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## Will a Lawsuit a Day Keep the Cyberdocs Away? Modern Theories of Medical Malpractice as Applied to Cybermedicine

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**Will a Lawsuit a Day Keep the Cyberdocs Away?  
Modern Theories of Medical Malpractice as Applied to  
Cybermedicine**

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**I. INTRODUCTION**

{1}Rivaled only by lawyers, those who earn their livelihood by practicing medicine are viewed by many as America's Public Enemy No. 1. This perception is due to the rising cost of medicine, the over-scheduling of patients, and the poor bedside manner that many people associate with a trip to the doctor's office. However,

the advent of the Internet and its proliferation into schools, offices, and homes has placed medical opinions only a mouse click away. Websites, such as [cyberdocs.com](http://cyberdocs.com), allow patients to type in a description of their ailments and receive diagnoses and treatment advice from an on-line medical professional known as a "cyberdoctor." [1] This practice of "cybermedicine" [2] is viewed by many as a liberating alternative to making a trip to see their family practitioner. Critics, on the other hand, foresee a plethora of legal and ethical dilemmas on the electronic horizon.

{2} This article examines the practice of cybermedicine and how modern theories of medical malpractice can be applied to cases where no relationship between the patient and the physician exists in the physical world. Part II provides a background on electronic medicine, including the evolution of cybermedicine, the pitfalls associated with medical websites, and a description of telemedicine. Part III provides an overview of general medical malpractice principles and presents the three main categories of liability for electronic medicine. Finally, Part IV gives an in-depth analysis of how traditional theories of medical malpractice can be applied to cybermedicine and discusses proposed solutions which aim to protect both cybermedicine consumers and cyberdoctors.

## **II. BACKGROUND: ELECTRONIC MEDICINE AND CYBERDOCTORS**

### **A. The Introduction of Cybermedicine**

{3} The Internet is home to over 10,000 websites devoted to health and medicine. [3] One wishing to obtain medical information can access sites vast in topic areas. The American Medical Association ["AMA"] maintains an award-winning website that allows users to access a database of 650,000 physicians. [4] More revolutionary sites allow users to "visit" a doctor or a pharmacy right from their computer. [5] This practice is known as "cybermedicine." Cybermedicine is defined as "the Internet driven practice of medicine where patients communicate with physicians through electronic mail." [6] These physicians, called "cyberdoctors," diagnose the patient's symptoms and offer treatment advice. [7] Some cyberdoctors go so far as to prescribe medication over the Internet. [8]

{4} Cybermedicine hit the Internet in full force on Friday, October 4, 1996, when Cyberdocs, Inc. was launched into cyberspace. [9] The site was created by two physicians in Massachusetts, Kerry Archer, M.D. and Steven Kohler, M.D. [10] Before the creation of this site, users were limited to Internet medical consultations with nurses or browsing the Internet for health-related articles. [11] With the creation of [cyberdocs.com](http://cyberdocs.com), however, web users can become virtual patients and obtain medical evaluations from licensed doctors. [12]

{5} In a typical visit to [cyberdocs.com](http://cyberdocs.com), a first-time user must provide his medical history by filling out a patient chart, similar to that used in traditional doctors' offices. [13] Next, the patient enters his credit card number; a routine visit with a cyberdoctor will cost about fifty dollars. [14] A patient then may choose to send an e-mail to the site describing his symptoms and requesting a diagnosis or the patient may wait for a cyberdoctor to log onto the site to interact one-on-one with the patient. [15] Following the e-mail correspondence or online discussion, discharge instructions are issued which can either be saved or printed out. [16] Should the patient need a prescription, the cyberdoctor will call the local pharmacy and have the prescription prepared for the patient to pick up at his convenience. [17]

### **B. The Pitfalls of Medical Websites**

{6} [Cyberdocs.com](http://cyberdocs.com) opened Pandora's Box for imitation sites purporting to offer similar services. The problem with many of these sites lies in the difficulty for lay consumers to differentiate between sites

operated by legitimate health care professionals and sites maintained by individuals with no verifiable credentials. [18] Some sites are prefaced by complex disclaimers which attempt to exclude their creators from tort liability. [19] Others are maintained by individuals describing themselves as doctors or self-proclaimed healers, who in actuality have no formal medical training. [20] Moreover, several sites operated by M.D.'s are little more than advertising schemes that link users to for-profit sites which advertise prescription drugs or sell herbal remedies. [21] These sites not only create the potential for turning users away from cybermedicine, they also threaten to bring harsh legal scrutiny to legitimate sites.

## 1. Dubious Quality of On-line Advice

{7} In 1998, one study attempted to shed light on this new type of doctor-patient interaction and assess the quality of on-line medical services. [22] The study sent an identical e-mail to seventeen on-line doctors identified through the search engine Yahoo!. [23] The e-mail claimed to be authored by a 55-year-old male suffering from a skin irritation and offered a detailed description of the symptoms. [24] The correct diagnosis was a herpes zoster infection in an immunocompromised person, requiring immediate treatment with Acyclovir. [25]

{8} Seven doctors agreed to diagnose the patient and the average time of their responses was eight hours. [26] Five of the cyberdoctors accurately diagnosed the infection as herpes zoster. [27] Two responses, however, gave dubious advice that could have compromised the patient's health had he not obtained another medical opinion. [28] One of the cyberdoctors proclaimed to be a "well-known naturopathic doctor and family practitioner." [29] He wrote in his e-mail that the skin irritation was "probably nothing to worry about" and recommended over-the-counter medicine and Vitamin C. [30] The other questionable response came from a self-described nutritionist. [31] His recommendation included eating two apples and having a warm glass of water. [32] He further instructed the patient to take Red Clover and Dandelion, and offered to send instructions on how to order these herbal remedies. [33] This study highlights the potential for misdiagnosis and Internet fraud in the arena of cybermedicine.

## 2. Accessibility to Prescription Drugs

{9} Another area of cybermedicine that has attracted the attention of critics is the availability of pharmaceuticals over the Internet. [34] Drug abuse is a chronic problem in the United States and it is estimated that one-third of all drug abuse is attributable to prescription drugs. [35] With approximately 400 websites selling prescription drugs, [36] experts predict that online sales of pharmaceuticals will exceed six billion dollars in the next five years. [37] Statistics such as these raise questions about the safety and liability of on-line medicine.

{10} Obtaining prescription drugs via a PC is a relatively simple endeavor. Some sites require web users to undergo a consultation with an on-line physician, others do not. [38] Following such a consultation or preliminary questionnaire, the "patient" is required to disclose his credit card information, then the pills are delivered through standard mail. [39] Many sites go so far as to offer free delivery for web orders. [40] Narcotics or other "abusable" drugs are generally unavailable, however the potential for misuse is always present. [41]

{11} Many websites offer prescriptions for antidepressants, such as Prozac, and drugs not approved by the FDA. [42] There is increased cause for alarm realizing the fact that many of these online companies are located overseas, leading to a drastic increase in the illegal importation of pharmaceuticals of unknown origin and quality. [43] Dr. Nancy Dickey, former president of the AMA, has expressed concern over the point-and-click convenience of obtaining prescription drugs over the Internet. [44] According to Dr. Dickey, cybermedicine is "not good medicine" and the practice of doctors prescribing drugs by this method is "something to be terribly concerned about." [45]

{12} Internet pharmacies take different approaches when filling online prescriptions. [46] Some Internet pharmacies require a prescription from the user's personal physician, while others will agree to an online consultation with a cyberdoctor who then prescribes the medication. [47] Still others fill the prescription without either a previous prescription or an online consultation. [48] The first scenario offers most, if not all, of the safeguards of a traditional physician-patient-pharmacist interaction. [49] The risks significantly increase in the second and third scenarios. [50]

{13} Pharmacy sites which provide users a cyberdoctor or require neither a prescription nor a consultation usually follow a similar approach. When the Internet patient accesses the site and expresses an interest in the advertised drug, he is asked to agree to a waiver of liability. [51] This is followed by a short questionnaire, often consisting of YES/NO check boxes alongside questions regarding medical history. [52] Some sites actually pre-select the answers which enable the consumer to obtain the prescription. [53] The patient is then asked to enter a credit card number and a few days later the drug is delivered to his door. [54]

{14} Countless patients are consulting doctors whom they have never met and are taking drugs based on the cyberdoctor's recommendations. [55] The two most common prescriptions issued over the Internet are for Viagra and Propecia, drugs which treat impotence and male pattern baldness, respectively. [56] One doctor which prescribes Viagra over the Internet described the drug as being "tailor-made for Internet sales," due to users' desire for confidentiality and the minimal likelihood of misuse. [57] However, one doctor is quick to point out that "most men taking Viagra are over [fifty]" and "for men of that age, erectile dysfunction is often associated with quite serious accompanying conditions, like diabetes, blood pressure, and high cholesterol." [58] Thus, the benefit of detecting and treating the accompanying conditions of erectile dysfunction is lost when men seek treatment for this problem online. [59]

{15} According to the AMA, online interactions that result in a prescription being issued often fail to meet appropriate standards of care. [60] The AMA maintains that quality is sacrificed because:

[1] there are no examinations of the patient to determine if there is a medical problem and to determine a specific diagnosis; [2] there is no dialogue with the patient to discuss treatment alternatives and to determine the best course of treatment; [3] there is no attempt to establish a reliable medical history; [4] there is no provision of information about the benefits and risks of the prescribed medication; and [5] there is no follow-up to assess the therapeutic outcome. [61]

### C. Cybermedicine's First Cousin: Telemedicine

{16} Cybermedicine, though a radical innovation, did not hit the market without a predecessor. A practice known as "telemedicine" paved the way for medicine practiced over the Internet. The AMA defines telemedicine as "medical practice across distance via telecommunications and interactive video technology." [62] Telemedicine ranges in complexity from a simple telephone call or fax transmission to two-way audio and video links, which permit a physician to treat or consult a patient in a remote part of the world. [63]

#### 1. Telemedicine as a Market Force

{17} Although the technology has long been in place for telemedicine, the medical community hesitated to embrace this type of long-distance medicine. Indeed, most Americans have never heard the term "telemedicine," and studies show that telemedicine is currently utilized by only twenty-five percent of the entire medical community. [64] However, the use of telemedicine is predicted to rise due to factors such as increasing consumerism, changing demographics, hardware price deflation, and increasing access to the Internet. [65] It is estimated that the global telemedicine industry will grow forty percent annually over the next ten years. [66] Furthermore, it is expected that, in the U.S. alone, "telemedicine will represent at least 15 percent of all health care expenditures by the year 2010." [67]

{18} Predictions such as these reaffirm the prevailing opinion that telemedicine will have a profound impact on the economic market of the United States. Waterford Advisors, Inc., a New York City firm providing corporate finance and strategic advisory services to health care information technology firms, foresaw this emerging economic force and founded Waterford Telemedicine Partners, Inc. in July of 1999. [68] Waterford Telemedicine Partners, Inc. provides business information to those who manage or finance telemedicine ventures. [69] This information comes in many forms, ranging from comprehensive analyses about the industry and related organizations to regular news columns. [70] Such information is provided on WTC's website, TeleMedicineIndex.com. [71] Also accessible from this site is The Waterford Telemedicine Index ["WTI"], which tracks the common stocks and operating performances of 100 publicly traded telemedicine firms. [72] Additionally, this site provides Waterford's "Telemedicine Industry Report 2000," released in March of last year, which rates the relative importance of each firm to telemedicine. [73] Services provided by this group, as well as related services provided on other websites, signify the increased role telemedicine is expected to have in the United States. [74]

## 2. Telemedicine's Recent Advances

### a. Antarctic Rescue

{19} Last year telemedicine received more publicity than ever before when Dr. Jerri Nielsen, an American doctor stationed at the Amundsen-Scott South Pole Research Center, discovered a lump in her breast. [75] Stranded in Antarctica during the continent's bleak winter months, when no planes could land and no ships could sail, Dr. Nielsen learned how to perform a needle biopsy on her tumor by video conferencing with experts in the United States. [76] The U.S. medical team showed her how to guide the needle by demonstrating on a lemon. [77]

{20} According to NBC's Dateline report, Dr. Nielsen utilized modern technology for nearly five months to consult with Dr. Kathy Miller, an Indiana University Hospital cancer specialist. [78] The doctors conferred by e-mail and video-conference about whether Nielsen could perform surgery on herself. [79] Supplies that were air dropped by the Air Force allowed Nielsen to perform her own biopsy. [80] She was then able to e-mail photographs of the slide samples back to doctors in the United States. [81] NBC followed Nielsen's radical measures as she began intravenous chemotherapy on July 23, 1999, with the aid of a videoconference between the South Pole and doctors in the United States. [82] Nielsen was eventually rescued when the antarctic winter relented, and her story became a poignant example of telemedicine success. [83]

### b. Telemedicine Training Programs

{21} 1999 proved to be a landmark year for telemedicine yet again when the University of California-Davis opened the first telemedicine training center on the West Coast. [84] The Telemedicine Learning Center will train hundreds of health care providers and support staff in the clinical, technical, and operational aspects of telemedicine, from how to conduct a telemedical examination to how to repair equipment. [85] Funding for the Learning Center is part of a five million dollar grant made by The California Endowment to the California Healthcare Association's California Telehealth and Telemedicine Center to support telemedicine throughout California. [86] It is predicted that the total grant will enable California to increase its number of telemedicine sites to over 100 statewide. [87] Similar telemedicine training programs are available through other state universities, such as the Telemedicine Center at East Carolina University, the University of Texas Medical Branch's Teletraining Institute, and the University of Vermont's health care program which gives practical instruction from national telemedicine experts in a conference-style setting. [88] These programs signal a gradual shift in the medical industry's willingness to expand its educational programs to encompass telemedicine.

### c. Increased Federal Attention

{22} Although it has been slow on the uptake, Congress is now beginning to recognize some of the benefits telemedicine has to offer. Several federal agencies now offer grants to further telemedicine ventures. For example, the Health Resource Service Administration's Office for the Advancement of Telemedicine has funded clinical programs in underserved rural areas; the Rural Utilities Services Telemedicine Program provides funds to facilitate telemedicine infrastructure in rural areas; the National Telecommunications & Information Administration's Office of Telecommunications and Information Applications has grant funds available for state and local governments, as well as for healthcare entities, libraries, public service agencies, and other groups to better provide public telemedicine services; and the National Library of Medicine has developed a telemedicine program which evaluates the impact of telemedicine on cost, quality, and access to healthcare. [89] The federal government has further supported telemedicine efforts by forming the Joint Working Group on Telemedicine ["JWGT"], a federal interagency group that coordinates members' telemedicine activities. [90] The aim of the JWGT is to prevent overlap in federal funding from the member agencies that provide telemedicine grants. [91] Federal agencies included in the JWGT are the Appalachian Regional Commission, the Department of Agriculture, the Department of Commerce, the Department of Defense, the Department of Education, the Federal Communications Commission, the Department of Health and Human Services, the Department of Justice, the Department of State, the National Aeronautics and Space Administration, and the Department of Veterans Affairs. [92]

{23} In addition to the aforementioned measures, there is pending legislation which, if passed, will continue to expand the federal government's support of telemedicine. The Triple-A Health Improvement Act, H.R. 1344, is sponsored by Representative Nussle [R-IA] and "promotes access to healthcare services in rural areas." [93] This legislation amends the Balanced Budget Act of 1997 to extend Medicare's coverage to encompass telemedicine. [94] The Comprehensive Telehealth Act, S. 770, is sponsored by Sen. Conrad [D-ND] and also amends the Balanced Budget Act of 1997 to provide "reimbursement for telehealth services under Medicare." [95] This legislation includes funding for technological updates, expands the list of reimbursable providers, extends coverage to rural areas, and eliminates the requirement that the presenter be a physician. [96] The Promoting Health in Rural Areas Initiative, S. 980, sponsored by Senator Baucus [D-MT], encompasses many of the same measures as S. 770 and also "directs the Secretary of Health and Human Services to conduct a specified study on telehealth licensure and [to] report to Congress." [97]

{24} Despite its lack of further exposure among Joe Q. Public, telemedicine is an important foundation for the growth of cybermedicine. To date, there has not been a single lawsuit involving the practice of cybermedicine. Therefore, case law concerning telemedicine provides the backbone for an hypothesis on how courts will handle cybermedicine malpractice claims.

### **III. TRADITIONAL MEDICAL MALPRACTICE THEORIES AND LIABILITY FOR ELECTRONIC MEDICINE**

#### **A. Medical Malpractice Generally**

{25} Recovery for a medical malpractice claim is predicated on two factors: a doctor-patient relationship must exist, and the doctor must have acted in a way that breached his professional duty of care. [98] The formation of the doctor-patient relationship is viewed by the courts as the creation of a contract, either express or implied. [99] Thus, rules of contract law apply when courts decide whether a doctor-patient relationship was present. [100] The contract which emerges from this doctor-patient relationship is seen by courts as a contract in which the doctor agrees to treat the patient with the requisite level of skill and care, and the patient, in turn, agrees to pay for these services. [101] Therefore, tort liability for negligence may apply when a patient brings a medical malpractice claim arguing that the duty of care was breached. [102] The crux of a medical malpractice claim is that the doctor breached the contractual doctor-patient relationship by not meeting the duty of care owed to the patient. [103]

{26} Specific rules governing medical malpractice claims are established by the individual states. However,

most states subscribe to the overarching principles of the doctor-patient relationship and the duty of care.

[104] The Supreme Court of Colorado summarized these principles in *Greenberg v. Perkins*. [105] The court stated:

If a physician undertakes to treat or otherwise provide medical care to another, he thereby either expressly or impliedly contracts to exercise reasonable and ordinary care and diligence to fulfill that purpose. In such a circumstance, a physician-patient relationship exists, and the physician's contractual obligations create the matrix from which an independent tort obligation arises. [106]

## 1. The Doctor-Patient Relationship

{27} Several courts have had the responsibility of defining what constitutes the doctor-patient relationship. In 1996, the Appellate Court of Illinois for the Fourth District defined the doctor-patient relationship as "a consensual relationship in which the patient knowingly seeks the physician's assistance and the physician knowingly accepts the person as a patient." [107] In 1976, the Supreme Court of Alabama ruled that the doctor-patient relationship is created when professional services are accepted for the purposes of medical treatment. [108] Similar definitions of the doctor-patient relationship can be found through an examination of state case law. [109]

{28} The determination of whether the parties stand in a contractual relationship with one another is a question of law. [110] In 1968, the Court of Appeals of Tennessee stated that the voluntary acceptance of the doctor-patient relationship by both parties provides prima facie evidence of a contractual relationship. [111] In 1944, the Court of Appeals of New Jersey held that no contractual doctor-patient relationship exists when a doctor merely looks on while a third party diagnoses and treats the patient. [112] Furthermore, in 1992, the Supreme Court of South Carolina affirmed a North Carolina decision holding that the existence of a doctor-patient relationship is a prerequisite to any medical malpractice claim. [113] Again, similar sentiments have been expressed by courts in all of the fifty states. [114]

## 2. The Duty of Care

{29} Once the doctor-patient relationship has been established, courts are called upon to determine what duty of care a doctor owes to his patient. It has been well established that the existence of a duty to the patient is the essence of a medical malpractice claim. [115] The general rule is that the standard of care against which the doctor's conduct will be measured is whether a reasonably careful physician of the same school of medicine would have acted in the same manner. [116]

{30} In a negligence action for medical malpractice, a plaintiff must prove that the defendant owed a duty to the plaintiff, that the defendant breached that duty, and that an injury resulted from that breach. [117] One of the key considerations is whether there was reasonable foreseeability of injury. [118] Several jurisdictions have held that this reasonable foreseeability doctrine dictates that a doctor must disclose the risks associated with a treatment plan and discuss available alternatives. [119] Known as the 'duty to disclose,' "a physician violates his duty to his patient and subjects himself to liability if he withholds any facts which are necessary to form the basis of an intelligent consent by the patient to the proposed treatment." [120] Similarly, "a physician may not minimize the known dangers of a procedure or operation in order to induce his patient's consent." [121]

## B. The Three Levels of Liability for Electronic Medicine

{31} Medical malpractice claims of the twenty-first century have concerns beyond those of the doctor-patient relationship and the duty of care. As the primary forum for the practice of medicine begins to shift away from

the doctor's office and into electronic medium, new levels of liability emerge. Liability for practicing medicine electronically can now be divided into three categories: low level liability for information dissemination and patient education via electronic devices, moderate level liability for telemedicine, and high level liability for cybermedicine. [122]

### 1. Low Level Liability: Information and Education

{32} Anyone with access to a computer can set up a website. Several people have done so - from fan clubs to professional organizations. The legal liability incurred by those wishing to disseminate information and educate the public is minimal, as the First Amendment generally protects such speech. [123] Similarly, medical websites which do nothing but offer information and links to resources will probably not find themselves named in a medical malpractice action. [124]

{33} One should not, however, dismiss all Internet speech as having blanket protection under the First Amendment. Indeed, the Internet is being treated differently by the courts due to its newness and its use of technology. [125] The U.S. Supreme Court has created a hierarchy of First Amendment protection as related to the media. [126] Speech and print media have been granted the most protection by the court, while lesser protection has been afforded to newer electronic communications. [127] The content of the speech involved usually determines its level of protection in such medium. [128] Thus, any First Amendment analysis should focus not on the media, but on the characteristics of the speech. [129] Nutritionists, holistic healers, self-proclaimed "doctors," and legitimate M.D.'s are all accessible on-line. The level of First Amendment protection for these individuals hinges on what their claims entail.

### 2. Moderate Level Liability: Telemedicine

{34} The practice of consultation and communication of medical advice over electronic mediums raises questions about liability. [130] Consultants engaging in the newer practice of telemedicine enjoy moderate legal liability for medical malpractice claims. [131] In *Lopez v. Aziz*, [132] the court refused to impose liability for a doctor who consulted with a colleague regarding a patient's care. [133] Some cases, however, permit medical malpractice liability in instances where the consultant has not met the patient. For example, in *Bienz v. Central Suffolk Hospital*, [134] the Supreme Court of New York recently held that a telephone call was sufficient to create the doctor-patient relationship. The court stated, "A medical malpractice cause of action may be based on allegations that a physician negligently gave advice to his patient as to what course of treatment to pursue." [135] Even though the advice was communicated over a telephone wire rather than in person, the court ruled that the existence of a doctor-patient relationship was an issue of fact that could be presented to a jury. [136]

### 3. High Level Liability: Cybermedicine

{35} The actual practice of medicine, diagnosis, and treatment of patients on the Internet incurs the highest level of liability. [137] Cybermedicine carries the same, if not more stringent, liability as traditional medical practice. [138] Therefore, the elements of the doctor-patient relationship and the duty of care apply to on-line doctors.

## IV. MEDICAL MALPRACTICE AND CYBERMEDICINE

### A. Traditional Theories of Medical Malpractice As Applied to Cybermedicine

{36} The doctor-patient relationship and the duty of care the doctor owes to the patient comprise the two main elements in a medical malpractice claim. [139] These elements do not disappear when applied to cybermedicine; however, questions arise as to the application of these elements in cases where physicians and

patients never confer in person. Is Internet interaction sufficient to establish a doctor-patient relationship? If so, is the duty of care the same for a cyberdoctor as the duty of care for a traditional practitioner? The answers to these questions will determine the liability doctors incur when they move their practices on-line.

## 1. The Doctor-Patient Relationship in Cyberspace

{37} As noted previously, the establishment of a contractual doctor-patient relationship is a legal prerequisite to bringing a medical malpractice claim. [140] In most cases of mainstream cybermedicine, no difficulty exists in establishing the existence of such a relationship. For example, a practitioner on cyberdocs.com enters into a doctor-patient relationship because the patient must first enter a credit card number in order to gain access to the physician. [141] The act of entering his credit card number signifies the patient's acceptance of the physician's services and provides consideration in exchange for the promise of that service. [142] Consequently, the patient creates a contractual relationship. [143] The doctor's acceptance of the patient imposes a duty to treat that patient with reasonable skill and care. [144]

{38} A difficulty in the above scenario arises when the doctor renders medical advice without consideration. In *Bienz v. Central Suffolk Hospital*, [145] the patient initiated a phone call to set up an appointment and gave no consideration. [146] The court held that a professional relationship may arise when a doctor offers treatment advice over the telephone. [147] On the other hand, the *Lopez v. Aziz* [148] court found that where one doctor consulted another doctor for the benefit of the patient, no consensual relationship existed between the consulting doctor and the patient. [149] In cases such as these, courts have generally examined the amount of influence the physician's advice exerts over the patient.

{39} Note that these examples are derived from cases involving telemedicine. Any malpractice claim concerning cybermedicine will be a case of first impression. The likelihood exists that courts will look toward recent telemedicine caselaw to guide their decision. No binding precedent exists to guide the courts. One can hypothesize that a doctor-patient relationship will be found when consideration is present. Also, a relationship will be found where there is two-way communication similar to the practice of telemedicine, as is the case with cyberdocs.com. [150] In cases where a doctor offers general advice over a website without targeting a specific individual, First Amendment protection likely will be granted, and the probability exists that no doctor-patient relationship will be found to exist.

## 2. The Duty of Care for Cyberdoctors

{40} The duty of care a doctor owes to his patient hinges on situational criteria which courts analyze case-by-case. In *Greenberg v. Perkins*, [151] the court laid out a non-exhaustive list of factors to be considered where a physician examines a patient at the request of a third party. [152] The court stated that "no one factor is controlling in itself . . ." [153] Thus, the duty of care turns on "fairness under contemporary standards - that is, would reasonable persons recognize and agree that a duty of care exists." [154] This case illustrates the tendency of courts to examine the surrounding circumstances in deciding the duty of care definition.

{41} Whereas the duty of care determines the court's interpretation of surrounding circumstances, two contradicting schools of thought are foreseeable regarding courts' treatment of the duty of care in relation to cybermedicine. One could postulate that the duty of care would be greater for doctors practicing medicine over the Internet than for doctors limiting their practice to traditional methods. Courts could reach this conclusion by determining that cyberdoctors assume the risk of possible mis-diagnosis by relying on information provided by their patients. Additionally, the decision to conduct medicine over the Internet is left to the doctor's discretion. Thus, courts could reason that cyberdoctors need to proceed with a level of skill and care necessary to obtain the information needed to accurately treat the patient. Failure to do so may be viewed by courts as a breach of the doctor's professional duty of care.

{42} In the alternative, the possibility exists for courts to conclude that the duty of care cyberdoctors owe their patients is less than the duty of care for traditional doctors. This view could be adopted by courts placing the assumption of risk with the patients, rather than vesting that risk in cyberdoctors. When a patient seeks medical treatment from a cyberdoctor, it is reasonable to assume that the patient possesses a working knowledge of the Internet. Courts could determine that, given this knowledge, patients assume the risk of mis-diagnosis or mistreatment if they choose only to consult one on-line doctor. Similarly, many courts may be hesitant to find a cyberdoctor liable in a situation where a patient misrepresented his ailments or neglected to seek follow-up care.

## *B. Solutions for Consumers and Cyberdoctors*

{43} The debut of cyberdocs.com forced academics, politicians, and the medical community to grapple with ways to make cybermedicine safe for consumers and cyberdoctors. In an ideal world, consumers would come to medical websites armed with information, and website hosts would harbor only noble intentions. Unfortunately, the world in which we live is not ideal, and solutions to the problems associated with cybermedicine are still elusive. Several novel ideas exist on how to ensure consumer safety while limiting liability to fair and practical levels.

### *1. Solutions for Consumers*

{44} The importance of making cybermedicine safe for consumers cannot be overstated. One author found that "[b]y mid-1999, over 100 million adults within the U.S. were using the Internet, up from 65 million the previous year and 43 million the year before. By 2003, the number of adults online is predicted to grow to 177 million." [155] Perusing health information remains one of the principal reasons Americans use the Internet. [156] Last year, as many as seventy million adults in the United States used online sources to meet their health-related needs. [157] The growth of organizations whose goals are to ensure that online sources provide only accurate and safe information parallels the expansion of these websites.

{45} Several non-profit groups formed websites to monitor and to provide information about health-related sites. For example, The Foundation for Accountability's ["FACCT"] mission is to guarantee that health information on the Internet is "clear [and] accurate." [158] To accomplish its mission, FACCT uses instruments geared towards aiding Americans' understanding of health information. [159] Another organization, Geneva's Health on the Net Foundation, utilizes a self-governing seal of approval, known as "HONcode," to signify its approval of health-related websites. [160] Subscribing websites may display this seal provided they follow the principles of HONcode. [161] Finally, according to one author, other "[w]atchdog groups like Science in the Public Interest also periodically review health-related websites and issue warnings when they discover misleading and inaccurate information." [162]

### *2. Solutions for Cyberdocs*

{46} Initiatives to protect cyberdoctors from sky-rocketing liability have also been proposed. One solution proposes codification of medical malpractice rules at the federal level. [163] This scheme grants federal licensing to all Board certified practitioners, who would be seen in the eyes of the law as being visited in their home state when practicing over the Internet for liability purposes. [164] According to one author, "[s]tandards of care can be discerned through each board certified practice specialty." [165] Because no such measure has been adopted by Congress, the medical community continues to search for ways to protect itself from liability while offering expertise to patients over the Internet. [166]

### *3. Medical Practice Guidelines: A Solution for Anyone?*

{47} The rising use of non-conventional mediums to practice medicine removes many physical barriers to

obtaining medical treatment. This removal may allow shut-ins, the elderly, and the timid access to health care, provided they have a computer and an Internet connection. However, the increasing use of cybermedicine poses interesting questions concerning state licensure laws. Although some states have enacted laws specifically targeting licensure for the provision of telemedicine by out-of-state doctors, [167] no comparable cross-over laws for cybermedicine currently exist. [168] Furthermore, many state licensure laws restrict a physician's license to that state, rather than facilitate medical practice across state lines. [169] Such laws require that doctors conducting services outside their domiciled state of practice obtain full licensure from that state. [170] This issue of state licensure must be addressed in the near future in order to effectively regulate the expanding practice of cybermedicine.

{48} The individual states retain the right to regulate the practice of medicine. [171] This right vests in the states through traditional interpretations of the Tenth Amendment, which reserves to the states all powers not specifically entrusted to Congress. [172] As early as 1889, the U.S. Supreme Court upheld this right when it ruled that the state's "establishment of minimum standards for licensure did not violate an individual's property rights, which are protected by the Fourteenth Amendment." [173]

{49} Moreover, under their constitutionally-granted police power, states maintain the authority to protect the public health and safety of their citizens. [174] These traditional notions of state autonomy with regards to the licensing of health professionals have been turned upside down by the practices of telemedicine and cybermedicine. One proposed option aims to ensure that quality standards of care are maintained for consumers, while at the same time limiting liability for medical practitioners. This proposal advocates the adoption of national medical practice guidelines for cybermedicine. Should such a proposal be implemented, it would require communication between state medical boards and a relinquishing of some state autonomy to federal agencies and law enforcement bodies. [175] Whether such collaboration is desirable, or even possible, is open for debate. [176]

#### a. What Are Medical Practice Guidelines?

{50} Medical practice guidelines debuted almost fifty years ago in an attempt to bring standardization to American health care. [177] Medical practice guidelines are defined by the federal Agency for Health Care Policy & Research [AHCPR] as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical conditions." [178] In essence, these guidelines are recommendations which set out standard treatment alternatives in various medical situations. [179] Following their foray into the health care establishment, several hospitals and regional and national medical associations created and implemented their own practice guidelines. [180] The AMA now maintains a directory chronicling these initiatives. [181] Whether such guidelines can be morphed from an attempt to standardize the type of care for a particular illness into an attempt to standardize the quality of care dictated when treating patients electronically has yet to be seen. [182]

#### b. Medical Practice Guidelines & Malpractice

{51} Although medical practice guidelines began as an attempt to standardize treatment approaches, other goals have since emerged. [183] For example, some guidelines now purport to establish an educational resource for physicians by providing alternative care options, to assist in cost containment, and to limit physician liability. [184] Of particular interest to the medical community is the fact that medical practice guidelines, when used properly, can decrease the frequency of medical malpractice claims by providing doctors with legitimate defenses to medical negligence actions. [185] This benefit is obtained if the guidelines: [1] are carefully evaluated by physicians and other qualified personnel; [2] are continuously updated and generally available through a communication system; [3] create an affirmative defense for physicians; and [4] are admissible as evidence with probative value by potential plaintiffs. [186]

{52} Several states have allowed adopted medical practice guidelines to be admitted as evidence in medical malpractice litigation. [187] In such situations, these guidelines may be introduced by a party as evidence of the specific legal standard of medical care required by the facts of the particular case. [188] Since medical practice guidelines are written, published works, their admissibility is governed by the rules of evidence. [189] The general rule governing admissibility is that the proponent of the evidence must establish that the evidence is relevant, reliable, and authentic. [190]

{53} It is noteworthy that the admission of a practice guideline into evidence does not obligate the court to accept and apply the guideline in the determination of the standard of care. [191] Once "a practice guideline is admitted into evidence and put before the jury, the question becomes how much evidentiary weight it will be accorded." [192] Testimony in the form of medical expert opinion regarding the acceptance and use of a medical practice guideline in the requisite medical field is a necessity. Under current state and federal law, "practice guidelines have the same effect as any other learned treatise: a tool for expert witnesses." [193] Even assuming such guidelines are adopted by the medical profession to standardize cybermedicine, this requirement will be difficult to meet in a malpractice action against a cyberdoctor, since there are currently no decided or pending cases arising out of the practice of medicine over the Internet.

### c. The Pros and Cons of Medical Practice Guidelines

{54} There are differences of opinion over whether or not medical practice guidelines should be adopted for cybermedicine. The most notable advantage is the fact that they dictate pre-determined standards of care, which can be introduced as evidence in medical malpractice litigation. [194] Current standards for traditional medical practice are vague and unpredictable. [195] Standards for medical practice over the Internet are nonexistent. As the law currently stands, it is left to juries to determine [after hearing expert medical testimony] the professional standard of care doctors are required to exhibit. [196] The adoption of practice guidelines may provide explicit standards to which every practitioner and expert must conform.

{55} There are, however, several drawbacks to the adoption of medical practice guidelines. Conflicts over practice guidelines have arisen in traditional medical practice when there are multiple guidelines adopted for one condition or procedure. [197] In this situation, the courts must determine which is the proper guideline to apply. [198] This determination becomes more difficult when the guidelines themselves are vague or too general to resolve specific cases. [199] In addition, there are technical problems which inhibit the formulation of practice guidelines to pre-determine prescriptive standards of care. [200] Often there exists a lack of consensus among doctors and other medical personnel regarding the appropriate vocabulary to use when drafting practice guidelines. [201] Furthermore, problems arise when there is a lack of sufficient scientific research or clinical expertise on which to base a practice guideline. [202] This problem is of particular concern when discussing practice guidelines for the relatively new practice of cybermedicine.

## V. CONCLUSION

{56} Since its inception, the Internet has revolutionized the way people communicate and access information. The Internet has served as a stomping ground for technological pioneers and as a battleground for those combating its misuse. The introduction of cybermedicine has prompted increased discussion of issues such as information availability, consumer responsibility, and legal liability. While no malpractice case involving cybermedicine has come before a court, the likelihood of such a case presenting itself in the near future is high. Courts will have traditional theories of medical malpractice and caselaw concerning telemedicine to serve as guides through this uncharted territory, but how courts will choose to apply these tools has been the topic of heated debate among legal scholars. For now, web surfers and cyberdoctors are left guessing as to what the future holds for online medicine. The possible solutions to this quandary are as infinite as cyberspace itself.

## ENDNOTES

[\*] Ruth Ellen Smalley graduated from the University of Missouri-Columbia in 1999 with a B.A. in Political Science. She will receive her J.D. in May, 2002 from the University of Richmond School of Law. Ms. Smalley is currently a Senior Staff Member of the *Richmond Journal of Law and Technology*. She would like to thank the staff of the *Journal of Law and Technology* for their work during the publication process. She would also like to thank Professor Rodney A. Smolla for his critique, insight, and assistance in preparing this work for publication. Finally, the author wishes to thank her parents, David and Susan Smalley, for their steadfast love and support.

[1.] See Cyberdocs [last visited Oct. 24, 2000], at <http://www.cyberdocs.com>.

[2.] See Ranney V. Wiesemann, *On-Line or On-Call? Legal and Ethical Challenges Emerging in Cybermedicine*, 43 ST. LOUIS L.J. 1119, 1119 (1999)(defining "cybermedicine" as "the Internet-driven practice of medicine where patients communicate with physicians through electronic mail" resulting in a diagnosis of the patient's ailment)(citing Christopher Elliot, *Is "Cybermedicine" Safe?*, U.S.A. WEEKEND, Nov. 30, 1997 at C1).

[3.] See Barbara J. Tyler, *Cyberdoctors: The Virtual Housecall - The Actual Practice of Medicine on the Internet Is Here; Is It a Telemedical Accident Waiting to Happen?*, 31 IND. L. REV. 259, 263 (1998).

[4.] See *id.* at 271 n.82; see generally American Medical Association Home Page (last visited Oct. 24, 2000), at <http://www.ama-assn.org>.

[5.] See generally Cyberdocs, *supra* note 1; CyberPharmacy (last visited Oct. 24, 2000), at <http://www.cyberpharmacy.com>.

[6.] See Wiesemann, *supra* note 2.

[7.] *Id.*

[8.] See *id.* at 1139 (citing Cyberdocs, *Cyberdocs Today Announced the First Virtual Doctor's Office on the World Wide Web* (last visited Nov. 17, 2000), at <http://cyberdocs.com/>).

[9.] See *id.* at 1138 (citing Tyler, *supra* note 3).

[10.] See *id.*

[11.] See Tyler, *supra* note 3, at 284.

[12.] See *id.* (citing Quacks, *Bogus Treatments Infect the Internet*, SAN ANTONIO EXPRESS NEWS, Oct. 21, 1996).

[13.] See Wiesemann, *supra* note 2, at 1139 (citing Tyler, *supra* note 3).

[14.] See *id.* (citing Tyler, *supra* note 3).

[15.] See *id.* (citing Tyler, *supra* note 3).

[16.] See *id.* (citing Tyler, *supra* note 3).

[17.] See *id.* (citing Cyberdocs, *Cyberdocs Today Announced the First Virtual Doctor's Office on the World Wide Web* (last visited Nov. 17, 2000), at <http://cyberdocs.com/>).

[18.] See generally Nicolas P. Terry, *Cyber-Malpractice: Legal Exposure for Cybermedicine*, 25 AM. J. L. & MED. 327, 329 (1999)(discussing the difficulty in distinguishing between a pharmacy and a pharmaceutical manufacturer, or between a physician group and an MCO).

[19.] See, e.g., Health Answers (last visited Oct. 29, 2000), at <http://www.healthanswers.com>.

[20.] See Gunther Eysenbach & Thomas L. Diepgan, *Evaluation of Cyberdocs*, 352 THE LANCET 1526 (1998), available in 1998 WL 14106021.

[21.] See *id.*

[22.] See *id.*

[23.] See *id.*

[24.] See *id.*

[25.] See *id.*

[26.] See *id.*

[27.] See *id.*

[28.] See *id.*

[29.] See *id.*

[30.] See *id.*

[31.] See *id.*

[32.] See *id.*

[33.] See *id.*

[34.] See generally Diane Jennings, *Bitter Pill to Swallow: 'Cybermedicine' Simplicity Has Fans But Raises Concerns*, THE DALLAS MORNING NEWS, Nov. 6, 1998, at 1A.

[35.] See Eric M. Peterson, *Doctoring Prescriptions: Federal Barriers to Combating Prescription Drug Fraud Against On-Line Pharmacies in Washington*, 75 WASH. L. REV. 1331, 1334 (2000) (citing Karen Blumenschein, *Prescription Drug Diversion: Fraudulent Tactics Utilized in the Community Pharmacy*, 61 AM. J. PHARMACEUTICAL EDUC. 184 (1997)).

[36.] See *id.* at 1342 (citing Steve Sternberg, *Clinton Wants FDA to Control Drug Sales Online*, U.S.A. TODAY, Dec. 29, 1999 at 6D).

[37.] Chester Chuang, *Is There a Doctor in the House? Using Failure-to-Warn Liability to Enhance the Safety of Online Prescribing*, 75 N.Y.U.L. REV. 1452, 1454 (Nov. 2000) (citing Sarah A. Webster, *Internet Drug*

*Sales Investigated: Critics Raise Warning About Health Risks of Online Prescriptions*, DETROIT NEWS, June 7, 1999, at A1).

[38.] See *Cybermedicine: The Benefits and Risks of Purchasing Drugs Over the Internet*, 5.2 J. TECH. L. & POL'Y 1, ¶ 17 (Summer 2000).

[39.] See Jennings, *supra* note 34.

[40.] See Peterson, *supra* note 35, at 1341 (citing Shari Roan, *Cyberspace Prescriptions and How E-Pharmacies Work*, KANSAS CITY STAR, Oct. 3, 1999 at F5).

[41.] See Jennings, *supra* note 34.

[42.] Ross D. Silverman, *Regulating Medical Practice in the Cyber Age: Issues and Challenges for State Medical Boards*, 26 AM. J. L. & MED. 255, 266 (2000)(citing Bernard S. Bloom & Ronald C. Innacone, *Internet Availability of Prescription Pharmaceuticals to the Public*, 131 ANNALS INT'L MED. 830 (1999)).

[43.] See *id.*

[44.] See Jennings, *supra* note 34.

[45.] *Id.*

[46.] See Silverman, *supra* note 42, at 266.

[47.] *Id.* (citing Bernard S. Bloom & Ronald C. Innacone, *Internet Availability of Prescription Pharmaceuticals to the Public*, 131 ANNALS INT'L MED. 830 (1999)).

[48.] *Id.*

[49.] *Id.*

[50.] *Id.*

[51.] *Id.* (citing AMERICAN MEDICAL ASSOCIATION, REPORT OF THE BOARD OF TRUSTEES, 35-A-99, INTERNET PRESCRIBING 1, 1 (1999), available at <http://www.ama-assn.org/meetings/public/annual99/reports/onsite/bot/rtf/bot35.rtf>).

[52.] *Id.* at 266-67 (citing AMERICAN MEDICAL ASSOCIATION, REPORT OF THE BOARD OF TRUSTEES 35-A-99, INTERNET PRESCRIBING 1, 1 (1999), available at <http://www.ama-assn.org/meetings/public/annual99/reports/onsite/bot/rtf/bot35.rtf>).

[53.] *Id.* at 267 (citing Bernard S. Bloom & Ronald C. Innacone, *Internet Availability of Prescription Pharmaceuticals to the Public*, 131 ANNALS INT'L MED. 830 (1999)).

[54.] See *id.* at 267 (citing Sheryl Gay Stolberg, *Internet Prescriptions Boom in the "Wild West" of the Web*, N.Y. TIMES, June 27, 1999, at A1).

[55.] Jennings, *supra* note 34, at 1A.

[56.] *Id.*

[57.] *Id.*

[58.] *Id.* quoting Andy McCormick, spokesman for Pfizer, Inc.).

[59.] *See id.*

[60.] Silverman, *supra* note 42, at 267.

[61.] *Id.* (citing AMERICAN MEDICAL ASSOCIATION, REPORT OF THE BOARD OF TRUSTEES, 35-A-99, INTERNET PRESCRIBING 1,1 (1999), available at <http://www.ama-assn.org/meetings/public/annual99/reports/onsite/bot/rtf/bot35.rtf>).

[62.] Wiesemann, *supra* note 2, at 1122 (citing BARBARA K. BOXER & MICHAEL BEST, AMERICAN HEALTH LAWYERS ASS'N, TELEMEDICINE: OVERCOMING THE LEGAL ISSUES SURROUNDING TELEMEDICINE OR ALLOWING PHYSICIANS TO CHARGE FOR PHONE CALLS 18 (1998)).

[63.] *Id.* (citing Daniel McCarthy, Note, *The Virtual Health Economy: Telemedicine and the Supply of Primary Care Physicians in Rural America*, 21 AM. J.L. & MED. 111, 114 (1995)).

[64.] *See id.* at 1121 (citing Christopher J. Caryl, *Malpractice and Other Legal Issues Preventing the Development of Telemedicine*, 12 J.L. & HEALTH 173 (1998); Tyler, *supra* note 3).

[65.] *See generally* HealthLawIndia.com, *Telemedicine and the Law*, at [http://www.healthlawindia.com/documents/convergence\\_140700.htm](http://www.healthlawindia.com/documents/convergence_140700.htm) (visited Nov. 1, 2000) (discussing the predicted rise in use of telemedicine in India).

[66.] *Dateline: Telemedicine Will Grow 40 Percent Annually Over the Next 10 years, Says Industry Expert* (NBC television broadcast, Dec. 2, 1999)(transcript on file with BUSINESS WIRE at [http://www.findarticles.com/cf\\_o/m0EIN/1999\\_Dec\\_2/58036713/print.jhtml](http://www.findarticles.com/cf_o/m0EIN/1999_Dec_2/58036713/print.jhtml)).

[67.] *Id.* (quoting Peter Leitner, CEO of Waterford Telemedicine Partners, Inc.).

[68.] *See id.*

[69.] *See Dateline: Waterford Telemedicine Partners Announces Research Results from the Company's Telemedicine Index* (NBC television broadcast, Feb. 22, 2000) (transcript on file with BUSINESS WIRE at [http://www.findarticles.com/cf\\_0/m0EIN/2000\\_Feb\\_22/59581596/print.jhtml](http://www.findarticles.com/cf_0/m0EIN/2000_Feb_22/59581596/print.jhtml)).

[70.] *See generally*, TeleMedicineIndex.com, *The Essential Source of Business Information Pertaining to the Telemedicine and Telehealth Industry*, at <http://www.telemedicineindex.com> (providing breaking news and articles about the telemedicine industry) (visited Nov. 1, 2000).

[71.] *See id.*

[72.] *See* TeleMedicineIndex.com, *Waterford Telemedicine Index*, at <http://www.telemedicineindex.com/telemIndex.asp> (visited Nov. 1, 2000).

[73.] *See id.*

[74.] *See id.*; *see generally* Telemedicine Research Center, *The Telemedicine Information Exchange*, at <http://tie.telemed.org> (visited Oct. 31, 2000) (providing an "all-inclusive platform without bias for information on telemedicine").

[75.] *See* Associated Press, *Technology Became Lifeline; South Pole Doctor's Care Frustrating*, CHICAGO

[76.] *See id.*

[77.] *See Dateline: No Way Out; Doctor in South Pole Treating Herself for Possible Breast Cancer* (NBC television broadcast, July 16, 1999) (transcript on file with NBC News Transcripts).

[78.] *See* Associated Press, *supra* note 75.

[79.] *See id.*

[80.] *Id.*

[81.] *Id.*

[82.] *Id.*

[83.] *Id.*

[84.] *See* Mike McDaniel, *UC-Davis Establishes California's First Telemedicine Center*, THE CALIFORNIA AGGIE, Aug. 16, 1999, available at <http://www.californiaaggie.com/archive/99/08/16/telemedicine.html>.

[85.] *Id.*

[86.] *Id.*

[87.] *Id.*

[88.] *See, e.g.* East Carolina University School of Medicine, *Telemedicine*, at <http://www.telemed.med.ecu.edu> (visited Nov. 1, 2000); The University of Texas Medical Branch at Galveston, *UTMB Telemedicine Training Institute*, at <http://www2.utmb.edu/telemedicine> (modified Oct. 18, 2000); University of Vermont, *Telemedicine Program at Fletcher Allen Health Care*, at <http://www.vtmednet.org/telemedicine/index.htm> (visited Nov. 1, 2000).

[89.] *See* 3COM, *Telemedicine Overview: Federal Agencies Funding Telemedicine Grants*, at <http://www.3com.com/solutions/convergence/telemedicine/funding.html> (visited Oct. 31, 2000).

[90.] *See id.*

[91.] *Id.*

[92.] *See id.*

[93.] *See* 3COM, *Telemedicine Overview: Proposed Legislation*, at <http://www.3com.com/solutions/convergence/telemedicine/legislation.html> (visited Oct. 31, 2000).

[94.] *Id.*

[95.] *Id.*

[96.] *Id.*

[97.] *Id.*

- [98.] See generally James L. Rigelhaupt, Jr., Annotation, *What Constitutes Physician-Patient Relationship for Malpractice Purposes*, 17 A.L.R. 4th 132 (analyzing state and federal cases in which the courts have decided what constitutes a physician-patient relationship for malpractice purposes).
- [99.] See, e.g., *Osborne v. Frazor*, 425 S.W.2d 768, 771 (Tenn. App. 1968) (citing 70 C.J.S. Physicians & Surgeons § 37); see also *Oliver v. Brock*, 342 So. 2d 1, 3-4 (Ala. 1976) (finding that voluntary acceptance of the doctor/patient relationship was prima facie evidence of a contractual relationship); *St. John v. Pope*, 901 S.W.2d 420, 423 (Texas 1995); *Lyons v. Grether*, 239 S.E.2d 103 (Virginia 1977); see generally Derek F. Meek, *Telemedicine: How an Apple (or Another Computer) May Bring Your Doctor Closer*, 29 CUMB. L. REV. 173, 186 (1998/1999); Joanna M. Carlini, *Liability on the Internet: Prescription Drugs and the Virtual Pharmacy*, 22 WHITTIER L. REV. 157, 177 (Fall 2000).
- [100.] See Rigelhaupt, *supra*, note 98, at § 3.
- [101.] See *id.*; see also Carlini, *supra* note 99, at 177 (citing *Keene v. Wiggins*, 69 Cal. App. 3d 308 (1977)).
- [102.] See, e.g., *Rainer v. Grossman*, 107 Cal. Rptr. 469, 471 (1973).
- [103.] See *id.*; see also Rigelhaupt, *supra* note 98, at § 8b (citing *Mozingo v. Pitt County Mem'l Hosp., Inc.*, 400 S.E. 2d 747 (N.C. App. 1991)).
- [104.] See generally, Rigelhaupt, *supra* note 98 (listing citations to cases from thirty-one in which courts have addressed these principles).
- [105.] *Greenburg v. Perkins*, 845 P.2d 530 (1993).
- [106.] *Id.*, at 534.
- [107.] *Reynolds v. Decatur Mem'l Hosp.*, 660 N.E.2d 235, 243 (Ill. App. 1996).
- [108.] *Oliver v. Bock*, 342 So.2d 1, 3 (Ala. 1976)](citing 61 AM. JUR. 2d, *Physicians, Surgeons, and Other Healers*, § 96).
- [109.] See generally, Rigelhaupt, *supra* note 98 (providing a collection and analysis of state and federal cases addressing the issue of what constitutes a physician-patient relationship for malpractice purposes).
- [110.] See, e.g., *Reynolds*, 660 N.E.2d at 238 (citing *Kirk v. Michael Reese Hosp. & Med. Ctr.*, 513 N.E. 2d 387 (Ill. 1987)).
- [111.] *Osborne v. Frazor*, 425 S.W.2d 768, 771 (Tenn. App. 1968).
- [112.] See *Young v. Crescente*, 39 A.2d 449, 451 (1944); *but cf.* *Bovara v. St. Francis Hosp.*, 700 N.E.2d 143, 144 (Ill. App. 1998) (holding whether a consensual relationship exists where a physician contacts another physician on behalf of the patient is a question of fact); *Dougherty v. Gifford*, 826 S.W.2d 668, 674-75 (Tex. App. 1992) (finding that the mere fact a physician does not have direct physical contact with a patient does not preclude the existence of a doctor/patient relationship).
- [113.] See *Roberts v. Hunter*, 426 S.E.2d 797, 799 (S.C. 1993) (citing *Easter v. Lexington Mem'l Hosp.*, 278 S.E.2d 253 (1981)); see also *Hill v. Kokosky*, 463 N.W.2d 265, 266 (1990) (citing *Rogers v. Horvath*, 237 N.W. 2d 595 (1975)) (stating that a doctor/patient relationship is a legal prerequisite to basing a cause of action in professional malpractice against a physician).

[114.] See generally, Rigelhaupt, *supra* note 98.

[115.] See, e.g., Lopez v. Aziz, 852 S.W.2d 303 (Texas App. 1993) (citing Salas v. Gambou, 760 S.W.2d 838 (Tex. App. 1988)); Childs v. Weis, 440 S.W.2d 104 (Tex. Civ. App. Dallas 1969)); see generally Carlini, *supra* note 99, 176-178, Phyllis Forrester Grande, *Medical Malpractice Issues Related to the Use of Telemedicine - An Analysis of The Ways in Which Telecommunications Affects the Principles of Malpractice*, 73 N. DAK. L. REV. 65, 65-66 (1997)(citing Ortiz v. Shah, 905 S.W. 2d 609 (Tex. App. 1995)); Meek, *supra* note 99, at 186.

[116.] See Greenberg v. Perkins, 845 P.2d 530, 534 (Colo. 1993); see also Melville v. Southward, 791 P.2d 383, 387 (Colo. 1990) (citing Blockas v. Murray, 646 P. 2d 907 (Colo. 1982); Dixon v. Norbery, 157 P. 2d 131 (Colo. 1945); Norkett v. Martin, 165 P. 256 (Colo. 1917); McGraw v. Kerr, 128 P. 870 (Colo. App. 1912)); Klimkiewicz v. Karnick, 372 P.2d 736, 740 (Colo. 1962); Silver v. Redleaf, 194 N.W.2d 271 (Minn. 1972) (reiterating that "plaintiff . . . must offer expert medical testimony as to the standard of medical care and treatment recognized by the medical community"); see generally Sam A. McConkey, *Simplifying the Law in Medical Malpractice: The Use of Practice Guidelines as the Standard of Care in Medical Malpractice Litigation*, 97 W. VA. L. REV. 491, 497 (Winter 1995) (citing PROSSER & KEETON ON THE LAW OF TORTS, § 32 at 187 (5th ed. 1984).

[117.] See, e.g., Bovara, 700 N.E.2d at 146 (citing Kirk v. Michael Reese Hosp. & Med. Ctr., 513 N.E. 2d 387 (Ill. 1987)); see also Meek, *supra* note 99, at 185 (citing Phyllis Forrester Granade, *Medical Malpractice Issues Related to the Use of Telemedicine - An Analysis of The Ways in Which Telecommunications Affects the Principles of Malpractice*, 73 N. DAK. L. REV. 65 (1997).

[118.] See *id.* (citing Kirk v. Michael Reese Hosp. & Med. Ctr., 513 N.E. 2d 387 (Ill. 1987)).

[119.] See, generally, Allan H. McCoid, *The Care Required of Medical Practitioners*, 12 VAND. L. REV. 549 (1959) (discussing cases demonstrating that a physician's duty to communicate specific information to patients).

[120.] Salgo v. Stanford, 317 P.2d 170, 181 (Cal. App. 1957); see also Flannery v. Georgetown University Hosp., 679 F.2d 960, 962-63 (D.C. Cir. 1982); Canterbury v. Spence, 464 F.2d 772, 781 (D.C. Cir. 1972), *cert. denied*, 409 U.S. 1064 (1972); Russell v. Harwick, 166 So. 2d 904, 905 (Florida 1964); Bang v. Charles T. Miller Hosp., 88 N.W.2d 186, 190 (Minn. 1958); see generally, Frances H. Miller, *Health Care Information Technology and Informed Consent: Computers and the Doctor-Patient Relationship*, 31 IND. L. REV. 1019 (1998); Kathleen M. Vyborny, *Legal and Political Issues Facing Telemedicine*, 5 ANN. HEALTH L. 61, 87 (1996).

[121.] *Id.*

[122.] Tyler, *supra* note 3, at 263.

[123.] See *id.* at 270 (citing Philip H. Miller, Note, *New Technology, Old Problem: Determining the First Amendment Status of Electronic Information Services*, 61 FORDHAM L. REV. 1147 (1993)).

[124.] See *id.* at 268.

[125.] See *id.* at 270.

[126.] See *id.* at 271 (citing Note, *The Message in the Medicine: The First Amendment on the Information Superhighway*, 107 HARV. L. REV. 1062 (1994)).

[127.] *See id.* (citing Note, *The Message in the Medicine: The First Amendment on the Information Superhighway*, 107 HARV. L. REV. 1062 (1994)).

[128.] *See id.*

[129.] *Id.* (citing Note, *The Message in the Medicine: The First Amendment on the Information Superhighway*, 107 HARV. L. REV. 1062 (1994)).

[130.] *See id.* at 267.

[131.] *See id.* at 277.

[132.] 852 S.W.2d 303 (Tex. App. 1993).

[133.] *Id.* at 307.

[134.] 163 A.D.2d 269 (N.Y. App. 1990); *see generally* Terry, *supra* note 18, at 329 (predicting a rise of litigation concerning judgment used in web diagnosis).

[135.] 163 A.D.2d at 269.

[136.] *Id.*

[137.] Tyler, *supra* note 3, at 267.

[138.] *See id.* at 285.

[139.] Rigelhaupt, *supra* note 98, at § 2 (citing 61 AM. JUR. 2d, *Physicians, Surgeons & Other Healers*, § 201).

[140.] *See* Roberts v. Hunter, 426 S.E.2d 797, 799 (S.C. 1993) (citing Easter v. Lexington Mem'l Hosp., 278 S.E.2d 253 (N.C. 1981)); *see generally* Granade, *supra* note 117, at 66 (citing St. John v. Pope, 901 S.W.2d 420 (Texas 1995)).

[141.] Tyler, *supra* note 3, at 286-87 (citing Jan Greene, *Sign on and Say "AH-H-H-H-H,"* 71 HOSPITALS, HEALTH, & NETWORKS, Apr. 20, 1997, at 45-46); *see also* Cyberdocs, *supra* note 1.

[142.] Tyler, *supra* note 3, at 286 (citing John D. Calamari & Joseph M. Perillo, *CONTRACTS - BLACK LETTER SERIES* (1983)).

[143.] *Id.*

[144.] *Id.*

[145.] 163 A.D.2d 269 (N.Y. App. 1990).

[146.] *Id.* at 139.

[147.] *Id.*

[148.] 852 S.W. 2d 303 (Tex. App. 1993).

[149.] *Id.* at 307.

[150.] See Tyler, *supra* note 3, at 283-85.

[151.] 845 P.2d 530 (Colo. 1993).

[152.] *Id.* at 536.

[153.] *Id.*

[154.] *Id.*

[155.] Silverman, *supra* note 42, at 259 (citing *Internet Users Now Exceed 100 Million*, N.Y. TIMES, Nov. 12, 1999, at C8; U.S. CENSUS BUREAU, COMPUTER USE IN THE UNITED STATES: OCTOBER 1997 TABLE (last modified Oct. 14, 1999), at <http://www.census.gov/prod/99pubs/p20-522.pdf>).

[156.] See *id.* (citing Jeff Goldsmith, *How Will the Internet Change Our Health System?*, HEALTH AFFAIRS, Jan.-Feb. 2000, at 148).

[157.] *Id.* (citing Jeff Goldsmith, *How Will the Internet Change Our Health System?*, HEALTH AFFAIRS, Jan.-Feb. 2000, at 148).

[158.] FACCT Mission, at <http://www.facct.org/about/mission.html> (last visited Nov. 1, 2000).

[159.] *Id.*

[160.] Geneva Health On the Net Foundation, at [http://www.hon.ch/Project/projects\\_all.html](http://www.hon.ch/Project/projects_all.html) (visited Nov. 1, 2000).

[161.] *Id.*

[162.] Francis H. Miller, *Health Care Information Technology and Informed Consent: Computers and the Doctor-Patient Relationship*, 31 IND. L. REV.1019, 1042 n.21 (1998).

[163.] See Tyler, *supra* note 3, at 289.

[164.] See *id.*

[165.] *Id.*

[166.] Wiesemann, *supra* note 2, at 1153.

[167.] See *id.* at 1131.

[168.] See *id.* at 1146 (stating that no state-by-state licensing provisions exists to regulate medical practice via the Internet); see also Silverman, *supra* note 42, at 269.

[169.] Silverman, *supra* note 42, at 268; see also Wiesemann, *supra* note 2, at 1146.

[170.] See Converged Network Solutions, *Telemedicine Overview*, at <http://www.3com.com/solutions/convergence/telemedicine/barriers.html> (last visited Nov. 1, 2000); see also Silverman, *supra* note 42, at 268 (stating that those states which have passed laws regarding telemedicine licensing require that physicians not only have full licenses, but also unrestricted licenses); Wiesemann, *supra* note 2, at 1146 (noting that states have no laws requiring cybermedicine doctors to be licensed in the state they practice in).

[171.] Silverman, *supra* note 42, at 255.

[172.] *Id.* (citing U.S. CONST. amend X); *see also* Vyborny, *supra* note 120, at 94.

[173.] Silverman, *supra* note 42, at 257 (citing *Dent v. West Virginia*, 129 U.S. 114 (1889)).

[174.] *See id.* at 256 (citing *Dent v. West Virginia*, 129 U.S. 114 (1889); *Collins v. Tex.*, 223 U.S. 288 (1912); *Crane v. Johnson*, 242 U.S. 339 (1917); *Lambert v. Yellowley*, 272 U.S. 581 (1926); *La. State Bd. of Med. Examiners v. Fife*, 162 LA 681 (1926), *aff'd* 274 U.S. 720 (1927)).

[175.] *See id.* at 262.

[176.] *See generally* Lori Rinella, *The Use of Medical Practice Guidelines in Medical Malpractice Litigation - Should Practice Guidelines Define the Standard of Care?*, 64 UMKC L. REV. 337, 339 (Winter 1995).

[177.] William R. Trail, *Government Created Medical Practice Guidelines: The Opening of Pandora's Box*, 10 J.L. & HEALTH 231, 234 (1995/1996).

[178.] *See id.* (citing AGENCY FOR HEALTH CARE POLICY AND RESEARCH, U.S. DEPT. OF HEALTH & HUMAN SERVICES, PUBLIC HEALTH SERVICE, CLINICAL PRACTICE GUIDELINES: DEPRESSION IN PRIMARY CARE: TREATMENT OF MAJOR DEPRESSION (inside cover) (1993)).

[179.] *See* Rinella, *supra* note 176, at 337-38.

[180.] *See* Trail, *supra* note 177, at 235.

[181.] *See id.*

[182.] *See generally*, Trail, *supra* note 177 (recommending that states offer affirmative defenses to those physicians who comply with medical practice guidelines); Rinella, *supra* note 176 (analyzing the role of medical malpractice guidelines in establishing a standard of care).

[183.] *See* Trail, *supra* note 177, at 234.

[184.] *See id.* (citing John D. Ayres, *The Use and Abuse of Medical Malpractice Guidelines*, 15 J. Legal Med. 421 (1994)).

[185.] *See id.* at 235 (citing GOVERNMENT ACCOUNTING OFFICE, U.S. CONGRESS, MEDICAL MALPRACTICE: MAINE'S USE OF LEGAL REFORMS ON MEDICAL MALPRACTICE COSTS, 5-7 (1993)).

[186.] *See id.* at 233 (citing TMA'S HOSPITAL MEDICAL STAFF SECTION COMMITTEE ON PRACTICE PARAMETERS, TEXAS MEDICAL ASSOCIATION, PRACTICE PARAMETERS: A PRIMER, 9-12 (1998)).

[187.] *See* Rinella, *supra* note 176, at 339, n. 23.

[188.] *See* Rinella, *supra* note 176, at 338.

[189.] *See id.* at 347 (citing John D. Ayres, *The Use and Abuse of Medical Practice Guidelines*, 150 J. LEGAL MED. 421 (1994)).

[190.] *See id.* at 347-48 (citing FED. R. EVID. 401, 402, 801, 901).

[191.] *See id.* at 338-39 (citing Paul D. Rheingold & Thomas P. Valet, *Practice Parameters: New Standards*

for Medical Care?, TRIAL May 1993, at 57).

[192.] See *id.* at 339 (citing Paul D. Rheingold & Thomas P. Valet, *Practice Parameters: New Standards for Medical Care?*, TRIAL, May 1993, at 57).

[193.] See *id.* at 351 (citing Sam A. McConkey, IV, *Simplifying the Law in Medical Malpractice: The Use of Practice Guidelines as the Standard of Care in Medical Malpractice Litigation*, 97 W. VA. L. REV. 491 (1995)).

[194.] See *id.*

[195.] See *id.*

[196.] See *id.* at 353.

[197.] *Id.*

[198.] *Id.*

[199.] *Id.*

[200.] *Id.*

[201.] *Id.* at 353-54.

[202.] *Id.* at 354 (citing Edward B. Hirshfield, *Should Practice Parameters Be the Standard of Care in Malpractice Litigation?*, 266 JAMA 2886 (1991)).

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### ***Related Browsing***

1. [http://www.slu.edu/publications/gc/v6-3/news\\_11.shtml](http://www.slu.edu/publications/gc/v6-3/news_11.shtml) - Article about cybermedicine by a St. Louis University professor.
2. <http://www.foxnews.com/fn99/vtech/011100/internethealth.sml> - FoxNews story on cybermedicine.
3. <http://www.gase.com/cyberlaw/toppage11.htm> - Legal Implications of the Practice of Medicine over the Internet.
4. <http://trc.telemmed.org> - The Telemedicine Research Center.
5. <http://www.uiowa.edu/~cyberlaw/cls97/stupaper/berven.html>. "Is There a Doctor on the Net? Cyberspace, Telemedicine, and the Virtual Physician-Patient Relationship in Vietnam" by Heidi Berven. This paper discusses legal and social policy issues posed by telemedicine practice both nationally and internationally. Paper also addresses problems of "regulating telemedicine practitioners across state and international boundaries, and addresses the practical limitations of current medical licensing protocols in a global

cyberspace community. Ultimately, it argues that national or international licensing programs may help harmonize practice standards, and improve telemedicine delivery."

6. <http://journal.law.ufl.edu/~techlaw/vol5/medicinefinal.htm>. "Cybermedicine: The Benefits and Risks of Purchasing Drugs Over The Internet" by David Mills. Article discusses the legality of online prescription drug sales. Article looks at current cases and pending regulation and addresses the issue of who regulates cybermedicine. The article then balances the risks and benefits of online medicine.

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