Telemedicine: The Cure for Central California's Rural Health Care Crisis?

INTRODUCTION

Rural residents of the San Joaquin Valley of California are in danger. Medical resources are insufficient to meet the needs of rural residents throughout the United States, but the crisis is especially critical in central California. Multiple factors contribute to this problem. Legislation on both federal and state levels is making one potential solution more practical. Telemedicine promises to address factors contributing to this health care crisis. California legislation mandates a study of telemedicine in rural areas and requires third party payers to reimburse providers for telemedicine services.[1] Although some authorities warn that telemedicine may not be all it promises,[2] Congress is expanding Medicare reimbursement for telemedicine services and is funding new programs throughout the United States.[3] Its advocates present telemedicine as a beacon, lighting the way out of the rural health care crisis. However, telemedicine's light is also sending warning signals of legal issues yet to be explored.

This comment first explores the scope of the rural health care crisis. After a brief description of the current status of telemedicine technology and recent government actions intended to facilitate implementation of telemedicine, it turns to factors which contribute to the problem and the ways in which telemedicine is expected to ameliorate

---

[1] Telemedicine Development Act of 1996, CAL. WELF. & INST. CODE § 14132.72, CAL. INS. CODE § 10123.85, CAL. HEALTH & SAFETY CODE § 1374.13 (Deering 1997).

[2] See, for example, Richard Woottin, *Telemedicine: A Cautious Welcome*, 313 BRIT. MED. J. 1375 (1996), for discussion of the view that telemedicine should be pursued slowly.

[3] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18, and 47 U.S.C.); Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 (codified in scattered sections of 42 U.S.C.); Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 110 Stat. 1936 (codified in scattered sections of 42 U.S.C.); Federal Agriculture Improvement and Reform Act of 1996, Pub. L. No. 104-127, 110 Stat. 888, 7 U.S.C. § 950aaa (1997); Health Centers Consolidation Act of 1996, Pub. L. No. 104-299, 110 Stat. 3626, 42 U.S.C. § 254 (1997).

them. Finally, it identifies legal issues which may arise as a result of the use of telemedicine in rural California[4] and makes recommendations to decrease telemedicine-related liability of health care providers.

I. THE SPECIAL NATURE OF RURAL HEALTH CARE

Rural health care is affected by a number of factors. Economic, demographic, and geographic factors interact, affecting the rural health care environment.[5]

Rural residents tend to be in poorer than average health. The Agency for Health Care Policy and Research of the Department of Health and Human Services has determined that nearly one-third of adults living in rural America are in only fair to poor health.[6] Numerous factors contribute to rural Americans' relatively poor health status. Rural residents tend to be more elderly and have lower incomes than average. Both elderly and low income populations experience poorer health outcomes than the general population.[7] When elderly or low income people are ill or injured they are slower to recover and may not achieve the same level of recovery as other population groups. Furthermore, agriculture is generally considered to be the most hazardous of American industries.[8] The hazards of agriculture exert an especially strong impact in California, which is home to half of the nation's farm workers.[9]

In spite of the relatively great health care needs of rural residents, the number of rural hospitals is decreasing. Between 1987 and 1994, 249 rural hospitals in the United States closed their doors.[10] In California, the rural health care crisis is especially severe. Many California hospitals have closed or merged with other hospitals.[11] In 1996, sixty-

---

[4] This comment will focus on legal issues which may arise when the patient and all health care providers are located within the state of California.

[5] J. Paul Newell, *Rural Healthcare: The Challenges of a Changing Environment*, 47 MERCER L. REV. 979, 980-81 (1996).

[6] Agency for Health Care Pol'y and Res., Department of Health and Human Serv., *Improving Health Care for Rural Populations*, RES. IN ACTION, June 9, 1995.

[7] *Id.*

[8] James Meyers et al., *Ergonomics in Agriculture: Workplace Priority Setting in the Nursery Industry*, 58 AM. INDUST. HYGIENE ASS'N J. 121 (1997).

[9] Barnaby J. Feder, *Harvest of Shares; One Farm's Stock Plan Gives Its Migrant Workers a Stake*, N. Y. TIMES, June 26, 1997, at D1.

[10] *Rural Health Care Issues: Hearing Before the Subcomm. on Health of the House Comm. On Ways and Means*, 104th Cong. 10 (1996) (testimony of Kathleen A. Buto, Associate Administrator for policy, HCFA).

[11] CALIFORNIA HEALTHCARE ASS'N, REPORT OF THE TELEMEDICINE/TELEHEALTH CO-

four percent of California's small and rural hospitals lost money on operations.[12] Even though California remains rich in health care resources, forty-nine of California's fifty-eight counties lack the ability to meet the medical needs of their residents.[13] The Rural Healthcare Center of the California Healthcare Association has identified eighty-two hospitals which meet either state or federal criteria for classification as rural hospitals.[14] Rural hospitals serve more than 2.6 million rural Californians in geographical areas totaling approximately seventy-five percent of the state.[15] These hospitals are fairly evenly distributed between the northern and southern areas of the state.[16]

Eleven rural California hospitals are concentrated in a three-county area in the heart of the agricultural central San Joaquin Valley.[17] These hospitals struggle to continue serving the health needs of rural residents in the area. Some have made their problems public. Alta District Hospital in Tulare County was on the verge of bankruptcy in 1994. Its solution was to convert two-thirds of its beds into long term care — nursing home — beds.[18] Exeter Memorial Hospital in Tulare County began converting beds to long term care in the 1950s and closed its maternity service in the 1980s.[19] Financial problems forced Avenal District Hospital in Kings County to close its doors in 1993. It reopened as an outpatient clinic, without emergency services.[20] In 1996, Corcoran District Hospital, also in Kings County, filed for bankruptcy protection.[21] Fresno County saw Kingsburg District Hospital file for bankruptcy protection in June 1997.[22] In December of the same year, the Hospital Council of Northern and Central California confirmed reports that another rural Fresno County hospital, Sanger Gen-

---

ORDINATING COMMITTEE (Jan. 1997) [hereinafter TELEMEDICINE REPORT].

[12] CALIFORNIA HEALTHCARE ASS'N, RURAL CALIFORNIA AND ITS HEALTH CARE PROVIDERS (1997).

[13] TELEMEDICINE REPORT, *supra* note 11.

[14] RURAL HEALTHCARE CENTER, CALIFORNIA HEALTHCARE ASS'N, IMPORTANCE OF RURAL HOSPITALS (1997).

[15] *Id.*

[16] *Id.*

[17] *Id.*

[18] Tracy Correa, *Rural Hospitals on Financial Sick List*, FRESNO BEE, Aug. 25, 1996, at C1.

[19] *Id.*

[20] *Id.*

[21] Tracy Correa, *Hospital Seeks Bankruptcy Protection*, FRESNO BEE, June 27, 1997, at C1.

[22] *Id.*

eral Hospital, faced severe financial problems.[23]

The Hospital Council of Northern and Central California commends California's rural hospitals for their continuation of services in spite of funding crises;[24] however, many factors are making this increasingly difficult. Telemedicine capability would enable these hospitals to address many of the problems unique to the service of rural populations.

II. TELEMEDICINE: AN OLD CONCEPT IN A HIGH TECH FORM

Rural telemedicine is in the earliest stages of development. However, telemedicine in general has been in existence in some form for about 100 years.[25] Electronic signals have transmitted medical information from one site to another since the invention of the telephone.[26] Today, physicians conferring by phone and facsimile are commonplace activities. Modern definitions of telemedicine take it far beyond such commonplace devices. Today, telemedicine is generally defined as the use of electronic technology to bridge the distance between participants.[27] Through modern technology, a remote physician can do a complete physical examination of a patient, seeing and feeling as though he/she were at the bedside.[28] The physician can look into eyes and ears, listen to hearts,[29] and feel body parts by means of electronic instruments that give the same information as would be gathered during a traditional examination.[30] Furthermore, new technology puts real-time transmission of high quality images[31] onto desktop computers.[32] Physicians can examine patients from their homes or offices, making many special trips to the hospital unnecessary.

---

[23] Tracy Correa, *Cash-Short Sanger Hospital May Close*, FRESNO BEE, Dec. 24, 1997, at C1.

[24] Correa, *supra* note 18.

[25] Ray Dussault, *Telemedicine Poses Regulatory Woe*, 13 BUS. J. SERVING GREATER SACRAMENTO 21 (1996).

[26] *Id.*

[27] Paul M. Orbuch, *A Western State's Effort to Address Telemedicine Policy Barriers*, 73 N.D. L. REV. 35 (1997).

[28] Jay Sanders, *The Revolution in Health Care Delivery*, 73 N.D. L. REV. 19, 26 (1997).

[29] Sharon Parmet, *Telemedicine: Bridging Health Care Distances for Rural Families*, EXCEPTIONAL PARENT, Dec. 1996, at 30.

[30] Susan Carney, *Dial a Doctor*, BANGOR DAILY NEWS, July 18, 1998.

[31] Marc Grobman, *Managed Care's Last Frontier*, BUS. & HEALTH, May 1997, at 31.

[32] Patrick Burns, *Changing Times and the Business Case for "Telestuff," Innovative Telemedicine Solutions*, HEALTH MGMT. TECH., May 1997, at 31.

Telemedicine pilot projects have flourished in recent years.[33] Participating health care providers are beginning to use telemedicine routinely and are studying its performance.[34] Four hospitals in Fresno, Tulare, and Kings Counties are currently participating in a pilot program administered by the California Health Collaborative. Coalinga Regional Medical Center, Sierra Kings District Hospital, Exeter Memorial Hospital, and Selma District Hospital currently limit their telemedicine services to radiology and physician-to-physician consultation, but look forward to expanding into new areas.[35]

Extremely adaptive to various-sized systems,[36] telemedicine has the potential to ameliorate health care shortages in areas served by small rural hospitals.[37] In spite of telemedicine's potential and its decreasing cost, many health care providers have hesitated to invest in telemedicine technology.[38] Until recently, the costs of the infrastructure and equipment, as well as the cost of use, remained prohibitive to rural hospitals. Average equipment costs range upward from $135,000 for small sites. Annual transmission costs range from $19,000 to $80,000.[39] Furthermore, the major payers for health care — Medicare, Medicaid, private insurers, and health maintenance organizations — have been reluctant to pay for telemedicine services beyond limited radiology and pathology services.[40]

Congress and the State of California recognize telemedicine's potential to reverse the downward spiral of rural health care. Recent legislation on federal and state levels removes many of the financial obstacles faced by rural hospitals considering telemedicine programs.

---

[33] Conor Heneghan, *Opthalmology Rides Wave of Telemedicine*, OPTHALMOLOGY TIMES, May 1, 1997, at 9.

[34] Bill Siwicki, *Measuring the Benefits of Telemedicine*, HEALTH DATA MGMT., Nov. 1997.

[35] Telephone interview with Sharon Avery, Director, Rural Healthcare Center, California Healthcare Association (July 24, 1997).

[36] Andrew Pasternack, *Why the Phone Company May Be Your Best Strategic Partner*, 71 HOSP. & HEALTH NETWORKS 32 (1997).

[37] Kerry Meyer, *Can Telemedicine Deliver What It Promises?* FAM. PRAC. MGMT., Mar. 1996.

[38] Matt Krantz, *Computers and Technology*, INVESTOR'S BUS. DAILY, Aug. 21, 1997, at A4.

[39] HEALTH RESOURCES AND SERV. ADMIN., DEPARTMENT OF HEALTH AND HUMAN SERV., *HRSA Survey Shows Promise and Challenge of Rural Telemedicine*, Press Release, Feb. 21, 1997.

[40] Heneghan, *supra* note 33.

III. RECENT LEGISLATION MAKES TELEMEDICINE A REALISTIC OPTION IN RURAL HEALTH CARE

Many sectors of government are working toward implementing the routine use of telemedicine. On the federal level, the Federal Communications Commission (FCC) has authorized up to $400 million each year to subsidize upgrades of telecommunication technology and costs related to its use for telemedicine services by rural hospitals.[41] Funding for the subsidy will come from assessments on telephone companies and users.[42]

The Secretary of the United States Department of Agriculture (USDA) is concerned about the downward spiral of health care for rural residents if electronic access to telemedicine is not available.[43] The USDA, through its agency the Rural Utilities Service, administers the Distance Learning and Telemedicine Program. This program gives loans or grants to help rural communities build the infrastructure needed for telemedicine.[44]

The Secretary of the Department of Health and Human Services (DHHS) joined the Secretary of the USDA in expressing concern about rural health care and efforts to implement telemedicine.[45] Medicare, a DHHS program, currently pays for radiology services accomplished through telecommunication technology.[46] However, beginning no later than January 1, 1999, Medicare will also pay for teleconsultation services for approximately 3.3 million beneficiaries who reside in counties designated as "health professional shortage areas."[47] On the same date, the Secretary of DHHS is required to submit a report on the possibility of reimbursement for telemedicine consultation for other

---

[41] Johnathan Gardner, *Medicare to Pay Docs Who Use Telemedicine,* MODERN HEALTHCARE, Sept. 8, 1997, at 24. The FCC authority is granted by the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, 47 U.S.C. § 254 (1997).

[42] Gardner, *supra* note 41.

[43] Letter to Reed E. Hundt, Chairman Federal Communications Commission, from Daniel R. Glickman, Secretary of Agriculture; William M. Daley, Secretary of Commerce; and Donna E. Shalala, Secretary of Health and Human Services, *Federal-State Joint Board on Universal Service,* C.C. Docket No. 90-45, RURAL HEALTH CARE [hereinafter Letter to Reed Hundt].

[44] Federal Agriculture Improvement and Reform Act of 1996, 7 U.S.C. § 950aaa (1997).

[45] Letter to Reed Hundt, *supra* note 43.

[46] *Telemedicine Report to Congress, Executive Summary,* S. 652, 104th Cong. (1996), *printed in* 73 N.D. L. REV. 131, 134-35 (1997).

[47] Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251, 42 U.S.C. § 13951w (1997). See also *Congress Issues A Medicare Telemedicine Payment Mandate,* HEALTH DATA NETWORK NEWS (N.Y.), Aug. 6, 1997, for discussion.

Medicare beneficiaries.[48] In addition, the Office of Rural Health Policy began a program of grants for the development of telemedicine programs in rural public or nonprofit health care facilities.[49]

In 1996, California took major steps toward bringing telemedicine to its rural areas. Legislation directed the Office of Statewide Health Planning and Development, in conjunction with the Department of Health Services, to develop a strategic plan to prepare rural California for health care reform.[50] The legislation requires the rural health care strategic plan to address the special needs of elderly and ethnic populations by eliminating barriers to health services, such as the lack of providers and access to emergency care, and by defining the role of new technology, including telemedicine.[51] The state now recognizes telemedicine as a legitimate form of medical care,[52] allowing health care plans to use telemedicine as a means of complying with state licensing regulations.[53]

Insurers have refused reimbursement for telemedicine services in the past.[54] California has addressed this problem with statutes prohibiting third party payers in California from requiring face-to-face contact between health care provider and patient. As of January 1, 1997, disability insurance contracts[55] and health care service plan contracts are required to reimburse providers for services which are appropriately provided by telemedicine.[56] The regulations are intended to provide reimbursement for services which involve assessment of the patient through telemedicine, but not where one physician merely discusses findings with another.[57] The same requirements apply to Medi-Cal re-

---

[48] Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251, 42 U.S.C. § 13951w (1997).

[49] Health Centers Consolidation Act of 1996, 42 U.S.C. § 254(c) (1997).

[50] Telemedicine Development Act of 1996, CAL. HEALTH & SAFETY CODE § 127620 (Deering 1997).

[51] Telemedicine Development Act of 1996, CAL. HEALTH & SAFETY CODE § 127620(c) (Deering 1997).

[52] Telemedicine Development Act of 1996, CAL. WELF. & INST. CODE § 14132.72(a) (Deering 1997).

[53] Telemedicine Development Act of 1996, CAL. HEALTH & SAFETY CODE § 1367(e)(2) (Deering 1997).

[54] *Doctors Seek Further Refinements to Win Support for Telemedicine*, COMM. DAILY, June 3, 1997, at 7.

[55] Telemedicine Development Act of 1996, CAL. INS. CODE § 10123.85 (Deering 1997).

[56] Telemedicine Development Act of 1996, CAL. HEALTH & SAFETY CODE § 1374.13 (Deering 1997).

[57] Telemedicine Development Act of 1996, CAL. WELF. & INST. CODE

imbursement as of July 1, 1997.[58] The Medi-Cal reimbursement statute automatically expires on January 1, 2001, unless extended by the legislature.[59] The expiration date for Medi-Cal reimbursement serves as a deadline for submission of an evaluation of the effects of telemedicine. According to the Chief of Medi-Cal's Medical Policy Division, the expiration date does not indicate an intent to cancel telemedicine reimbursement. "We certainly would not want to introduce it as a covered benefit and then whisk it away."[60]

The federal government and the state of California are assisting rural hospitals in implementing telemedicine technology. A major reason for government assistance is the promise that telemedicine will help ease the rural health care crisis.

IV. FACTORS CONTRIBUTING TO THE RURAL HEALTH CARE CRISIS AND HOW TELEMEDICINE CAN HELP

The rural health care crisis is a result of multiple, interrelated factors. These factors combine, creating a downward spiral in the availability of health care in rural areas. Telemedicine's supporters believe this modern technology can reverse this spiral by attracting more primary care physicians to rural areas and by enabling rural hospitals to offer specialized services.[61] One rural hospital bed filled through the use of telemedicine results in $100,000 to $150,000 annual revenue that would not have been realized if the patients who filled that bed had been transferred to larger hospitals.[62]

A. Medicare, Medi-Cal,[63] and Managed Care[64]

Medicare, Medi-Cal, and managed care organizations are the primary payers for health care in California. Reimbursement practices of

---

§ 14132.72(d), CAL. INS. CODE § 10123.85(d), CAL. HEALTH & SAFETY CODE § 1374.13(d) (Deering 1997).

[58] Telemedicine Development Act of 1996, CAL. WELF. & INST. CODE § 14132.72(c) (Deering 1997).

[59] Telemedicine Development Act of 1996, CAL. WELF. & INST. CODE § 14132.72(f) (Deering 1997).

[60] *California Takes the Lead on Telemedicine*, HEALTH DATA NETWORK NEWS (N.Y.), Nov. 20, 1996 (quoting T. George Wilson, M.D.).

[61] *Pennsylvania Gov. Casey Demonstrates Healthnet Project Linking Rural Hospitals with Urban Medical Centers*, PR NEWSWIRE, July 20, 1994.

[62] Meyer, *supra* note 37.

[63] Medi-Cal is California's Medicaid program. CAL. ADMIN. CODE § 50003 (Deering 1997).

[64] Managed care organizations include Health Maintenance Organizations (HMOs)

all three payers have a negative impact on rural health care providers. Health care for sixty percent of the patients treated in California's rural hospitals is covered by Medicare and Medi-Cal. Payments for care of these patients is often less than the full cost of services.[65] For example, Medicare reimbursement to rural hospitals is seventy percent per beneficiary of what urban hospitals are paid.[66] As Medicare and Medi-Cal patients move into managed care, reimbursement rates by Medicare and Medi-Cal will play a less significant role in rural health care. However, this movement of patients will magnify managed care's impact on rural hospitals. Managed care is largely responsible for increasing the movement of medical services out of rural areas.[67] It affects California more than any other state.[68]

In the past, managed care organizations have not pursued rural areas because they seek areas of dense population[69] in order to attain effective care through fiscal efficiency.[70] They continually strive to reduce costs through utilization management.[71] For example, patients are sent home after shorter stays than in the past.[72] The resulting decrease in demand for hospital care is a major factor in the financial problems of rural hospitals in the central San Joaquin Valley of California.[73]

In 1996, Medi-Cal began implementing managed care for Medi-Cal beneficiaries.[74] The program began in Fresno County in 1997. Beneficiaries in certain eligibility categories are automatically enrolled in HMO (Health Maintenance Organization) plans. Other beneficiaries have the option of enrolling or remaining in the traditional Medi-Cal fee for service plan.[75] The effect of the Fresno County program is devastating to small rural hospitals in Fresno and Kings Counties of the central San Joaquin Valley. Kingsburg District Hospital in Fresno

---

and Preferred Provider Organizations (PPOs).

[65] RURAL HEALTHCARE CENTER, CALIFORNIA HEALTHCARE ASS'N, MEDICARE/MEDICAID ISSUES (1997).

[66] Cheryl Tevis, *Rural Health: Reshaping Rural Health Care*, SUCCESSFUL FARMING, Apr. 1997, at 58.

[67] *Id.*

[68] TELEMEDICINE REPORT, *supra* note 11.

[69] Grobman, *supra* note 31.

[70] TELEMEDICINE REPORT, *supra* note 11.

[71] *Id.*

[72] *Id.*

[73] Correa, *supra* note 21; Correa *supra* note 23.

[74] The state contracted with HMOs to provide care for Medi-Cal beneficiaries for a fixed fee per month for each enrollee. *New Medi-Cal Managed Care Program*, MEDI-CAL PHARMACY BULL. 416, June 1997, at 1.

[75] CALIFORNIA DEP'T OF HEALTH SERV., 1 *Focus on Managed Care* 1 (1997).

County noted that the enrollment of seventy percent of its patients in managed care was a major factor in its filing for bankruptcy in June 1997.[76] In commenting on the financial problems of Sanger General Hospital, the vice-president of the Hospital Council of Northern and Central California noted that the transfer of Medi-Cal patients to managed care has adversely affected small, rural hospitals.[77] Medi-Cal plans to begin managed care enrollment in Tulare County in 1998. More than 70,000 Tulare County beneficiaries are in the mandatory enrollment categories.[78] When enrollment begins, Tulare County's rural hospitals will face problems similar to those created by managed care enrollment in Fresno County. Although Kings County is not currently scheduled for managed care enrollment,[79] its proximity to Fresno, Tulare, and Kern[80] Counties makes it vulnerable to the effects of the program.

Telemedicine technology now makes it possible for these rural hospitals to become part of larger provider networks. Telemedicine will allow them to share services with other small hospitals and to partner with large, urban hospitals, making rural hospitals more attractive to managed care organizations. Rural hospitals may be able to reverse some of the damage caused by managed care as telemedicine makes them more attractive to managed care organizations.[81]

B. Shortage of Primary Care Physicians[82]

In general, rural residents of the United States are under-served by primary medical providers. Whereas metropolitan areas are served by one primary care physician per approximately 1,053 people, rural areas are served by only one primary care physician per approximately 1,786 people.[83] In the central San Joaquin Valley, the problem is even more severe than in most rural areas of the United States. All of Kings County, most areas of Tulare County, and rural areas of Fresno

---

[76] Correa, *supra* note 21.

[77] Correa, *supra* note 23.

[78] Hahn Kim Quach, *Tulare Seeks to Educate Poor on Health Plans*, FRESNO BEE, Feb. 9, 1998, at B1.

[79] CALIFORNIA DEP'T HEALTH SERV., *New Medi-Cal Managed Care Program*, MED. SERV. BULL. 275 (1997).

[80] Medi-Cal began managed care enrollment in Kern County in 1996. *Id.*

[81] Grobman, *supra* note 31.

[82] For a detailed study of the shortage of primary care physicians, see Daniel McCarthy, *The Virtual Health Economy: Telemedicine and the Supply of Primary Care Physicians in Rural America*, 21 AM. J.L. AND MED. 111 (1995).

[83] Newell, *supra* note 5, at 982.

County are served by fewer than one primary care physician per approximately 3,500 people.[84] The shortage of primary care physicians threatens the health of the residents of these counties. It is also a major factor in rural hospital closings,[85] driving the health care spiral further downward.

Among the reasons physicians are reluctant to move to or remain in rural areas are professional isolation, unavailability of continuing education, limited support services, lack of complete medical facilities, excessive work loads, and time demands.[86] In addition, Medicare formulae reimburse rural physicians at fifty-nine percent of the rate paid to urban physicians.[87]

Telemedicine programs will minimize non-financial factors which make physicians reluctant to practice in rural areas. Telemedicine reduces the isolation of the rural physician by providing the ability to consult with other physicians and to maintain current medical knowledge without having to travel long distances to a major urban area.[88] Telemedicine provides up-to-date information on medical studies and technology. Furthermore, the physician will be able to receive information from all over the world;[89] time and financial constraints will no longer limit continuing education for rural physicians. The physician will be able to compare the information from various educational offerings and make an independent decision as to which is the most reliable.

Primary care physicians are also reluctant to practice in rural areas because rural hospitals lack complete medical facilities and medical specialist support.[90] Telemedicine ameliorates these problems by giving the rural physician increased access to medical specialists for consultations. Telemedicine permits a physician to refer a patient to a specialist anywhere.[91] Choice of a specialist is no longer limited by the dis-

---

[84] TELEMEDICINE REPORT, *supra* note 11.

[85] McCarthy, *supra* note 82, at 120.

[86] *Rural Health Care Issues: Hearing Before the Subcomm. on Health of the House Comm. On Ways and Means, supra* note 10.

[87] Tevis, *supra* note 66.

[88] *Telemedicine Report to Congress, supra* note 46, at 131.

[89] Sanders, *supra* note 28, at 24.

[90] *Rural Health Care Issues: Hearing Before the Subcomm. on Health of the House Comm. On Ways and Means, supra* note 10. Managed care is one of the forces increasing the move of specialty services from rural to urban areas. Tevis, *supra* note 66.

[91] Sanders, *supra* note 28, at 24. *See also Medivision Sales Brings Telemedicine Options to Rural Residents and University of Minnesota Patients*, PR NEWSWIRE, July 30, 1996.

tance the patient can travel. Furthermore, the rural physician can be present at the consultation, giving both physicians the opportunity to exchange complete information during a concurrent examination of the patient.[92] A primary physician will often learn skills necessary to treat the same conditions independently in the future.[93] The primary physician can exercise these skills, confident in the knowledge that a specialist is readily available for consultation should complications develop.[94] Rural practice will become more appealing to primary care physicians as telemedicine relieves isolation, increases educational opportunities, expands options for specialist referral and support, and provides the ability to manage more complex cases independently.

Beyond making rural practice more appealing to primary care physicians, telemedicine gives rural residents the option of being examined by a primary physician in another location. Telemedicine allows a physician to do a complete physical examination on a patient in another location.[95] Rural areas will need fewer local primary care physicians as urban physicians are able to examine and treat rural patients.

C. Problems of Distance and Transportation

In addition to having poorer than average health, many rural residents are seeing health care move farther away as rural hospitals close their doors.[96] Telemedicine promises to bridge this distance in many situations by permitting patients to remain in their own communities and still consult with specialists in larger urban areas.[97] Telemedicine has the potential to improve the health of rural Californians, as well as decrease the expense and pain of traveling to distant cities for specialized medical care.[98] Telemedicine's advocates point out that rural residents may be reluctant to leave their communities to travel long distances for specialty services in unfamiliar areas.[99] Telemedicine will allow them to receive these services while remain-

---

[92] Marilynn Larkin, *Lights, Camera, Telemedicine,* FDA CONSUMER, May 15, 1997, at 15.

[93] Sanders, *supra* note 28, at 27.

[94] Kristofer Hagglund and Daniel L. Clay, *Rural Healthcare Initiatives in Spinal Cord Injury,* AM. REHABILITATION, Mar. 22, 1997, at 2.

[95] Sanders, *supra* note 28.

[96] Newell, *supra* note 5, at 985.

[97] Siwicki, *supra* note 34.

[98] *Telemedicine Creeping into the Treatment of Chronic Back Pain,* BACK LETTER, Nov. 1996, at 123.

[99] Larkin, *supra* note 92.

ing in their own communities.[100] Many expensive and unnecessary patient transfers will be prevented when rural hospitals are able to provide adequate care via telemedicine.[101]

Traumatic injuries are more common and result in more severe consequences for rural residents than for those in urban areas.[102] Telemedicine can mean the difference between life and death in these cases.[103] For example, with telemedicine an ambulance can transmit images to a trauma center, enabling the hospital to prepare appropriate staff and equipment for immediate care upon the patient's arrival.[104] In other cases, time consuming transfers can be avoided by the ability to call in a specialist via telemedicine.[105] Rural hospitals participating in the Georgia College of Medicine telemedicine program have been able to retain eighty-six percent of patients who in the past would have been transferred for advanced services.[106] Treating patients locally keeps them close to home, decreasing travel costs and stress on families. Keeping hospital beds full is a key to keeping rural hospitals open.[107]

V. Potential Legal Issues and Recommendations

C. Everett Koop, former Surgeon General of the United States, believes that this new technology will be at the center of health care in the next century.[108] Telemedicine also promises to be at the center of many new legal issues. According to Jane Cordray, manager of the telemedicine program for the Medical Board of California, "[s]ometimes technology gets ahead of our ability to monitor and regulate it."[109] Currently, no consistent professional guidelines have been adopted[110] and there are no legal precedents specific to the practice of

---

[100] *Id.*

[101] Jane-Ellen Robinet, *Harmarville Firm Builds Its Niche in Telemedicine*, Pittsburgh Bus. Times, Aug. 29, 1997, at 17.

[102] Agency for Health Care Pol'y and Res., *supra* note 6.

[103] *Telemedicine Report to Congress*, *supra* note 46, at 131.

[104] Marilynn Larkin, *Telemedicine Finds Its Place in the Real World*, 350 Lancet 646 (1997).

[105] Cheryl Tevis, *Telemedicine Makes Rural Inroads*, Successful Farming, Apr. 1996, at 81.

[106] Meyer, *supra* note 37.

[107] *See supra* text accompanying note 62.

[108] *Health Technology: Communications Revolution Highlighted*, Health Line, Mar. 7, 1996.

[109] Dussault, *supra* note 25.

[110] Robert F. Pendrak & Peter Ericson, *Telemedicine May Spawn Long-Distance*

telemedicine.

When lawsuits related to telemedicine arise, courts will have many complex issues to unravel[111] and little legal precedent beyond traditional liability principles.[112] This new form of medical practice will raise new issues related to confidentiality, licensing of physicians, informed consent, and physician liability. Other issues cannot yet be imagined. "[S]ometimes we won't know what the problems are until an abuse happens and that can be too late."[113] Practice guidelines are unclear or unrefined and there are no legal precedents for liability carriers to apply in setting premium rates for insurance policies covering claims related to telemedicine.[114]

A. Confidentiality of the Telemedicine Medical Record

Some issues regarding telemedicine medical records are unclear.[115] The medical record is a legal document. Its contents and uses are governed by state laws[116] and ethical considerations. California legislation incorporates all information transmitted through telemedicine into the patient's medical record.[117] All laws which apply to traditional medical records apply to telemedicine transmissions as well,[118] including those related to confidentiality.[119] The law requires health care providers to

---

Lawsuits, HEALTHCARE FIN. MGMT., Nov. 4, 1996, at 44.

[111] *Id.*

[112] Berkeley Rice, *Will Telemedicine Get You Sued?* MED. ECON., Nov. 24, 1997, at 56.

[113] Dussault, *supra* note 25 (quoting Jane Cordray, Medical Board of California).

[114] Pendrak & Ericson, *supra* note 110.

[115] Marva West Tan, *Tuning in for Treatment; Telemedicine Brings Opportunities and Risks*, RISK MGMT., Apr. 1997, at 46.

[116] Several attempts at federal legislation to standardize the protection of health information have failed. Francoise Gilbert, *Privacy of Medical Records: The Health Insurance Portability and Accountability Act of 1996 Creates a Framework for the Establishment of Security Standards and the Protection of Individually Identifiable Health Information*, 73 N.D. L. REV. 93, 94 (1997).

[117] Telemedicine Act of 1996, Cal. BUS. & PROF. CODE § 123149.5 (Deering 1997) provides:

> It is the intent of the Legislature that all medical information transmitted during the delivery of healthcare via telemedicine, as defined in subdivision (a) of Section 2290.5 of the Business and Professions Code, become part of the patient's medical record maintained by the licensed health care provider. (b) This section shall not be construed to limit or waive any of the requirements of Chapter 1 (commencing with Section 123100 or Part 1 of Division 106 of the Health and Safety Code.).

[118] *Id.*

[119] Telemedicine Act of 1996, CAL. BUS. & PROF. CODE § 2290.5(c)(3) (Deering

obtain the patient's consent before releasing any information from which the identity of the patient can be discerned.[120]

Proponents of telemedicine minimize the risk of breaches of confidentiality. They point out that developers of telemedicine technology have incorporated encryption as a means of insuring the security of health care information transmitted through telemedicine technology.[121] However, the novelty of telemedicine transmissions and the publication of news stories about "hackers" accessing other confidential electronic files[122] may cause concern among patients. This concern may translate into lawsuits for perceived breaches of confidentiality.

Health care providers should protect the privacy of their patients by investigating security systems and implementing the highest level of security available. The investigation and rationale for the final decision should be documented to demonstrate that reasonable care has been taken to protect privacy. No industry wide standards have yet been established, but providers should adhere to standards as they develop.

Furthermore, health care providers must insure that all of their employees are aware of and apply legal and ethical principles of patient protection and confidentiality.[123] Risk managers should develop coordinated security policies and procedures encompassing all forms of electronic communication. Mandatory staff instruction should be updated on a regular basis.[124] Providers must prepare to defend themselves against negligence claims by maintaining records of these efforts, including content and staff attendance.

B. Provider Liability for Equipment Failure

In spite of the major technical problems which occasionally strike telemedicine centers (e.g. computer system shorts caused by lightning), telemedicine's advocates enthusiastically predict its widespread acceptance in the future, just as other forms of technology, such as auto-

---

1997).

[120] Telemedicine Act of 1996, CAL. BUS. & PROF. CODE § 2290.5(c)(5) (Deering 1997) states that "[d]issemination of any patient identifiable images or information from the telemedicine interaction to researchers or other entities shall not occur without the consent of the patient."

[121] John Morrissey, *Web Security Software in Testing Stage*, MODERN HEALTHCARE, Oct. 21, 1996, at 61.

[122] *See* Nina Bernstein, *Say Goodbye to Your Privacy*, SACRAMENTO BEE, Sept. 21, 1997, at F1; John Swartz, *Modern Thieves Prefer Computers to Guns*, S.F. CHRON., Mar. 25, 1997, at A1.

[123] Tan, *supra* note 115.

[124] *Id.*

mated teller machines, have been accepted.[125] Providers must be aware of potential liability if equipment is not inspected for obvious problems and maintained in a condition fit for the purpose for which it is intended.[126] Furthermore, physicians who use telemedicine equipment without adequate knowledge of its functions and requirements may be liable for any harm which results from their lack of knowledge. Providers who use telemedicine equipment should be well educated on operation and maintenance. Regular inspection and maintenance should be documented. Equipment should not be used if not operating properly. Except in emergencies, procedures which could harm patients if the equipment breaks down should not be attempted unless alternatives are immediately available. For example, a telemedicine physician may guide a local surgeon through a new procedure. An equipment breakdown could interrupt the telemedicine physician's observation of the patient or stop his communication with the local physician at a critical point in the procedure.

Health care providers should contact their liability carriers prior to purchasing telemedicine equipment or using it for patient care.[127] Policies should be read carefully. If telemedicine is excluded, the provider should negotiate coverage for telemedicine or investigate other providers. Insurers may offer recommendations to decrease liability.[128]

C. Physician Liability: Medical Malpractice

Questions will likely arise as to the liability of the distant physician in telemedicine encounters. The basic issues requiring adaptation to telemedicine are: Was a duty of care established through a doctor-patient relationship? What is the standard of care and did the physician breach it?[129]

---

[125] Sanders, *supra* note 28, at 33.

[126] Phyllis Forrester Granade, *Medical Malpractice Issues Related to the Use of Telemedicine-An Analysis of the Ways in Which Telecommunications Affects the Principles of Medical Malpractice*, 73 N.D. L. REV. 65, 88 (1996).

[127] Robert F. Pendrak & Peter Ericson, *Telemedicine and the Law*, HEALTHCARE FIN. MGMT., Dec. 1996, at 46.

[128] For example, the Physicians Insurers Association of America is working to educate physicians on avoiding liability related to telemedicine. Bill Siwicki, *Legal Issues Could Slow Growth*, HEALTH DATA MGMT., Apr. 1997.

[129] Rice, *supra* note 112.

1. Does the Distant Physician Establish a Physician-Patient Relationship?

Some authorities have applied the principles of *Clarke v. Hoek*[130] to the question of whether the distant physician will be liable for malpractice claims related to treatment via telemedicine.[131] In *Clarke*, one physician observed and evaluated treatment provided by another physician in order to report to a hospital which was considering granting staff privileges to the second physician. Dr. Hoek, the evaluating physician, reviewed x-rays and discussed the planned surgery with the other physician prior to observing the actual surgery.[132] The court ruled that no duty of care arose as to Dr. Hoek because he had not established a physician-patient relationship.[133] He had no direct contact with the patient, had no contractual relationship with the patient, and expected no payment for the service, either from the hospital or the patient.[134] Furthermore, he did not participate in treating the patient, but merely evaluated the performance of the other physician.[135]

However, there are obvious differences between the situation in *Clarke* and a telemedicine consultation. In a case where a physician treating a patient through telemedicine meets the patient and enters into an implied contract for payment, the courts will likely find a duty of care created through a physician-patient relationship.

In many jurisdictions, it is unclear whether a telemedicine consultation creates a physician-patient relationship.[136] In California, however, case law provides guidelines which will likely apply to telemedicine.[137] Whether a duty of care is established through a physician-patient relationship is primarily a question of law to be determined on a case-by-case basis.[138] In the United States, the establishment of such a relationship generally requires a contract between the physician and the patient, whether express or implied.[139] When a third party payer requests a consultation from another physician but no contract between the physician and patient is created, the physician is viewed as an agent of

---

[130] Clarke v. Hoek, 219 Cal. Rptr. 845 (Ct. App. 1985).

[131] Phyllis F. Granade & Jay H. Sanders, M.D., *Implementing Telemedicine Nationwide*, DEF. COUNS. J., Jan. 1996, at 67.

[132] Clarke v. Hoek, 219 Cal. Rptr. at 847.

[133] *Id.* at 851.

[134] *Id.*

[135] *Id.*

[136] Rice, *supra* note 112.

[137] Keene v. Wiggins, 138 Cal. Rptr. 3, 6 (Ct. App. 1977).

[138] *Id.; see also* Clarke v. Hoek, 219 Cal. Rptr. 845, 851 (Ct. App. 1985).

[139] Keene v. Wiggins, 138 Cal. Rptr. at 8.

the requesting party.[140] The physician has no duty other than to cause no harm to the patient.[141] In California, however, a physician may also be liable for malpractice without an express or implied contract through an offer or intention to treat a patient when the physician has reason to believe that the patient will rely on the report to the third party.[142]

Applying these guidelines to a case involving a telemedicine physician, a court would consider whether there was a contract between the patient and physician, whether the physician intended or offered treatment, and whether the physician had reason to believe that the patient would rely on his/her findings. Each case will be weighed on its own facts, but informed consent and compensation agreements will be strong evidence of a physician-patient relationship in most cases.

Furthermore, in some locations telemedicine has developed to the extent that patients seek treatment directly from distant physicians.[143] If telemedicine develops to that extent in rural California, the distant physician will be the only physician responsible for a patient's treatment. In assuming such responsibility, a telemedicine physician must anticipate that a court would find that he/she had established a physician-patient relationship.

Since it is likely that a telemedicine physician establishes a physician-patient relationship, all physicians who participate in telemedicine visits should keep in mind that they may have to defend themselves against malpractice claims. As practice guidelines and case law develop, physicians must maintain current knowledge of the standards to which they will be held.

2. Standard of Care

The standard of care in telemedicine cases raises issues related to both the distant and the local physician. Traditionally, the standard of care in medical practice is that of the knowledge, skill, and care of a physician with similar training in a similar situation, including a similar location.[144] Although some jurisdictions have modified the location standard for medical specialists to a "national standard,"[145] California

---

[140] *Id.*

[141] *Id.*

[142] *Id.*

[143] Chuck French, *Non-Traditional Video Markets: Telemedicine Imaging Solutions for Remote Video Examination of Patients-Now*, ADVANCED IMAGING, Apr. 1996, at 16.

[144] W. PAGE KEETON ET AL., PROSSER AND KEETON ON TORTS, at 187 (5th ed. 1984).

[145] *Id.* at 188.

has not yet adopted this modification.[146] In *Quintal v. Laurel Grove Hospital*, for example, an opthalmologist and an anesthesiologist were held to the local standards of care for their respective medical specialty areas of practice.[147] The court applied the local standard even though both physicians held specialty certification by the American Board of Medical Certification, a national organization.[148]

Will an urban specialist treating a patient in a rural area be held to the standard of a similar specialist in the urban area, or will the court try to determine what the standard should be for a similar specialist in a rural area? The standard for a specialist in a rural location might be difficult to discern, since there are few specialists in rural practice.[149] It would likely be different from the standard for a specialist who practices at a large medical center.

A plaintiff could argue that he/she "traveled" to the physician via electronics and thus the urban standard should apply. The court would probably take note of an argument that this electronic travel was in reliance on the higher level of expertise offered by the urban specialist. By accepting telemedicine cases, the patient could argue, physicians hold themselves out as offering the level of care available from a specialist in an urban setting.

On the other hand, the physician could argue that it was the physician who electronically traveled to the rural patient, making a rural standard of care more appropriate. The physician may add strength to the argument by pointing out that any treatment ordered was implemented in the rural setting by rural medical personnel.

Is the standard of care for a telemedicine physician identical to that of a similar physician doing a face-to-face examination? Some authorities assert that this actually is a higher standard of care because of the added element of electronic technology.[150] When a rural primary care physician joins a distant specialist in examining and conjointly ordering treatment for the patient, the courts will have to decide whether each should be held to the standard of his or her own location.

The rural primary care physician may face new types of malpractice claims related to telemedicine. In addition to claims which may arise

---

[146] Quintal v. Laurel Grove Hospital, 397 P.2d 161, 164 (Cal. 1964).

[147] *Id.*

[148] *Id.*

[149] *Rural Health Care Issues: Hearing Before the Subcomm. on Health of the House Comm. On Ways and Means, supra* note 10.

[150] Jeff L. Magenau, *Digital Diagnosis: Liability Concerns and State Licensing Issues are Inhibiting the Progress of Telemedicine*, COMM. & LAW, Dec. 1997, at 25.

if patients believe they should not have been treated through telemedicine, the physician may face claims for failure to use it as well.[151] This type of claim could arise, for example, if the physician decides the patient must be transferred immediately rather than referred to a specialist via telemedicine. The patient may claim damages for complications which arise en route, claiming that telemedicine would have been the appropriate option. Physicians must be able to justify their rationale for treatment decisions. If they do not use telemedicine, they may have to explain why not. If they do use it, they will need to be able to provide evidence that they have appropriate training and continuing education.[152]

All rural physicians should be aware of the potential advantages and limitations of telemedicine. Physicians practicing in areas where telemedicine becomes available must maintain knowledge of the current status of this new technology and must make rational decisions when deciding whether or not to use it in complex cases. Physicians should confirm coverage with their liability insurers and follow suggested guidelines.

3. Telemedicine as Evidence

Ninety percent of malpractice cases arise from failure to document actions that were taken, rather than failure to take appropriate action.[153] Authorities recommend that providers record all telemedicine sessions.[154] The recording will serve as clear evidence of what was or was not done and will be a valuable defense tool when it shows that appropriate care was given.[155] On the other hand, its use as evidence could be devastating if care was inadequate. Therefore, when sessions are recorded, physicians and other care givers must maintain proper decorum, even when the patient may not be aware of their behavior, for example, if he/she is unconscious. Health care personnel must be alert to the possibility that a jury may be judging their behavior. Many liability carriers believe such evidence will decrease malpractice judgments overall.[156]

---

[151] Tan, *supra* note 115.

[152] *Id.*

[153] Magenau, *supra* note 150.

[154] Pendrak & Ericson, *supra* note 110.

[155] *Id.*

[156] Magenau, *supra* note 150.

4. Informed Consent

Obtaining informed consent is a familiar process for physicians. California legislation requires the physician who is in charge of the case to obtain both verbal and written informed consent from the patient prior to treatment via telemedicine.[157] Legislators included an exception for emergency care when the patient is unable to give consent.[158] The informed consent must include full information about the risks and benefits connected with this new method of treatment.[159] A telemedicine physician who fails to fully inform his/her patient may be held liable under the same principles traditionally used to determine if the consent was informed.

The California Supreme Court has explored the issue of traditional informed consent and determined that "bright line" rules are not appropriate for defining the specific information which must be given.[160] The better rule, the court stated, is that a physician has a legal obligation to disclose all material information. It defined material information as "information which the physician knows or should know would be regarded as significant by a reasonable person in the patient's position when deciding to accept or reject a recommended medical procedure."[161] The court stated that the ultimate judgment as to the adequacy of information given to the patient is left with the jury, following presentation of persuasive arguments and appropriate instruction regarding the meaning of "material information."[162]

In preparing to obtain consent, a rural physician must keep in mind that the adequacy of the information given to the patient may be judged in court by a jury in the local community.[163] The physician must keep the patient and a potential jury in mind when deciding what information a reasonable rural California patient in the same circumstances would consider significant. The perception of rural residents regarding what is significant may differ considerably from the perception of residents in the suburbs of Los Angeles. The physician must be

---

[157] Telemedicine Development Act of 1996, CAL. BUS. & PROF. CODE § 2290.5 (Deering 1997).

[158] Telemedicine Development Act of 1996, CAL. BUS. & PROF. CODE § 2290.5(i) (Deering 1997).

[159] Telemedicine Development Act of 1996, CAL. BUS. & PROF. CODE § 2290.5(c)(2) (Deering 1997).

[160] Arato v. Avedon, 858 P.2d 598, 607 (Cal. 1993).

[161] *Id.*

[162] *Id.*

[163] *Id.*

sure the patient understands the procedure and has all questions answered. All information given to the patient must be clearly and completely documented in the medical record. Providers should prepare telemedicine informed consent forms which provide thorough and complete explanations of the technology and any risks or drawbacks in simple language.[164] They must be sure that each patient understands the information on the form. Physicians must be aware that the forms do not replace their responsibility to inform the patient of material information.

Health care providers and their legal advisers should consider a video tape explaining and showing the equipment. This tape would supplement, not replace, the information given by the physician. California hospital associations may want to collaborate on tapes in multiple languages. Video tapes would increase patient acceptance of telemedicine by demonstrating its use and the type of participation required by the patient during consultation. The patient's physician should add any additional information regarding the specific procedure and additional telemedicine information which a specific patient might consider material. A video tape would help to insure the consent is informed and would serve as evidence of what the patient was told. In addition, it would help alleviate patient anxiety about unfamiliar technology, decreasing the likelihood of claims related to a patient's unreasonable belief that a technology related injury has been suffered.

D. Issues Related to Crossing State Lines

Telemedicine makes it possible for a physician in one state to treat a patient who is in another state, giving rise to licensing and choice of law issues.[165] Although these issues are beyond the scope of this comment, it should be noted that California has begun to address concerns regarding out-of-state telemedicine physicians by making special provisions for such practitioners.[166] Resident rural California physicians are

---

[164] Tan, *supra* note 115.

[165] Under the Constitutional provision allowing states to adopt laws for the protection of the health, safety, and welfare of their citizens, each state has adopted its own licensing program for health care providers. Center for Telemedicine Law, *Telemedicine and Interstate Licensure: Findings and Recommendations of the CTL Task Force*, 73 N.D. L. REV. 109, 113 (1997).

[166] Physicians outside of California who consult regarding patients within California are exempt from the requirement of a license from the state of California, provided certain conditions are met. Telemedicine Development Act of 1996, CAL. BUS. & PROF. CODE § 2060 (Deering 1997).

licensed in the state, therefore this will not become an issue for them. Furthermore, specialty medical resources are abundant in the large medical centers in urban areas of California. Rural physicians will be able to consult with other California licensed physicians unless they choose to cross state lines through telemedicine technology. Any liability for practicing medicine in California without a license will be the liability of the out-of-state physician. Licensing issues are thoroughly explored in legal literature,[167] but should not have a major impact on rural California physicians or affect telemedicine's ability to improve the availability of health care in rural California.

E. Notwithstanding Legislative Mandates, Reimbursement Issues Remain

Perhaps the most intriguing question is suggested by California's requirement that third party payers reimburse services appropriately provided by telemedicine.[168] The statute leaves open the question of what services are "appropriate" for telemedicine. There are currently no decisions answering this question. However, the California Supreme Court has addressed appropriateness of treatment for insurance reimbursement.[169] The insurance contract in *Sarchett v. Blue Shield of California* provided for reimbursement of medical treatment which was medically necessary.[170] The court ruled that the judgment of the treating physician was not to be the determining factor.[171] Instead, the court found that peer review and arbitration, as required by the policy, were the appropriate methods of determining medical necessity.[172] The court expressed its opinion that there should be few cases where coverage would be refused, as doubtful cases must be resolved in favor of coverage.[173] Courts will likely apply these principles to the question of whether certain types of treatment are appropriate for telemedicine. However, this question may be more difficult to resolve because issues specific to telemedicine will be new to the courts, as well as to medical practitioners and payers. Although issues have not yet been identi-

---

[167] See Center for Telemedicine Law, *supra* note 165, for a discussion of interstate licensure.

[168] Telemedicine Development Act of 1996, CAL. HEALTH & SAFETY CODE § 1374.13(c), CAL. WELF. & INST. CODE § 14132.72(c) (Deering 1997).

[169] Sarchett v. Blue Shield of California, 729 P.2d 267, 273-75 (Cal. 1987).

[170] *Id.* at 273.

[171] *Id.*

[172] *Id.*

[173] *Id.* at 275.

fied, a possible question might be whether the rural physician actually needs to incur the added expense of a second opinion via telemedicine, versus a less expensive second opinion by another physician in the same rural area. It is likely that a court would find in favor of coverage if the physician's peers concurred with his judgment that telemedicine treatment was a medical necessity.

California law requires Medi-Cal and private payers to reimburse providers for medical treatment via telemedicine when telemedicine is an appropriate means of providing that treatment.[174] Since there are no other guidelines available, providers should be cautious. Hospital and physician associations should be encouraged to gather data regarding types of services which are being reimbursed or denied reimbursement. When sufficient data has been gathered, they may be able to persuade the legislature or the courts to adopt consistent guidelines.

Until guidelines emerge or precedents are set, providers should apply what they have learned from their experiences with reimbursement for procedures by traditional methods. They will need to be aware of when prior authorization may be required, what documentation they will be required to show that the procedure was medically necessary, and other related issues.

CONCLUSION

Telemedicine promises to reverse the dangerous downward spiral of rural health care in central California. It will help reverse the trend of rural hospital closings by enabling rural hospitals to network with other hospitals and become involved in managed care networks. Telemedicine will attract primary care physicians to rural areas by decreasing the isolation of the rural setting. Furthermore, it will decrease the time, expense, and inconvenience for rural residents who need to see medical specialists. It will help keep rural hospital beds filled with patients who in the past would have been transferred to urban hospitals. Telemedicine capability will save lives and improve the health status of rural Californians.

Opinions vary regarding the effect of telemedicine on medical malpractice lawsuits.[175] Some believe more comprehensive health care will lower risks. Others believe the expectations of patients will increase,

---

[174] Telemedicine Development Act of 1996, CAL. WELF. & INST. CODE § 14132.72(d), CAL. INS. CODE § 10123.85(d), CAL. HEALTH & SAFETY CODE § 1374.13(d) (Deering 1997).

[175] Pendrak & Ericson, *supra* note 110.

resulting in an increase in malpractice claims.[176] Physicians may be held to a higher standard of care due to their increased contact with specialists and ready access to continuing education related to their patients' diagnoses.[177]

Regardless of the number of cases which will arise, it is clear that new issues will be explored. Precedents in telemedicine have not yet emerged. Health care providers and their legal advisors must apply general principles to the practice of telemedicine and use caution as they begin to explore the new technology which promises to revolutionize rural health care.

ANN DAVIS ROBERTS, R.N.

---

[176] *Id.*

[177] Tan, *supra* note 115.