemedicine.' We'll just call it 'medicine' utilizing multiple telecommunications tools." Another panelist, Robert M. Brecht, Ph.D., president and chief executive officer of International Telemedicine Center Inc., suggests that "tele" needs to be removed from the word "telemedicine" and the industry needs to consider it the way medicine is practiced—a tool in the diagnostic process. *Id.*

36. See Granade & Sanders, *supra* note 26, at 67.

37. *Id.*

38. Several cases have discussed the physician-patient relationship in the context of a malpractice claim. See, e.g., *Roberts v. Hunter*, 426 S.E.2d 797, 799 (S.C. 1993) (establishing the doctor-patient relationship as a prerequisite to a medical malpractice claim); *Osborne v. Frazor*, 425 S.W.2d 768, 771 (Tenn. Ct. App. 1968) (holding that the voluntary acceptance of the physician-patient relationship by the affected parties creates a prima facie presumption of a contractual relationship); *Lopez v. Aziz*, 852 S.W.2d 303 (Tex. Ct. App. 1993) (positing that the existence of a duty flowing from physician to patient is the essence of a malpractice claim but finding no physician-patient relationship).

39. See *Roberts*, 426 S.E.2d at 799. But see *Greenberg v. Perkins*, 845 P.2d 530, 531 (Colo. 1993) (holding that when a physician has not undertaken any medical responsibility with respect to examinee except to evaluate and report his opinion on that person's physical condition to another party, no physician-patient relationship exists).

contractual relationship.⁴⁰ Conversely, physicians are under no legal obligation to engage in the practice of medicine or accept the treatment of every patient who applies for treatment.⁴¹

In the context of consulting, a telemedical practitioner—who is usually a specialist in a particular field—is called to consult with the referring physician regarding the patient and to supervise and advise in the patient's diagnosis and treatment.⁴² The responsibility and control of the consultants and the role they play in supervising and treating patients is one horn of the liability dilemma. Courts continue to emphasize the necessity for a contractual relationship to exist between doctor and patient before they grant a plaintiff's malpractice cause of action.⁴³ Where and when these physician-patient relationships are found by the courts, based on the facts in the existing case law, is both enlightening and surprising. As a corollary, absent a special relationship, there is no duty of care owed to third parties who are not contemplated in the contractual setting.⁴⁴ Those courts failing to find any special relationship tend to focus repeatedly on the amount of control exerted over the patient by a physician, as well as the

40. *Young v. Crescente*, 39 A.2d 449 (N.J. 1944).

41. Various courts have held that no duty exists for any physician to accept a patient. *See, e.g., Oliver v. Brock*, 342 So. 2d 1, 3 (Ala. 1976); *Hiser v. Randolph*, 617 P.2d 774, 776 (Ariz. Ct. App. 1980); *Buttersworth v. Swint*, 186 S.E. 770, 772 (Ga. Ct. App. 1936); *Childers v. Frye*, 158 S.E. 744, 746 (N.C. 1931); *Childs v. Weis*, 440 S.W.2d 104, 106-07 (Tex. App. 1969); *Lyons v. Grether*, 239 S.E.2d 103, 105 (Va. 1977) (no duty absent statute); *Miller v. Dumon*, 64 P. 804, 806 (Wash. 1901) (stating that any physician may absolutely refuse employment). *See also* *Violandi v. New York*, 584 N.Y.S.2d 842, 843 (N.Y. App. Div. 1992) (holding where an examination is conducted of a police officer, solely for the purposes of the employer, police department, there must be something more than a mere examination to establish the physician-patient contract, even when the exam resulted in a misdiagnosis reported to the employer).

42. *See* *Granade & Sanders*, *supra* note 26.

43. *See supra* note 38 and accompanying text.

44. Various courts have found a duty to third parties by virtue of a special relationship. *See, e.g., Tarasoff v. Regents of the Univ. of Cal.*, 551 P.2d 334, 342-43 (Cal. 1976) (holding a psychotherapist employed by the university had a duty to warn an intended victim who was ultimately killed at the hands of his patient); *Reisner v. Regents of the Univ. of Cal.*, 37 Cal. Rptr.2d 518 (Cal. Ct. App. 1995) (holding a physician owed a duty to the patient's boyfriend to warn the patient or her parents that the blood used in a transfusion during her surgery when she was twelve years old was contaminated with HIV virus); *Pate v. Threlkel*, 661 So. 2d 278, 279 (Fla. 1995) (holding that a physician who owed a duty to a patient to warn the patient of the genetically transferable nature of medullary thyroid carcinoma, also owed to the patient's children the duty to warn the patient so the children could be warned before they too contracted the disease); *DiMarco v. Lynch Homes-Chester County, Inc.*, 583 A.2d 422, 424-25 (Pa. 1990) (holding a physician owed a duty of care to the sexual partner of a blood technician who contracted hepatitis while drawing a blood sample and was not warned to refrain from sexual relations with her partner who ultimately contracted hepatitis); *Dudley v. Offender Aid & Restoration of Richmond, Inc.*, 401 S.E.2d 878, 879 (Va. 1991) (holding the private operator of a halfway house had a duty to control a felon so as to prevent him from causing harm by raping and murdering the victim).

unwarranted public policy of intolerably extending the duty of care owed.⁴⁵

The following sections of this Article will examine three differing degrees of risk engendered by the diverse tasks undertaken by medical web sites and practitioners on the Internet. There are minimal malpractice liability and extremely important public policy concerns favoring educating patients about disease and treatment on the Internet. A more questionable middle ground of risk is involved in conferencing, second opinions, and telemedicine, precisely because of the lack of contractual relationship or control of the contacted specialist over the outcome.⁴⁶ However, despite the risk, telemedicine saves money, it continues to grow, and it is here to stay.⁴⁷ The highest and most obvious medical-legal risk comes with the creation of World-Wide Web sites by physicians and the actual practice of medicine by these practitioners on the Internet. This practice of no-touch medicine is happening and should present a serious concern to all those involved in medical ethics, health care delivery systems, and quality patient care.

II. LOW LEGAL LIABILITY: EDUCATING AND PROVIDING SUPPORT

"Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information upon it."—Samuel Johnson

Bruce Binder, a forty-eight-year-old computer consultant from Redondo

45. Various courts have found no duty to third parties. *See, e.g.,* Pittman v. Upjohn Co., 890 S.W.2d 425, 435 (Tenn. 1994) (holding a physician and pharmacy owed no duty to the adult grandson of a woman who took the woman's Micronase—a drug that causes lowering of blood sugar—mistakenly thinking it was aspirin); Nasser v. Parker, 455 S.E.2d 502, 506 (Va. 1995) (holding a doctor and hospital had no duty to warn an intended victim, who was ultimately killed, that her assailant had been released from the hospital, because there was no control of the patient and no special relationship); Fox v. Custis, 372 S.E.2d 373, 376 (Va. 1988) (holding a parole officer did not "take charge" or "exercise control" over a parolee who murdered one person, committed arson, and abducted, beat, and set a woman on fire).

46. "Telemedicine is hampered by a lack of reliable comparisons between its benefits and costs and other options," states a committee report by the Institute of Medicine Committee, U.S. Dep't of Health and Human Services. *Telemedicine Needs Better Evaluation*, 112 PUB. HEALTH REP. 5 (1997). To date, very few applications of telemedicine have been approved for payment by the Health Care Financing Administration with the exception of teleradiology (transmission of x-rays over distances) which is reimbursed by Medicare and other third party payers. *Id.* The authors hint that because the use of telemedicine may impact staffing levels, many clinicians see its use as an economic threat to their livelihoods. The commentators also cite problems with legal issues such as minimum standards, licensure, liability, and regulation of hardware and software. *Id.*

47. *See* Jim Montague, *Technology*, 70 HOSPITALS 12-21 (1996) (reporting that telemedicine is expected to grow by \$100 billion in the next five years). The author discusses the U.S. TELEMEDICINE MARKET REPORT, which lists over 100 companies that provide products and services and is available for order ((800) 927-8071). The author explains that telemedicine used in Iowa has enabled 13 hospitals to join a consortium, making it one of the nation's largest telemedicine networks in the country. These hospitals can transmit diagnostic images for interpretation by radiologists, pathologists, and others, as well as diagnose, treat, and manage patient care. *Id.*

Beach, California, was diagnosed with prostate cancer in 1993.⁴⁸ Binder's physician gave him two accepted treatment modalities; he could agree to have radical prostate surgery or he could submit to radiation treatments.⁴⁹ Without treatment, Binder knew he would die. But with this treatment, Binder believed he might as well be dead because he could either be left incontinent, sexually dysfunctional, or both.⁵⁰ Someone told Binder that the Internet, more particularly Compuserve, had an on-line cancer forum which posted bulletin board messages. Binder logged on and made an inquiry about prostate treatments. The very same day he got his first responses to his inquiry.⁵¹ Binder chose to have cryosurgery, a then little-known procedure in which cancer cells were exposed to sub-freezing temperatures and destroyed.⁵² Three years later, he was still cancer free.⁵³ The Internet educates.

Portia Iverson had become obsessed with finding out information about autism since her son, Dov, had been diagnosed with it at twenty-one months of age.⁵⁴ She perused web sites on the computer looking for information.⁵⁵ Information on the best research studies being done in the field of autism was lacking.⁵⁶ So Portia, with the help of her husband, has co-founded a new web site where users can now get the latest information on research studies and grant proposals, as well as be linked to autism newsgroups.⁵⁷ Parent created sites go far beyond the usual fare offered in parenting magazines. These web sites create a forum for parents to connect to one another and offer information and support to those who live in remote areas or have children with rare diseases.⁵⁸ Parents

48. Elizabeth M. Cosin, *Surfing Web to Save Lives: Patients Join Net Community to Learn About Latest Research and Seek Support They Need*, L.A. DAILY NEWS, Oct. 28, 1996, at L3. Included in this article is the story of June Sherman, who one day typed "dysautonomia" into her Internet search engine. She did not think she would find anything about the rare disease, which affects less than 100 know people worldwide. However, she found support group listings and help, including up-to-date research findings. *Id.*

49. *Id.*

50. *Id.*

51. *Id.* (explaining that Binder and his wife Elena sifted through more than 400 pages of old messages and postings, and indicating that Binder received much feedback from prostate patients who had undergone the usual surgery and/or radiation, but were not pleased with the results).

52. *Id.*

53. *Id.*

54. Carla Koehl, *Finding a Web of Support*, NEWSWEEK, Mar. 22, 1997, at 50. This article discusses the veritable wealth of support available via the Internet for both rare and common adult and childhood disease processes that affect individuals.

55. *Id.*

56. *Id.*

57. *Id.* Dov was three and a half in 1995, when Portia and her husband created the "Cure Autism Now" web site, which can be located at the following internet address: <<http://www.canfoundation.org/>>.

58. As previously stated at note 3, the Internet is in a constant state of change, so accuracy and existence of these cites is not guaranteed to be accurate at the time of publication.

and organizations have expanded the availability of specialized web sites.⁵⁹ The World-Wide Web sites range in subject treatment from well-known processes like Down syndrome,⁶⁰ cerebral palsy,⁶¹ and sickle cell anemia⁶² to rare diseases like Sturge-Weber syndrome⁶³ and Infantile Refsum's disease.⁶⁴

There is no doubt that consumers must take a more active role in their own health care. The Internet has revolutionized the delivery of health information to consumers. With a few caveats, the computer can certainly help in medical problem solving.⁶⁵ The necessity for information for one's diagnosis or medical options has never been more obvious than now when consumers are faced with government and medicare funding cutbacks, hospital closings, waiting lists for surgical procedures, and doctors' and nurses' strikes.⁶⁶

Name any affliction or disease and chances are you will find at least one web site dedicated to informing the world about it.⁶⁷ If one goes to the World-Wide Web for medical information, it is essential to check out the credentials of the offered site.⁶⁸ Physicians are encouraged to utilize the Internet to educate

59. Koehl, *supra* note 54. A site devoted to rare genetic diseases in children, located at <<http://mcrcr4.med.nyu.edu/~murphp01/homenew.htm>>, is maintained by staffers at the New York University Medical Center. WellnessWeb, located at <<http://wellweb.com/index.htm>>, is designed to pay close attention to issues like treatment options, drug dosages, and physician selection. The site won a 1996 Best Site of the Year award from *Net Magazine*. Another interesting site is one maintained by the National Institutes of Health, located at <<http://www.nih.gov>>, where simply typing "childhood" into the search engine field pulls up dozens of links to very specialized research studies including recent papers on acute lymphocytic leukemia. *Id.*

60. *Downs Syndrome* (visited June 28, 1997) <<http://www.epix.net/~mcross/downsyn.html>>.

61. Julio Ciamarra, *Internet Resources for Special Children* (visited June 27, 1997) <<http://www.irsc.org/>>.

62. *Sickle Cell Anemia* (visited June 27, 1997) <<http://wellweb.com/index/qsickle.htm>>.

63. *Sturge Weber Syndrome* (visited Mar. 27, 1998) <<http://www.avenza.com/~swf/aboutsws.htm>>; see TABER'S, *supra* note 3, at 1850.

64. *Infantile Refsum's Disorder* (visited June 27, 1997) <<http://www.pacifier.com/~mstephe/>>; see TABER'S, *supra* note 3, at 1652.

65. See Green, *supra* note 16.

66. *Id.*

67. See generally Robert J. Hawkins, *Here's to Your Good Health and Fitness*, SAN DIEGO UNION & TRIB., June 18, 1996, at 1. This article explores many web sites that educate the consumer.

68. See LUIS G. PARERAS, M.D., *INTERNET: MEDICINE AND THE INTERNET* (1996), for a book that provides physicians with a very detailed and practical guide to using the Internet as a medical reference. The author provides easy to understand guidance to accessing medical information from choosing a server to suggested educational uses. The book is organized by topic and includes Experimental Organ Preservation, The Virtual Hospital, Surgery, and Radiological Anatomy Project. Many of these sites are interactive. See Book Review, 22 AM. J.L. & MED. 577 (1996) (giving a comprehensive review to the above book).

themselves and update their knowledge and skills.⁶⁹ The discerning consumer must look for web sites that are affiliated with reputable organizations or with academic institutions. There is something for everyone: from learning about AIDS and addiction to virtual bodies of men and women for learning anatomy.⁷⁰

A. First Amendment Protection for Internet Expression

Legal liability for producers of information provided to consumers on such medical information web sites is not likely, nor should it be.⁷¹ As technology advances, the electronic word has supplanted the printed word as the most prolific method of communication in our society.⁷² The Internet provides however, an unusual source of a legal dilemma. Commentators have indicated that, in using the Internet, all users of the Internet are also potential producers.⁷³ The roles in the radical landscape of cyberspace are infinitely interchangeable.⁷⁴ One can sign on to the Internet intending only to receive information from a web site and instead produce information by answering a question or participating in a chat forum. This convergence of the roles of user-supplier has significant implications for the nature of legal regulation.⁷⁵

The First Amendment was designed to protect speech no matter what the medium.⁷⁶ The danger with First Amendment analysis lurks in the probability that the Internet will be treated differently by the courts because of its newness and its use of technology. Such different treatment by the courts could serve to further obfuscate free speech and expression laws. The Internet and cyberspace are new types of forums. If courts treat them as public forums, then signing on will be like speaking on the town square, and users of the square will be expected to deal with the wide array of speech from political to offensive that takes place

69. *Id.*

70. *Id.* There are also web sites for cancer, cardiology (I & II), diabetes, healthy living, heart disease, diet, stroke, and mental health. Thousands of sites exist for every known health concern.

71. See, e.g., Philip H. Miller, Note, *New Technology, Old Problem: Determining the First Amendment Status of Electronic Information Services*, 61 FORDHAM L. REV. 1147, 1190-91 (1993) (arguing that computer electronic information services are analogous to print medium and thus granting a very high level of constitutional protection to the new model of computer or Internet communication, and citing *City of Los Angeles v. Preferred Communications, Inc.*, 476 U.S. 488, 496 (1986) (Blackmun, J., concurring) ("[T]he Court must determine whether the characteristics of cable television make it sufficiently analogous to another medium to warrant application of an already existing standard or whether those characteristics require a new analysis.")).

72. See Note, *supra* note 4, for an in depth and cogent analysis of the more pressing issues in new electronic media technology.

73. See Perritt, *supra* note 4, for an in depth discussion of the current computer technology and the role it plays in the legal landscape.

74. *Id.* at 51.

75. *Id.* at 56.

76. See Note, *supra* note 4, at 1063.

there.⁷⁷ Typically, the Supreme Court has created a hierarchy of protections for the media; speech and the print medium reigns supreme in the First Amendment arena and lesser protection has been granted to newer emerging electronic communications.⁷⁸ The level of protection granted to speech usually depends upon the content of the speech involved.⁷⁹ The Internet is communication and the First Amendment at its best and worst. Technological characteristics should not be the crucial factor in determining whether a message receives First Amendment protection.⁸⁰ First Amendment analysis should focus, not on the media, but only on the characteristics or type of speech involved.⁸¹ Charlatans, alternative healers, hucksters, and quacks are all on-line and available twenty-four hours a day. It is incumbent on the user of the medium to get second and third opinions from the resources available.⁸²

77. See *id.* at 1094, for a comprehensive discussion of the balance between a speaker's rights and a listener's privacy interests as well as forum and content based First Amendment analysis on the Internet.

78. *Id.* at 1062 (citing *FCC v. Pacifica Found.*, 438 U.S. 726, 748 (1978) ("[O]f all forms of communication, it is broadcasting that has received the most limited First Amendment protection.")).

79. Thus, obscenity, non-obscene child pornography, and defamatory speech and "fighting words" receive lesser (or no) First Amendment protection because of the content of the speech regardless of the media through which they are published. See LAURENCE H. TRIBE, *AMERICAN CONSTITUTIONAL LAW* 930 (2d ed. 1988). Recently, commercial speech has been granted significant protection from the United States Supreme Court as long as the advertising is true and non-deceptive. See *44 Liquormart v. Rhode Island*, 116 S. Ct. 1495 (1996) (holding that a state ban on advertising of retail liquor prices was unconstitutional because it did not advance the state's interest in promoting temperance). Over 20 years ago, the Court held in *Virginia Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748 (1976), that the state's blanket ban on advertising the price of prescription drugs violated the First Amendment.

80. See Note, *supra* note 4 at 1063 & n.7 (citing Laurence H. Tribe, *The Constitution in Cyberspace: Law and Liberty Beyond the Electronic Frontier, Keynote Address at the First Conference on Computers, Freedom and Privacy* (March 26, 1991) (on file with the Harvard Law School Library) ("[T]he Constitution's norms, at their deepest level, must be invariant under merely technological transformations.")).

81. *Id.*

82. See generally *Gorner, supra* note 27. Knowledgeable commentators suggest that the most reliable web sites are those linked to professional organizations. For example, the American Medical Association has an award-winning web site (<<http://www.ama-assn.org>>) that features its diverse publications and contains a database of 650,00 physicians. The National Library of Medicine has a catalog of journal articles on-line on MEDLINE. This site address is <<http://www.nlm.nih.com>> and it requires a credit card number to receive a user I.D. See *THE MERCK MANUAL, supra* note 3 (defining and covering virtually every known human illness in layman's terms).

Consumers are using the Top 200 prescriptions site (<<http://rxlist.com>>) to check out the drug's action, dosage, and possible interaction with other drugs. This is a free service that provides more information with mention to on-line discussion groups and other popular sites.

B. *The Written Disclaimer*

The recent proliferation of thousands of medically focused web sites is nothing short of phenomenal. Each source typically has some sort of disclaimer of liability. Some sites have an ever-changing topic such as "disease of the week."⁸³ Following such a web site is often a short disclaimer which indicates the purpose of the site is to educate and that one's own physician should be consulted for medical problems.⁸⁴

One interesting web site named *America's Housecall Network* presents information in summary form in scores of categories of interest and provides a two paragraph disclaimer in which common-law warranties are excluded and damages are limited to only those damages equal to charges paid in fees by the user for the acquired information.⁸⁵ Disclaimers also adorn the web site run by

83. See, e.g., *Ask Dr. Weil* (visited June 20, 1997) <<http://www.drweil.com>>. This intensely amusing and colorful web site offers advice, menus, a chat room and a home page as well as the opportunity to purchase a cook book. *Id.* The "Disease of the Week" feature provides homeopathic advice that ranges from kidney stones to chronic sinusitis.

84. *Id.* This site, which is updated on a weekly basis, adds a new disease each week or so. The following disclaimer is provided by Dr. Weil:

"Disclaimer: All material provided in the Ask Dr. Weil program . . . is provided for educational purposes only. Consult your own physician regarding the applicability of any opinions or recommendations with respect to your symptoms or medical condition." *Id.*

85. See *Health Answers* (visited June 20, 1997) <<http://www.healthanswers.com>>. This site contains the following disclaimer:

Information accessed through HealthAnswers is presented in summary form in order to impart general information relating to certain diseases, ailments, physical conditions and their treatments. Such information is not complete and should not be used as a substitute for a consultation or visit with your physician or other health care provider. Information accessed through HealthAnswers is not exhaustive and does not cover all diseases, ailments, physical conditions or their treatments. HealthAnswers makes no warranty as to the information's completeness, reliability or accuracy. Should you have any health care related questions please see your physician or other health care provider promptly.

Information accessed through HealthAnswers is provided "AS IS" and without warranty, express or implied. All implied warranties of merchantability and fitness for a particular use or purpose are hereby excluded. HealthAnswers's liability, if any, for damages (including, without limitation, liability arising out of contract, negligence, strict liability, tort or patent or copyright infringement) shall not exceed the fees paid to HealthAnswers by the user for the particular information or service provided. HealthAnswers shall not be liable under any theory of indemnity. In no event shall HealthAnswers be liable for any damages other than the amount referred to above, and all other damages, direct or indirect, special, incidental, consequential or punitive, are hereby excluded even if HealthAnswers has been advised of the possibility of such

a New Jersey ear, nose and throat osteopath.⁸⁶ The picture greeting the web site visitor of *Virtual Doctor* shows a male physician with a nurse next to him attending to an ill patient, attached to tubing, who is supposedly on a ventilator.⁸⁷ This site offers on-line advice on any medical topic for \$9.95.⁸⁸ However, the web site does not provide information about the qualifications of the adviser.⁸⁹

A seachange in access to medical information has occurred. Information on any conceivable medical subject is available on the Internet twenty-four hours a day. For the luxury of accessibility of information, which is largely unregulated, users must not be naive but must educate themselves to quality sites or become vulnerable to quacks and the unlicensed.⁹⁰

C. Regulation of Internet Fraud and Abuse

Many of the medical information sites found on the Internet are not purely altruistic ventures but are located on the Internet primarily to advertise and sell products.⁹¹ Advertising on the Internet has become a burgeoning industry.⁹² Its lure is that it is highly cost-effective since, once a site is created, it may reach millions of consumers both nationally and internationally. Sources indicate that advertisers spent \$74 million on Internet advertising in 1996 alone.⁹³ Advertising first appeared on the Internet in the guise of corporate or individual home pages

damages.

Id.

86. See *Virtual Doctor* (visited June 9, 1997) <<http://www.netvent.com/Doctor/consult1.html>>.

87. *Id.*

88. *Id.*

89. *Id.* The doctor that runs this web site is a New Jersey osteopath. He provides the user no information about his qualifications or medical credentials, unlike other web sites which do. See *Cyberdocs*, *infra* note 166. Ironically, the heading on the web site following the name of the doctor, Dr. John Brandeisky, which should say "Virtual Doctor Consultation Form" erroneously says "Virtual Doctor Consulatation [sic] Form." One must wonder how valuable the advice will be that is given for the price of only \$9.95 and when "consultation" is misspelled. The several pages of forms that follow ask for symptoms and request your name, address, and a Visa or Mastercard number.

90. See Jan Greene, *Sign on and Say 'AH-H-H-H-H,'* 71 HOSPS. & HEALTH NETWORKS, April 20, 1997, at 45-46 (discussing the new concept of practicing medicine on the Internet a huge leap of malpractice liability from telemedicine).

91. Such products range from books and tapes to cookbooks of low fat meals. Entering your Visa or Mastercard number can get a product sent to your home in short order. Most sites encrypt your credit card number so hackers or others cannot intercept the credit card number and use it.

92. See Greene, *supra* note 90.

93. See Richard Raysman & Peter Brown, *Regulating Internet Advertising*, N.Y.L.J., May 14, 1996, at 3 (col. 1) (providing a comprehensive overview of the problems in advertising and technology as well as some insight into the very few litigated cases in the area of Internet fraud and abuse).

which contained product information and sometimes allowed direct ordering on-line.⁹⁴

Federal regulations regarding Internet advertising have not yet been developed.⁹⁵ The use of the Internet to transmit ads containing fraudulent claims or consumer "scams" is an area of growing concern for both federal and state authorities.⁹⁶ Fraud and abuse in the health care industry is aggressively investigated by a variety of government agencies and is estimated to cost taxpayers over \$100 billion per year.⁹⁷ Thus, advertising on the Internet could present a new and more difficult role to the FTC and possibly other government agencies as well. However, in the interim, the FTC regulates unfair competition in the marketplace, including unfair or deceptive practices, regardless of location, when a consumer has been injured.⁹⁸

Charges have been brought by the FTC against several companies that market their products over the Internet.⁹⁹ While some of these cases simply have

94. *Id.*

95. The Internet is a very hospitable environment for those who wish to commit computer or other types of fraud. Federal law does exist to punish computer fraud. Computer Fraud and Abuse Act of 1986, 18 U.S.C. § 1030 (1994). Several cases address this section. *See, e.g.,* United States v. Sablan, 92 F.3d 865 (9th Cir. 1996) (holding the federal statute is not unconstitutional simply because there is no *mens rea* requirement for the damages element of the offense). *See also* United States v. Morris, 928 F.2d 504 (2d Cir. 1991) (holding that a computer transmission of a "worm" into a group of networks that connected university and other computers around the country and which obtained some limited information about users was an illegal act under the statute); Sawyer v. Department of Air Force, 31 M.S.P.R. 193 (1986) (a case from the Merit Systems Protection Board holding an employee who altered computer contracts and claimed it was only to indicate lack of safety provisions was guilty of a crime of use of a government computer for unauthorized purposes). *But see* State v. Azar, 539 So. 2d 1222 (La. 1989) (holding a state constructed computer fraud statute was unconstitutionally vague in part because of the phrase which prohibited the obtaining of money "through alteration, deletion, or insertion of programs or data").

96. *Id.*

97. *See* W. Eugene Basanta et al., *Recent Developments in Medicine and Law*, 31 TORT & INS. L.J. 357, 365 (1996) (stating that the Department of Justice, FBI, Department of Health and Human Services and Office of the Inspector General have had to aggressively investigate this fraud). The Justice Department diverted 10% of its financial resources to prosecuting health care fraud. In 1994, the FBI spent \$37 million fighting health care fraud and collected more than \$500 million in fines and assessments. *Id.*

98. *See* The Federal Trade Commission Act, 15 U.S.C. § 45 (1994) (granting the power to the FTC to pursue a variety of civil and criminal actions against those who engage in proscribed advertising practices).

99. *See* Raysman & Brown, *supra* note 93. This article indicates that in 1996, the FTC charged nine companies with making false or unsubstantiated claims. In Illinois federal court, in a case brought against U.S. Telemedia, No. Civ.A.96-C-1440 (N.D. Ill. March 13, 1996), the FTC alleged that the defendant would advertise and require payment in advance by telephone or e-mail, and the items ordered were not received and consumers could not obtain refunds. Thus the complaint was brought under the FTC's Mail or Telephone-order Merchandise Rule, 16 C.F.R. §

to do with a consumer's inability to receive the merchandise or a refund, others are much more disturbing in character.¹⁰⁰

One case with a factual scenario that cried out for redress by the court is *Massachusetts v. Phillips*.¹⁰¹ The defendant, Marjorie Phillips, through her company, New Discoveries, provided medical treatment information on the Web and advertised the availability of a treatment for HIV which would allegedly cure the disease in six weeks.¹⁰² The posted advertisement on the World-Wide Web read, "In Six Weeks You Are HIV Negative."¹⁰³ The advertisement alleged that the use of the combined spices of cloves, wormwood and black walnut hull would cure the virus.¹⁰⁴ If that treatment was unsatisfactory, an informational book was sold for twelve dollars which used a procedure called "SynchroZap," which entailed using a nine-volt battery to eliminate the "parasite" which an unknown Dr. Clark stated was the cause of the AIDS virus.¹⁰⁵ In addition, a 900 telephone number was presented to the users of the web site to be used at the additional cost of \$1.99 per-minute.¹⁰⁶ The Massachusetts Attorney General brought the claim against Phillips and was successful in getting a temporary restraining order issued against the site.¹⁰⁷ These egregious and duplicitous transactions that prey on the naive and desperate are precisely the type that should be avoided.

Although some psychiatrists and psychologists have begun charging for on-line services,¹⁰⁸ hundreds of other doctors are providing free services, practicing medicine in a more informal manner or taking money from on-line service providers to offer health advice in forums on America Online and Prodigy.¹⁰⁹ Unfortunately, even Prodigy's holistic health bulletin board was duped by a physician who answered questions on-line and who had lost his medical license.¹¹⁰ This trend of practicing medicine on the Internet has medical officials

435 (1996), which requires that sellers offer buyers the option to cancel an order or receive a credit or refund if the order is not received within a certain amount of time.

100. *Id.*

101. No. Civ.A.96-00661, slip op. (Mass. Super. Ct. April 2, 1996), *cited in* Raysman & Brown, *supra* note 93. The Attorney General of Massachusetts brought an action requesting a Temporary Restraining Order against the defendant under Massachusetts Consumer Protection Act, MASS. GEN. LAWS ch. 93 A § 2 (a) (1996).

102. *See id.* HIV is the acronym for, Human Immunosuppression Virus, the virus that causes the disease known as AIDS, Acquired Immune Deficiency Syndrome.

103. *Id.*

104. *Id.*

105. *Id.*

106. *See* Raysman & Brown, *supra* note 93 and text of the trial level case.

107. *Id.*

108. *See Quacks, Bogus Treatments Infect the Internet*, SAN ANTONIO EXPRESS NEWS, Oct. 21, 1996.

109. *Id.*

110. *Id.* Walter Stoll worked for Prodigy and held himself out to be a doctor for two years before they realized his license was lifted, after which they removed him from the bulletin board

vacillating from incredulous to infuriated.¹¹¹ Even the experts cannot agree as to what constitutes the practice of medicine on-line.¹¹²

Lastly, liability has been discussed for the publishers of these medical cites that are used fraudulently or illegally.¹¹³ In theory, an Internet Services Provider—such as America On-Line or Prodigy—could be held liable for knowingly permitting its facilities to be used to transmit an ad which contains false or fraudulent material.¹¹⁴ However, the Communications Decency Act of 1996 contains defenses in the form of “good samaritan” provisions which exclude Internet service providers from liability for information that travels from the Internet through their systems, possibly because of the inestimable benefits of the Internet in general.¹¹⁵

Thus, the offering of general medical advice and judgments on-line does not appear to create a formal physician-patient relationship.¹¹⁶ Nor does it appear that giving such generic advice will tend to generate liability for either the provider or publisher.¹¹⁷ If however, the provider is producing fraudulent information, advertising bogus or quack cures and soliciting money over the Internet, then courts do have the authority under both state and federal computer

and dropped his free membership. Apparently his license was taken because of his support for alternative and holistic therapies. *Id.*

111. *Id.*

112. *Id.* Dr. Thomas Monahan, executive secretary for the New York State Board of Medicine, which licenses doctors under the Education Department, says in respect to what constitutes the practice of medicine on the Internet, “The real answer is, we don’t know.” *Id.*

113. Publishers, also known as Internet Services Providers (ISPs) are those information services like AOL and Prodigy which, for a monthly fee from the user, allow the posting of information on the web sites the providers have created.

114. See Communications Decency Act of 1996, 47 U.S.C. § 223 (creating penalties for the transmission or display of obscene, indecent or patently offensive materials to minors via any type of interactive computer services).

Factually analogous cases exist in the print medium. See, e.g., *Braun v. Soldier of Fortune Magazine, Inc.*, 968 F.2d 1110 (11th Cir. 1992) (upholding a jury award of more than \$4 million to the family of a murder victim because the reasonably prudent publisher should not have run an ad by a mercenary who advertised as a “gun for hire” in the magazine and did kill the victim). But see *Eimann v. Soldier of Fortune Magazine, Inc.*, 880 F.2d 830, 838 (5th Cir. 1989) (holding a lower court erroneously imposed too high a standard on the magazine and that the magazine could only be held liable if: (1) the activity advertised was clearly illegal; and (2) if a reasonable publisher would conclude that the activity advertised could reasonably be interpreted as a offer to commit a crime).

115. Communications Decency Act of 1996, 47 U.S.C. § 223.

116. See Kenneth A. De Ville, *Internet Listservers and Pediatrics*, PEDIATRICS, Sept. 1, 1996, at 453.

117. *Id.* (pointing out that the requirements of the physician-patient relationship require a “legally recognized duty, the breach of that duty and a causal connection between the defendant’s breach of duty and the damage incurred by the plaintiff”).

or consumer statutes to stop the activity.¹¹⁸

III. MODERATE LEGAL LIABILITY: TELEMEDICINE

Telemedicine is no longer an experiment. It is a necessity which provides a boon to mankind.¹¹⁹ Proponents of its use are making steady progress in acquiring converts.¹²⁰ "Telemedicine" is defined as the use of telecommunications technology to provide health care services to patients who are at a distance from a physician or other health care provider.¹²¹ One-fourth of the nation's health care providers are currently utilizing telemedicine at their institutions, and experts suggest that the remaining seventy-five percent must join them or get left behind.¹²² Although the equipment can be costly and difficult to use and regulatory obstacles can be problematic, physician-patient video consultations grew by 300% from 1994 to 1995.¹²³ One barrier to the practice of telemedicine is that many physicians, fearing the economic harm from competition are against it.¹²⁴ However, diagnostics such as magnetic resonance imaging (MRI) have revolutionized health care. Telemedicine is the next effective, accessible, economical and logical step in consulting.¹²⁵ The changing

118. See *supra* notes 93-96.

119. See generally Bill Siwicki, *Legal Issues Could Slow Growth*, HEALTH DATA MGMT., Apr. 19, 1997 (providing a general discussion of the uses and efficacy of telemedicine as well as advocating laws to permit physicians to consult with other physicians in other states). This article and section focuses on the actual consultation done by professionals on-line-through telephone or other hook-ups. It does not refer to mere conversations or Internet discussions or informal exchanges but, instead, discussions involving actual specific patients to whom the practitioner has undertaken a duty to disseminate a valid professional judgment. *Id.*

120. *Id.*

121. See Granade & Sanders, *supra* note 26.

122. See Sandy Campbell, *Will Telemedicine Become as Common as the Stethoscope?*, HEALTH CARE STRATEGIC MGMT., Apr. 1, 1997, at 4. A national survey of 95% of the nation's rural hospitals by Abt Associates released in 1996 indicated that 29% of the nation's rural hospitals already practiced telemedicine or plan to have programs up and running within the year. See, e.g., Robert Pendrak & Peter Ericson, *Telemedicine and the Law*, HEALTHCARE FIN. MGMT., Dec. 1, 1996, at 12.

123. See Greg Borzo, *Telemedicine: New Tools, Not New Medicine*, AM. MED. NEWS, Nov. 11, 1996, at 42, available in 1996 WL 11860504. Statistics gathered by an annual survey conducted by *Telemedicine Today* indicated that 1993, in the first year the survey was done, 1750 consultations took place. In 1994, there were 2110 consultations. In 1995, there were 6267, a growth of 300%.

124. *Id.*

125. See *A Bridge to Russia*, HEALTH DATA MGMT., Jan. 19, 1997 (discussing the telemedical link pioneered by Dr. Earl W. Ferguson to create a World-Wide Web care site that would link clinicians and capture audio and video in real time to allow consults and store expert opinions for colleagues to access). Telemedicine transfers digital data from diagnostic equipment, visual and voice data. As technological support expands, so will the uses. See Douglas Bradham et al., *The*

face of medicine which necessitates an increased demand to lower health care costs cannot help but serve as the impetus for telemedicine services.¹²⁶ In addition, problems of unequal treatment of rural and urban patients can be dealt with using telemedicine as a conduit to deliver these services.¹²⁷ Typical company equipment available in today's marketplace allows doctors to see 3-D images of magnetic resonance imaging (MRI), CAT scans and x-rays.¹²⁸ Furthermore, interactive equipment now permits physicians to rehearse procedures using simulator-type equipment to locate positions within the body as well as to practice surgical techniques.¹²⁹ Medical commentators suggest that teleconferencing will burgeon as the Internet and World-Wide Web become more accessible on the home computer.¹³⁰ The available technology, through the use

Information Superhighway and Telemedicine: Applications, Status and Issues, 30 WAKE FOREST L. REV. 145, 152-160 (1995) (chronicling the development of telemedicine projects from teleradiology to consulting in different states, hospitals and University Medical Centers from 1991-1995).

126. See Mike Mills, *Venture Puts Health Care on Call*, WASH. POST, Mar. 25, 1996. The article reporter interviewed Neal Kassell, M.D., a renowned brain surgeon at the University of Virginia. In 1993, Dr. Kassell linked 19 Virginia hospitals via telemedicine, founded Multimedia Medical Systems—which offers 3-D imaging services—and inspired MCI Communication Corporation to invest in the venture with millions of dollars. Kassell states in the article, “The regulatory issues [with telemedicine] are going to disappear very quickly because telemedicine exists today whenever I’m talking to a patient on the telephone. The only difference now is I can see the patient, he said.” *Id.*

127. See Daniel McCarthy, *The Virtual Health Economy: Telemedicine and the Supply of Primary Care Physicians in Rural America*, 21 AM. J.L. & MED. 111 (1995) (defining the problems of rural access to medicine and presenting an overview of technology, and reflecting upon the failures of the government to increase the supply of rural practitioners).

128. See Mills, *supra* note 126.

129. *Id.* One System known as Multimedia Medical Systems’ basic product is \$50,000. It allows video-conferencing in one location and transmits live or recorded medical images to another location. In addition, doctors can use the equipment to plan and rehearse procedures. Dr. Kassell, a renowned neurosurgeon discussed the following concern:

Image-guided technology dramatically decreases the time I spend in surgery. Half the time I spend in surgery is separating normal [brain tissue] from abnormal and finding out where I am. It’s not a satisfying experience to remove what you thought was part of a tumor and instead you’ve removed memories from 1980 to 1985.

Id.

130. Marshall Ruffin, *The Future is Here*, PHYSICIAN EXECUTIVE, Nov. 1, 1996, at 11. The article advocates that all physicians become technology literate or suffer the economic consequences when the public learns to expect such services as video conferencing and answering patients’ questions and concerns from the patients’ homes. The author points out that this service will be economical. “[B]y adhering to Web standards, hospitals and physicians will be able to participate with patients in video teleconferences without having to pay for, install, or maintain proprietary equipment on patients’ PCS.” *Id.* The American consumer expects on-line banking, shopping and other activities and so too, like the abundance of ATMs, the growth in demands will

of multiplexed phone lines which project audio and video, provides excellent resolution in the transmission of x-ray and other more complicated test data. Physicians have always communicated with their patients and with each other via telephone. However, there are no current large-scale studies available to demonstrate that telemedicine is as safe and effective as in-person treatment by a physician.¹³¹ One recent small scale study of only thirty patients with dermatologic (skin) problems conducted by the Medical College of Georgia found no difference between the diagnoses physicians made using a telecommunication link and those diagnoses they made in person.¹³²

As the use of telemedicine is expanding, questions regarding medical malpractice claims must be addressed. Medical malpractice claims arise where a physician-patient relationship has been established which places a duty on the physician to exercise reasonable care in treating the patient.¹³³ The existence of a physician-patient relationship is normally a question of fact for the jury to decide.¹³⁴ Telephone "discussion between professional people of hypothetical situations cannot be viewed as a basis for liability."¹³⁵

Courts have generally been unwilling to extend liability to consultants. Thus,

soon require physicians' offices to have health home and office conferencing or business will be lost. *Id.*; see also Marshall Ruffin, *The World Wide Web is Coming Soon to an Organization Near You*, PHYSICIAN EXECUTIVE, Mar. 1, 1996, at 3. The article states that the growth areas in Internet use for a physician are both internal and external. *Id.* Internally, a physician can receive and protect secure communications within the organization. *Id.* Externally, a physician can communicate with other health care providers. *Id.* Additionally, the physician may contact insurers, patients and the general public. *Id.*

131. See Bradham et al., *supra* note 125, at 164. The article states that Medicare requires that a physician be present at both ends of a consultation in order to bill the government. The Telemedicine Center at the College of Georgia was the first medical center in the country to receive approval for Medicare and Medicaid reimbursement for telemedicine. *Id.* (citing Rita Shoor, *Long Distance Medicine*, BUS. & HEALTH, June 1994, at 39-40).

132. See Pendrak & Ericson, *supra* note 122.

133. See *Oliver v. Brock*, 342 So. 2d 1 (Ala. 1976); *Flynn v. Bausch*, 469 N.W.2d 125 (Neb. 1991). But see *Davis v. Weiskopf*, 439 N.E.2d 60 (Ill. App. Ct. 1982) (physician-patient relationship is not a pre-requisite for medical malpractice when the claim can be grounded in mere negligence).

134. See *Oliver*, 342 So. 2d at 3. During the course of a telephone conversation with defendant Dr. Brock, Dr. Whitfield, the treating physician, described generally the type of treatment he was administering to a patient who had been injured in an automobile accident. The court found the trial court's granting of the defendant's motion for summary judgment was appropriate because the court found there was nothing in the record to suggest that Dr. Brock saw, was engaged as a consultant, undertook to consult or received any remuneration for same in the treatment of the patient. *Id.* at 4.

135. *Id.* at 5 (Beatty, J., concurring) (stating generally that public policy concerns favor professionals who compare problem-solving approaches with other members of their profession, so they may learn from one another and benefit their clients).

the court in *Rainer v. Grossman*,¹³⁶ held that a lecturing medical school professor, who presented a discussion on gastroenterology at a continuing education conference and who opined that surgery was necessary for an ulcerative colitis patient based on a presentation of medical history, facts, and x-rays of the patient by the treating physician, had established no physician-patient relationship with the patient and had incurred no liability for malpractice.¹³⁷ The court in *Rainer* focused on the policy argument that it would be counterproductive to discourage professional discussion by extending malpractice liability to those with whom a treating physician merely confers.¹³⁸ In addition, *Rainer* focused on the fact that the consulting doctor was neither under the practitioner's control nor direction, nor had he personally examined the patient.¹³⁹ Thus, the philosophy of some courts has been to limit any extension of the duty of care and freely encourage professional consultation to benefit both the patients and the medical profession generally.¹⁴⁰

In *Lopez v. Aziz*,¹⁴¹ the Texas Court of Appeals focused on the degree of consent between patient and practitioner in forming a contract, either express or implied, and found no liability for simply conferring with a colleague.¹⁴² The court's rationale relied on the fact that the treating physician who controlled the patient care was free to accept or reject the opinion of the consultant.¹⁴³

Most states have a "consultation exemption" which allows out-of-state physicians who enter a state merely to consult with a local physician an exemption to the state's licensing requirements.¹⁴⁴ Other states are restricting the

136. 107 Cal. Rptr. 469 (Cal. Ct. App. 1973).

137. *Id.* at 471-72; *see also* De Ville, *supra* note 116, at 3. This is the classic case of presenting information at an academic conference. The patient had the surgery suggested for ulcerative colitis, had complications and sued both his attending physician and the speaker. The trial court judge dismissed the claims against the speaker on summary judgment. The trial court decision was affirmed on appeal. *Id.*; *see also* Roberts v. Hunter, 426 S.E.2d 797 (S.C. 1993) (holding that a neurologist who was called to consult in an emergency room was not liable when the patient left before an examination could take place).

138. *Rainer*, 107 Cal. Rptr. at 472.

139. *Id.* (suggesting liability should rest with the treating physicians who can rely on their own judgment after following proper medical procedures).

140. *See* Hill v. Kokosky, 463 N.W.2d 265, 268 (Mich. Ct. App. 1990) (holding summary judgment was proper for the defendants in a case in which several doctors gave informal opinion to a treating obstetrician via telephone regarding the treatment alternatives of a twenty-two week pregnant woman who subsequently bore a child with cerebral palsy, mental retardation, and respiratory problems).

141. 852 S.W.2d 303, 306-07 (Tex. Ct. App. 1993).

142. *Id.* at 307.

143. *Id.*

144. *See* Granade & Sanders, *supra* note 26, at 69 n.9 (citing Phyllis F. Granade, *Implementing Telemedicine on a National Basis: A Legal Analysis of the Licensure Issues* (Draft for the Medical College of Georgia, April 1995); *see also* Jay H. Sanders, *Telemedicine: Capabilities, Growth Projections and Attending Issues Surrounding its Use*, 6 J. PHARMACY & L.

exemption to those physicians licensed within that state.¹⁴⁵ However, another line of cases clearly allows liability for malpractice when the consultant has never met the patient.¹⁴⁶ A telephone call made by a patient to a physician's office for the purposes of initiating treatment was held sufficient to create a physician-patient relationship and possible liability.¹⁴⁷ In *Bienz v. Central Suffolk Hospital*, the plaintiffs¹⁴⁸ survived a motion for summary judgment filed by the defendant physician when the only allegation against the physician was that plaintiffs had telephoned the office and received advice. The court would not speculate on the advice that may have been given over the phone by the physician but opined that the giving of medical advice, even over the phone, can serve to create an implied physician-patient relationship and is a question of fact for the jury to decide.¹⁴⁹

Likewise, in *Davis v. Weiskopf*,¹⁵⁰ a physician—who had reviewed an emergency room patient's x-rays and knew the radiologist suggested that the patient had a bone cancer but never saw the patient in the office—was held to have a duty to warn the patient of the need for seeking medical treatment before summarily dismissing the patient.¹⁵¹ Both *Bienz* and *Davis* can be reconciled with the other consulting cases based on the question of control. In neither case

3 (1996). Dr. Sanders designed the telemedical system at the Medical College of Georgia that interacts with rural hospitals allowing for "electronic house calls" so patients can be cared for in their homes. He points out that a majority of states provide some form of consultation exemption. *Id.* at 7 (citing Phyllis Granade, *Telemedicine Licensing Issues* (1994) (unpublished manuscript, on file with the Medical College of Georgia)).

New York provides that any physician licensed by another state or country may provide in-state consultations only. *Id.* at 8. The following states permit out-of-state physicians to consult with a local physician: Alabama, California, Georgia, Oregon, South Carolina, South Dakota and Texas. *Id.*

145. Four states—Kansas, Oklahoma, South Dakota and Texas—seem to prohibit physicians unlicensed within the state from practicing telemedicine within the state, and twenty states are considering similar restrictions. See *Under Examination*, 13 NO. 4 MED. MALPRACTICE L. & STRATEGY 12 (1996). The article also presents a concern that malpractice insurance written for a doctor in one state may not cover him or her for alleged negligence or malpractice in telemedicine practiced in another state. *Id.*

146. See, e.g., *Davis v. Weiskopf*, 439 N.E.2d 60, 65 (Ill. App. Ct. 1982) (physician refused to meet with and treat patient referred to him by another physician; physician had undertaken a duty of care and was required to perform to the required level of care) (citations omitted).

147. See *Bienz v. Central Suffolk Hosp.*, 557 N.Y.S.2d 139 (N.Y. App. Div. 1990).

148. *Id.*

149. *Id.* at 139-40.

150. *Davis*, 439 N.E.2d at 60.

151. *Id.* at 61. The patient had made an appointment after the physician accepted the referral from an emergency room doctor. The first appointment was canceled and rescheduled without the physician seeing the patient. Before his second appointment, the patient called to state that he would be late and was informed that Dr. Hagman would not treat him. Neither Dr. Hagman nor anyone on the staff informed the patient of the severity of his illness. *Id.*

was there a primary care physician or other doctor who could ultimately be responsible for the care of the patient. Thus, courts are reluctant to find consultants liable for any opinions they render as long as another physician has ultimate responsibility for decision-making in the patient's case.

While Internet discussions are more analogous to the academic conference scenario than to formal consultancy relationships, there is a risk of liability to a practitioner using telemedicine.¹⁵² Medical commentators framing responses to a discussion on the Internet can insulate themselves from liability in two ways: (1) by framing their responses in general terms to make it clear to any reader that there is no consultancy relationship; or (2) by issuing a disclaimer in writing with the original subscription and with each message written.¹⁵³

As telemedicine expands exponentially, there are legal risks to the practitioner. The quality of the resolution of the information transmitted is of utmost concern as well, since it must be compacted and is ordinarily sent over telephone lines.¹⁵⁴ Distortion or artifacts present on a test or x-ray which resulted from the transmission or other sources can obscure or affect the practitioner's diagnosis and ultimately the opinion rendered, thereby increasing the practitioner's potential liability.¹⁵⁵ Since communication is the cornerstone of a good physician-patient relationship, will the impersonal and distant consultation of telemedicine result in increased litigation?¹⁵⁶

One thing is certain. While "curbside consultations"¹⁵⁷ ordinarily have no liability attached to them, Internet discussions and telemedical conferencing will provide a record that saves the information which can be printed in hard copy form at a later time.¹⁵⁸ A hard copy print-out is discoverable before trial and could be uncovered in the defendant physician's computer files by a plaintiff's attorney.¹⁵⁹

Despite the fact that at the state level, most states have at least one telemedicine system in operation or one in the planning stage, the risks of

152. See De Ville, *supra* note 116 (discussing the minimal amount of liability to listserver discussions and those done on-line).

153. *Id.*

154. See Sanders, *supra* note 144, at 11-12. Sanders raises questions regarding the lack of scientific study in the area as well as lack of information regarding whether the telemedicine practitioner errs in the clinical observation and reporting of signs and symptoms. Thus he states that there are two levels of questions yet to be answered: (1) the safety and effectiveness of telemedicine, and (2) the exposure of practitioners to increased liability because of the impersonal nature of the service.

155. *Id.*

156. *Id.* at 12.

157. See De Ville, *supra* note 116 (explaining that "curbside consultations" are those discussions between professionals that are largely informal and which rarely generate liability).

158. *Id.*

159. *Id.* See generally Steven E. North, *Fundamentals of the Management of the Plaintiff's Malpractice Case*, 421 PLI/LIT 7 (1991).

liability from telemedicine are purely theoretical.¹⁶⁰ The benefits of expanding health care delivery are inestimable. In today's societal marketplace of crumbling health care structure and mandated managed care, telemedicine offers a consumer access, quality and economy. State licensing restrictions on the consulting relationship must be relaxed to accommodate the best expert possible in any field, regardless of the location or economic status of the health care consumer.

Current trends in case law suggest that a physician-patient relationship will be found between telemedicine practitioners and the patients they see.¹⁶¹ Most cases demonstrate that consultants are rarely held liable for medical malpractice or negligence.¹⁶² Careful risk management should include planning by the consultant, who should never feel obligated to offer advice if the quality of the telemedical transmission is inadequate.¹⁶³

Telemedicine could result in revolutionary changes in our health care delivery system. The technology and availability of accessible, low-cost consulting could result, not only in meeting the prevailing health care needs but also in lowering malpractice liability for internists or general practitioners who could comfortably and economically seek expert advice for the benefit of their patients.

IV. HIGH LEGAL LIABILITY: CYBERMEDICINE

Imagine the peace of mind of having access to the American medical monolith from anywhere in the world. Doctors now practice medicine on the Internet. Those beepers physicians carry can now signal, not just physicians on-call for their office patients, but physicians on-call for any potential Internet patient who signs on to their web site worldwide. However, the electronic practice of remote doctoring makes both the American Medical Association and regulators on state medical boards wary and tense of the possible resulting malpractice liability.¹⁶⁴ Physicians who practice on the Internet so far have had impunity from any resulting suits, but that situation will soon change. The questions raised regarding such long distance practice range from how can one practice good medicine without percussion, auscultation and inspection of the patient to identification of the actual patient who is signing on for the medical

160. See Sanders, *supra* note 144, at 5. The author points out the efficacy of using such systems for use in state correctional facilities to serve the prison population, increase security and lower costs. He also notes that the impetus for such development has been from university medical centers attempting to extend the levels of care to those in remote areas. The Defense Department anticipates cost reductions to serve military personnel, as well as their dependents in all locations throughout the world. *Id.*

161. See Granade & Sanders, *supra* note 26, at 73.

162. *Id.* (text, comments and cases included in the article suggest very low legal liability for consultants).

163. *Id.*

164. See Greene, *supra* note 90, at 46.

service provided.¹⁶⁵

A. Cyberdocs: How It Works

On Friday, October 4, 1996, the wire services announced the first virtual real live doctors office on the World-Wide Web.¹⁶⁶ Other sites offered users nurses who could "triage" complaints, email consultation, self-diagnosis, health screening and medical devices that can be utilized at home and monitored in the cyberoffice.¹⁶⁷ Today, the user need not spend a great amount of time searching the Internet for specific information on a particular disease.¹⁶⁸ A group of board-certified Emergency Medicine specialists provide around-the-clock live medical care for patients on-line in the comfort of their own homes, as long as they have Internet access through a home computer.¹⁶⁹ The medical services provided vary depending on the need.¹⁷⁰ The web site can provide an acute medical consultation, a second opinion, care for minor medical illnesses, medical referrals, or simply write an excuse from work for a patient.¹⁷¹ One innovative service is that of world-wide prescription refills.¹⁷² The two physicians who started the service know that they are "venturing into uncharted waters," but are convinced that Internet medicine is "going to be big, and they want in on the ground floor."¹⁷³

165. *Id.*

166. *See Cyberdocs Today Announced the First Virtual Doctors[sic] Office on the World Wide Web!*, M2 PRESSWIRE, Oct. 4, 1996, available in 1996 WL 11276562; *see also Cyberdocs* (visited first July 7, 1997 and lastly on March 27, 1998) <<http://www.cyberdocs.com>> (devoting much attention to the qualifications of the physicians on the site and offering various medical services). *Id.* (asserting that all medical information is encrypted with RSA encryption technology and cannot be "hacked.").

167. *See Quacks, Bogus Treatments*, *supra* note 108 (noting that Dr. Foster Carr had created a cyberspace doctor's office in about 1995, wherein he intended to provide users with a total full-service medical practice on the Internet but not mentioning either prescription availability or disease diagnosis).

168. *See Cyberdocs Today*, *supra* note 166.

169. *Id.*

170. *See* Electronic mail (Email) sent by Steven A. Kohler, M.D. (July 4, 1997) (on file with author). Dr. Kohler founded *Cyberdocs*, which opened in September 1996, but had no patients until January 1997. As of July 1997, Kohler stated: "Presently we are averaging more than one patient per day, and it seems to be rapidly increasing." *Id.* Dr. Kohler further indicated that in June 1997, the web site generated approximately 40,000 "hits." *Id.* This indicates visits to the site, whether or not they actually sign up for services.

171. *Id.*

172. *Id.*

173. *See* Greene, *supra* note 90 (interviewing the founding physicians of *Cyberdocs*, Steven Kohler and Kerry Archer in April 1997; *see also Cyberdocs Today*, *supra* note 166. *Cyberdocs'* mission is to provide "initial consultative medical care, on a provisional basis only, for simple medical problems, pending further doctor-patient interaction in an office or hospital-based setting."

A patient taking advantage of *Cyberdocs* might be traveling abroad and need a refill of medication.¹⁷⁴ The physicians will not prescribe drugs which are subject to abuse or which are controlled.¹⁷⁵ One other very large benefit from the anonymity of the contact is that people who feel uncomfortable asking questions of their own doctor in person may use such a service and get treatment for an embarrassing ailment sooner.¹⁷⁶ Additionally, the web site provides direction to other helpful specific informational web sites on the Internet, as well as interpretation of health information which the patient does not understand.¹⁷⁷ A disclaimer informs those with serious symptoms to seek immediate medical care from a practitioner and further states that no person should consider the Internet as a substitute for a family doctor.¹⁷⁸

Signing on to this web site is easy to do.¹⁷⁹ However, the doctors only accept patients who are either physically in Massachusetts or outside of the United States entirely, thus circumventing problems with state licensing laws.¹⁸⁰ When using the site, patients are asked to enter a credit card number and advised that all transactions are confidential and safe from detection, after which they are typically charged a fifty dollar fee for a chat with the physician on-call.¹⁸¹ Prior to the electronic appointment or consultation, first time users are asked to record

Id. Dr. Kohler describes people who are away from home on business, on vacation, at school, or living in a remote area or having no primary care doctor as prime users. *Id.*

174. See Greene, *supra* note 90. Dr. Kohler has stated as follows:

Certainly, we have seen patients who clearly should be physically examined by a doctor, and then we tell the patients so, after discussing the possibilities of their illness with them. . . . In the virtual housecall portion of the site, we try to screen out patients who are not appropriate for the service by stating that if they have certain chief complaints (chest pain, abdominal pain, flank pain, headache, neck stiffness, shortness of breath), that they should not use the site and see a doctor immediately; also we make it clear that certain medications we will not prescribe, i.e., drugs of potential abuse and drugs that require close monitoring, and do provide at least a partial list of these medications. Any patient that requests a particular medication and that is the only thing they really want, and then we do not prescribe that medication, then we go ahead and refund the patient.

Email, *supra* note 170.

175. See Greene, *supra* note 90.

176. *Id.*; see also *Cyberdocs Today*, *supra* note 166 (providing the example that a patient may have the beginnings of bronchitis and because of receiving early antibiotic treatment, such early treatment may prevent the patient from a serious pneumonia that may have developed without prompt treatment).

177. See *Cyberdocs Today*, *supra* note 166.

178. See Greene, *supra* note 90.

179. Email, *supra* note 170. ("Once the patients have paid, they must first sign off to the affect [sic] that they are either physically in Massachusetts or outside of the US; then prior to seeing the doctor there is a disclaimer [sic] that they must sign to again; at any point they may back out without being charge. Finally, the discharge instructions also help out as a disclaimer [sic].") *Id.*

180. *Id.*

181. See Greene, *supra* note 90, at 45.

their medical history in their personal chart.¹⁸² Then patients are asked to provide a brief description of their current illness or their medical concern.¹⁸³ Patients are then brought to the "examining room," and they are joined by the particular physician on call.¹⁸⁴ At the conclusion of the live portion of the consultation, discharge instructions can be saved or immediately printed out through the web site.¹⁸⁵ All physician-patient interaction becomes part of the patient's confidential medical record.¹⁸⁶ In addition, the electronic practice of medicine may be covered by the doctors' malpractice insurance policy if the insurance contains a telemedicine clause covering such a practice, as long as the physicians offer advice that is only in their field.¹⁸⁷

B. Risk Factors of Internet Practitioners

Physicians who staff Virtual Housecalls and prescribe medication and treatment over the Internet could be prime candidates for lawsuits. Two things must exist in order for a malpractice claim to proceed: (1) a contractual physician-patient relationship must exist, and (2) the physician must breach a duty of care owed to the patient.¹⁸⁸ Unlike the consultant or specialist who may not exert any control over the patient, the practitioner on the Internet establishes

182. See *Cyberdocs Today*, *supra* note 166.

183. *Id.*

184. *Id.*

185. *Id.*; see also Email, *supra* note 170. Dr. Kohler's Email stated the following: We have standardized discharge instructions on different illnesses and for different medications. They are very medicolegally oriented; the patient must sign off to the affect [sic] of a 'yes' or 'no' to them. It is clearly stated that if the patient wants a copy of them, that he or she can copy and paste, or press the browser print button when the discharge instructions are on the screen. We did it this way because we can keep things secure and encrypted for the patient. If we emailed the discharge instructions to the patient, we would have to have the patient set up for encryption, which we think would just open up a can of worms-it would make things too technically difficult for the patient. Finally, the entire doctor-patient interaction is electronically recorded, including the discharge instructions.

Id.

186. See *Cyberdocs Today*, *supra* note 166.

187. See Greene, *supra* note 90, at 45.

188. See Pendrak & Ericson, *supra* note 122; see also James L. Rigelhaupt, Jr., Annotation, *What Constitutes Physician-Patient Relationship for Malpractice Purposes*, 17 A.L.R.4TH 132 (1981 & Supp. 1997). The annotation states the following in its introduction:

Ordinarily, recovery for malpractice against a physician is allowed only where there is a relationship of doctor and patient as the result of a contract, express or implied, that the doctor will treat the patient with proper professional skill and the patient will pay for such treatment, and there has been a breach of professional duty to the patient.

Id. (citing 61 AM. JUR. 2D *Physicians, Surgeons, and Other Healers* § 201 (no date offered in original)).

a physician-patient relationship because the patient must first enter a credit card number in order to gain access to a physician.¹⁸⁹ Since the physicians' offer of services on the Internet is accepted by the patient with Internet access and a written credit card number forming the consideration for the promise, a contractual relationship is formed.¹⁹⁰ Thereafter, if the practitioner on the Internet accepts the patient, he undertakes a duty to that patient to treat them with reasonable skill and care.¹⁹¹

Concerns of documentation, communication and written follow-up are crucial to the management of all patients, especially those attended to on the Internet.¹⁹² Legal liability, coupled with defensive medicine, are the prime factors in driving up the costs and decreasing the quality of medical care.¹⁹³ Risk management is therefore, of great concern to professionals who treat patients.¹⁹⁴

189. See Greene, *supra* note 90.

190. See generally JOHN D. CALAMARI & JOSEPH M. PERILLO, *CONTRACTS-BLACK LETTER SERIES* (1983) (stating that a valid contract must have the elements of an offer, acceptance and consideration in order to be enforceable).

191. See Email, *supra* note 170. Dr. Steven Kohler states:

We have frequent discussions regarding what illnesses are appropriate for us to treat, and what medications are appropriate to prescribe, and for how long. We do come across certain medical conditions that we have to "wing it" at the time, and then afterwards discuss the medical condition and a practical guideline for it.

Id. The problems created by this approach, such as which standards of care should prevail, forum shopping and licensing concerns, have been dealt with in articles by other authors. See Kathleen M. Vyborny, *Legal and Political Issues Facing Telemedicine*, 5 *ANNALS HEALTH L.* 61 & n.37 (1996) (citing R. James Brenner, *Teleradiology Poses Host of Thorny Legal Issues*, *DIAGNOSTIC IMAGING*, Apr. 1994, at 37). This article explores the myriad of legal problems with standards of care, Federalism, and licensing issues. The article further points out that over 60% of the journal articles listed in the Telemedicine Bibliography cited below were written since early 1993 (citing *Telemedicine: Past, Present, Future* (bibliography, 1634 citations) (Kristine Scannel et al. compilers, Bethesda Md., Nat'l Library of Medicine, Jan. 1966-Mar. 1995) (available from U.S. Gov't Printing Office, Washington D.C.)). Also, the author states that over 50% of the articles addressing legal and privacy issues were written from 1993-95. *Id.*

192. See Terese Hudson, *Documentation Crucial to E.D. Risk Management*, *HOSP. & HEALTH NETWORKS*, Mar. 20, 1992, at 6 (discussing issues in emergency department liability).

193. See generally David M. McIntosh & David C. Murray, *The High Cost of Medical Liability*, 1994 HUDSON INST., available online Hudson Briefing Paper (visited June 26, 1997) <<http://www.wp.com/hcla/hudson1.htm>>. The general focus of this paper is a study at a large Indiana hospital of the direct and indirect costs of medical liability involved in patient care. These direct costs included: insurance, self-insurance, awards and settlements, hospital legal fees and administrative costs. Indirect costs included the cost of all the treatment commonly referred to as "defensive medicine." *Id.* Defensive medicine is that medicine practiced in which a doctor orders unnecessary tests and procedures in order to avoid legal liability. *Id.* This single study indicated that \$450 of each patient's total cost was due to legal liability. The authors support aggressive tort reform, with limits on attorney fees and revision of collateral source rules. *Id.*

194. See John C. West, *The Legal Implications of Medical Malpractice Guidelines*, 27 *J.*

Studies indicate that the “least-risky insurance risk class” is family practitioners and specialists who perform no surgery.¹⁹⁵ Also, there is typically more legal risk of liability when there is a lack of ongoing physician-patient relationship, and when the medical problem is complex and/or life-threatening.¹⁹⁶ This legal risk is greater in a setting in which the patient has had no prior relationship with the practitioner—for example the emergency room.¹⁹⁷ Further compounding the problem of liability in Internet practice, the physician cannot see, touch or listen to the patients before treating them.¹⁹⁸ Additionally, the physician cannot know whether the patient is a poor historian, a liar, a charlatan, or someone with Munchausen’s syndrome.¹⁹⁹ It is much easier for patients, or their families, to become angry and sue a physician they just met fleetingly, than it is for them to sue their own family doctor with whom they have developed a trusting long-term relationship.²⁰⁰ Thus, the physician who sees patients on the Internet, for the first time, will be in much the same situation as the emergency room physician and will be a prime candidate for legal liability.²⁰¹

CONCLUSION

The future of medicine is here today. The Internet is unprecedented in the

HEALTH & HOSP. L. 97 (1994) (estimating the cost of defensive medicine ranged from \$3 to \$6 billion in 1975, and from \$15 to \$40 billion in 1983). Therefore, using those estimates and extrapolating the author estimates that in 1993 the cost ranged from \$13.6 to \$81 billion. *Id.*

195. *See id.*

196. *See* Sally L. Reynolds et al., *Professional Liability in a Pediatric Emergency Department*, 87 PEDIATRICS 134-37 (1991). The article discusses risk in general of treating patients in an emergency room. The most high risk patients for lawsuit were found to be “appendicitis, wounds, fractures, meningitis, ectopic pregnancy, and myocardial infarction.” *Id.* at 136. Frequently, higher risk is found in those patients who make multiple visits to the department for the same complaint. Failure to document the physical examinations performed was a major error. *Id.*

197. *See* Hudson, *supra* note 192.

198. Certainly, this inability to examine the patient will change with the addition of hardware and software programs, which are now available on phone lines, to do telemedicine consultation. Virtual stethoscope and other items will eventually make touch, hearing and feeling more accessible to the web sites.

199. *See* TABER’S, *supra* note 3, at 1158. Munchausen syndrome was named after the fictional 18th century baron created by Rudolph Raspe. This syndrome is characterized by malingering in which the patient may practice self-mutilation and deception to feign illness. Often the patients are knowledgeable about symptoms and diseases and are very convincing. These patients often travel from hospital to hospital never staying long enough to be given psychiatric treatment. *Id.*; *see also* Greene, *supra* note 90 (statement by Dr. Kohler that truthfulness in patients was a problem that he and his partner Archer faced every day at Salem (Mass.) hospital in the emergency room).

200. *See* Greene, *supra* note 90 (alluding to the fact that the anonymity of the physician may contribute to the litigiousness).

201. *See Quacks, Bogus Treatments, supra* note 108.

ease of transfer of information that it offers users of home computers; whether physicians, patients or others.²⁰² The utility and availability of the Internet combined with the ease of transfer of information presents a double-edged sword for patients and physicians. The benefits of on-line teleconferencing and consultations as well as the on-line practice of medicine in this era of limited health care dollars and managed care are inestimable. The legal quagmire of patient privacy issues, licensing laws, and unknown standards of care places a heavy burden on the health care professional or medical practitioner. The practice of telemedicine is here to stay, and virtually every state has made arrangements to allow its use, at least within its own borders, by increasing accessibility of its citizens to the best that can be provided in health care. Physicians' groups are joining the Internet and World-Wide Web with gusto and informing and educating their patients on-line. The freedom for physicians to practice medicine on a network without interference from health care providers is both attractive and alluring.

Today, the leading edge of medicine is represented by actual medical practice on the Internet. Many physicians' professional organizations have vigorously opposed Internet practice. These groups and individuals reason that liability from Internet practice could be extensive and they decry the impersonal and untouchable aspects of such practice. They intimate that such a development is ethically charged with lack of clinical responsibility. Like the critics of Galileo and Copernicus, the critics of Internet practice medical are wrong.

Common sense dictates that the Internet is a ubiquitous method of communication, access, and economy in the health care area. Physicians and other health care professionals should acquire the knowledge to use the Internet to help patients and their families. Physician pioneers in this area of Internet medical practice will one day be held out as innovative, conscientious leaders. While the courts have yet to test liability for medical malpractice in any case involving the practice of medicine on the Internet, such a case is bound to surface soon. Courts can proportion liability on a case-by-case basis. Courts can and will decide jurisdictional issues, standards of care, and the duty owed to the patient. Health professionals of all callings should be encouraged to utilize the Internet to educate and communicate with their patients. The risks of Internet practice can be easily managed and minimized through competent preparation by the intelligent practitioner. Federal licensing should be granted to all Board certified practitioners. The practitioners should be seen as being visited in their home state for liability purposes. Standards of care can be discerned through each board certified practice specialty.

Bad practitioners, quacks and charlatans should be punished, regardless of where they practice. The larger picture is that the dissemination of valid health information, as well as the practice of medicine by validly credentialed practitioners on-line performs a service for all of us. Thus, Internet practice should be protected by public policy concerns. Public health will benefit significantly. Furthermore, new frontiers in research will benefit us all as this

202. See S. Andrew Spooner, *The Pediatric Internet*, 98 PEDIATRICS 1185 (1996).

information is disseminated more quickly. Not only will the consumer and the practitioner become better educated, but also practitioners will provide the patient with improved and more coordinated health care at a better price. With the coming millennium, your health insurer will cover calls made to an on-line practitioner, much the same as Medicare now pays for teleconferencing. The Internet is at the forefront of your healthcare future.