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A WESTERN STATES' EFFORT TO ADDRESS TELEMEDICINE POLICY BARRIERS

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I. AN INTRODUCTION TO TELEMEDICINE AND THE WESTERN GOVERNORS' ASSOCIATION

Providing a sufficient level of health care resources to residents of the rural west of the United States has long been a challenge for state governments. Despite greater health care needs in rural areas, urban states still have nearly forty-two percent more physicians relative to population than rural states. Rural residents are also more than twice as likely to face a shortage of primary care physicians than the nation as a whole. This disparity has increased in the last decade. From 1988 to 1992, the number of rural citizens living in primary care shortage areas rose by twenty-five percent, or four million individuals. The resource shortage in rural America is in part caused and compounded by the difficulty these areas have in recruiting and retaining qualified physicians.[1]

There is great potential for telemedicine to lessen the rural health care resource shortage by bringing physicians and specialists to a significant number of rural citizens. Telemedicine can be defined as "the use of electronic information and communications technologies to provide and support health care when distance separates the participants."[2] A rural physician seeking a consultation by telephone with an urban specialist regarding a patient's condition is a simple example of telemedicine. Another is the use of a computer-linked interactive video system that allows a patient at the clinic in Beach, North Dakota to have a suspected spider bite examined by a specialist in St. Paul, Minnesota, who

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1. *See* SOPHIE M. KORCZYK, HEALTH CARE NEEDS, RESOURCES AND ACCESS IN RURAL AMERICA, A REPORT FOR THE NATIONAL RURAL ELECTRICAL COOPERATIVE ASSOCIATION 12-17 (1994). Health education in rural areas may be increased through the use of telemedicine technology, leading to improved recruitment, retention of rural physicians, and improved health care for rural residents generally. *Id.* at 29.

2. DIVISION OF HEALTH CARE SERV., INST. OF MED., TELEMEDICINE: A GUIDE TO ASSESSING TELECOMMUNICATIONS IN HEALTH CARE (Marilyn J. Field ed., 1996). For an excellent review of the history, use, and future of telemedicine, *see* Douglas A. Perednia, M.D., & Ace Allen, M.D., *Telemedicine Technology and Clinical Applications*, 273 JAMA 483 (1995), *reprinted in* FAULKNER & GRAY, TELEMEDICINE SOURCEBOOK 19-27 (1996).

can then determine that a staph infection is instead the cause of a severely injured leg. X-rays sent by facsimile to a radiologist from a rural medical office would be another telemedicine example.[3]

Rural communities are not the only areas in position to take advantage of telemedicine. As the nation's health care system goes through a rapid evolution, managed care plans may look to telemedicine to support primary care clinicians. Managed care might also use telemedicine to centralize specialists thereby reaping significant cost reductions. Furthermore, academic medical centers also consider telemedicine a means to develop new domestic and international markets for their specialists. Increased access to medical care for other non-rural groups, such as the inner-city poor and the urban and suburban homebound, is also a target for telemedicine.[4]

Given the interest of the Western Governors' Association's (WGA)[5] members in increasing rural health resources and in developing accessible and cost-effective networked services in general, addressing telemedicine barriers was an issue well suited to a regional nonpartisan policy making approach. On instruction from the Governors at their 1994 winter meeting in St. George, Utah, the WGA established a Telemedicine Policy Review Group consisting of senior state health officials, telemedicine experts, and other interested parties. This group convened in Denver, Colorado, in May of 1995. Based on six commissioned background papers, the group crafted recommendations to the Governors to help them address individually and collectively some of the major barriers to the increased use of telemedicine.

The barriers identified for gubernatorial action were: 1) infrastructure planning and development; 2) telecommunications regulation; 3) reimbursement for telemedicine services; 4) licensure and credentialing; 5) medical malpractice liability; and 6) confidentiality.[6] Along with a brief explanation of each of these barriers, the recommendations to the Governors became part of the *WGA Telemedicine Action Report* that was

3. *See* FAULKNER & GRAY, TELEMEDICINE SOURCEBOOK 11-73 (1996) (showing a number of reprinted articles from the popular press that describe telemedicine's fast-growing uses).

4. *See* DIVISION OF HEALTH CARE SERV., INST. OF MED., *supra* note 2, at 18-22, 173 (discussing some of the economic implications of telemedicine).

5. The Western Governors' Association (WGA) is an independent, non-partisan organization of Governors from 18 western states, two Pacific-flag territories, and one Commonwealth. Through the WGA, the Governors identify and address key policy and governance issues in the areas of natural resources, the environment, human services, economic development, international relations, and public management. The Governors select the issues to be addressed based on regional interest and impact. Governor Edward T. Schafer of North Dakota is the Chairman of the WGA for 1997, and is also the Lead Governor for Rural Health Initiatives. The WGA is headquartered in Denver, Colorado.

6. Each of these barriers is discussed in the WESTERN GOVERNOR'S ASS'N TELEMEDICINE ACTION REPORT, which is reprinted in full as an appendix to this article. WESTERN GOVERNOR'S ASS'N TELEMEDICINE ACTION REPORT, *infra* app. at 55 [hereinafter WGA TELEMEDICINE ACTION REPORT].

presented to the Governors at their annual meeting in Park City, Utah, in June of 1995.[7]

This article reviews telemedicine policy developments from a western states' perspective since the publication of the *WGA Telemedicine Action Report*. Those developments addressed specifically herein focus on the barriers of telecommunications regulation, licensure, and confidentiality. A review of significant California telemedicine legislation and its reimbursement component is also set forth. The other barriers identified in the *WGA Telemedicine Action Report*, malpractice and infrastructure development,[8] are not addressed specifically because developments in these areas have occurred more on an individual state basis.[9]

II. TELECOMMUNICATIONS REGULATION

If telecommunications infrastructure is developed in a manner that incorporates health care needs such as telemedicine, it still must be affordable for its rural users. This obvious need places the parallel national objectives of telecommunications deregulation and healthcare reform directly at odds. As the *WGA Telemedicine Action Report* states, "[l]imited competition for telecommunication services in rural areas and regulatory distortions caused by arbitrary boundaries such as Local Access and Transport Areas (LATAs), result in prohibitively high costs for transmission services needed to support high bandwidth applications like interactive video."[10] In other words, it costs a lot to wire up rural areas for telecommunication services and then it costs a lot to use the services offered.

A real world example of these costs can be seen by looking at the Deaconess Medical Center telemedicine project based in Billings, Montana. The vast territory that is Eastern Montana lends itself to relatively low telecommunications costs because it is within a single "Baby Bell" territory, US West, and is within a single LATA. The Deaconess system utilizes a dedicated T-I network that initially encompassed eight telemedicine sites.[11] The telephone bill for this modest telemedicine effort was

7. *See Telemedicine in the West*, WGA Res. 95-019 at 3 (June 26, 1995) (sponsored by Governor Schafer). This unanimously adopted resolution endorses the WGA TELEMEDICINE ACTION REPORT and the recommendations contained therein. *Id.*

8. As this article was being finalized, however, the WGA contracted with the National Library of Medicine to prepare a report on the health care applications of western states' information technology networks. This report should be completed during the Summer of 1997.

9. Readers should note that with all the frequently occurring developments in telemedicine, this article can only serve as a snapshot of events as of the time of the writing in early 1997.

10. *See* WGA TELEMEDICINE ACTION REPORT, *infra* app. at 59.

11. T1 is the general term for a digital carrier available for high-value voice, data, or compressed video traffic. T1 is also technically know as "DS1," a digital carrier capable of transmitting 1.544 megabytes per second (Mbps) of electronic information.

upwards of $13,000 every month.[12] Other telemedicine projects such as the High Plains Rural Health Network in Eastern Colorado, Nebraska, and Kansas, and statewide networks in Kansas and Iowa face similar potentially prohibitive telecommunications costs.[13]

The *WGA Telemedicine Action Report* makes two recommendations to the Governors on this subject: 1) Governors should direct their state utility regulatory commissions and Attorneys General to review and recommend modifications to state public utility laws and to regulations that would lower prices and encourage investments in under and unserved areas; and 2) Governors should encourage user groups such as rural communities, physicians, hospitals, patient groups, and educational organizations to unite and create organizations of consumers that can yield economies of scale in purchasing telecommunications services.[14] Rural cooperatives function in much the same way as the contemplated user groups, and have proven to be successful models for rural communities.[15]

In addition to these recommendations for each individual state to consider, an opportunity to influence telecommunications regulation for rural health purposes for the region and the nation arose with the signing into law of the Telecommunications Act of 1996 (Act) on February 8, 1996.[16] The Act is the first revision of the telecommunications laws of the United States since the Communications Act of 1934, which it extensively amends. The Act generally creates a legal structure to facilitate competitive entry and reduce government regulation of communications companies and services. Both the Federal Communications Commission (FCC) and state regulatory commissions are granted authority to implement the Act and to create necessary regulations.

The key portion of the Act from the rural telemedicine perspective is the portion addressing universal service. Universal service is the goal whereby access to basic communications technology is assured for everyone in the United States regardless of his or her address.[17] The Act explicitly makes the promotion of universal service a federal policy.[18] It also addresses the level of service that should be available to all given the

12. *See* Charles F. Holum, *Regulatory and Institutional Barriers to Telemedicine*, *in* WESTERN GOVERNORS ASS'N, TELEMEDICINE ACTION REPORT BACKGROUND PAPERS 9, 10 (1995).

13. *Id.* at 10-11. A North Dakota telemedicine system will likely incur telecommunications costs that average approximately $2000 a month at each of its nine sites that will be operating in the summer of 1997. Telephone Interview with Carla Anderson, Telemedicine Coordinator, North Dakota Telemedicine System, MedCenter One, Bismarck, N.D. (Feb. 12, 1997).

14. *See* WGA TELEMEDICINE ACTION REPORT, *infra* app. at 59.

15. *See* Holum, *supra* note 12, at 18.

16. Telecommunications Act of 1996, Pub. L. No. 104-104, 1996 U.S.C.C.A.N. (100 Stat.) 56 (codified in scattered sections of 47 U.S.C.).

17. *See* S. CONF. REP. NO. 104-230 (1996).

18. *Id.*

technological changes revolutionizing telecommunications.[19] Principles for universal service set forth in the Act include:

(1) Maintain the availability of quality service at just and reasonable rates;[20]
(2) Promote access to advanced services;[21]
(3) Promote access in high cost areas such as rural and insular zones to services that are reasonably comparable in type and price to services provided in urban areas;[22]
(4) Provide for equitable and nondiscriminatory contributions from telecommunications providers to support universal service support mechanisms; and[23]
(5) Promote access to advanced services for health care providers, schools, and libraries.[24]

The development of these principles falls on the shoulders of a Federal-State Joint Board on Universal Service (Joint Board), which the Act directed the FCC to establish.[25] The Joint Board was given nine months from the February, 1996, enactment of the Act to present its universal service recommendations. The Act also mandated that the recommendations be implemented by the FCC within six months thereafter.[26] On March 8, 1996, the FCC adopted a Notice of Proposed Rulemaking and an Order Establishing a Federal-State Joint Board for consideration of universal service issues.[27]

To further guide the Joint Board and the FCC, the Act explains that universal service is an evolving level of telecommunications services that the FCC will establish periodically, taking into account advances in telecommunications, information technologies, and services.[28] In determining what services to include, the Joint Board and the FCC are to consider the extent to which such services are: essential to education or public health and safety;[29] "subscribed to by a substantial majority of residential customers;"[30] being deployed in public networks by

19. 47 U.S.C.A. § 254 (West Supp. IVA 1996).
20. *Id.* § 254(b)(1).
21. *Id.* § 254(b)(2).
22. *Id.* § 254(b)(3).
23. *Id.* § 254(b)(4).
24. *Id.* § 254(b)(6).
25. *Id.* § 254(a)(1).
26. *Id.* § 254(a).
27. FEDERAL COMMUNICATIONS COMM'N, CC Docket No. 96-45, FCC 96-93, Notice and Order (1996) (containing the notice and order establishing Joint Board). Members of the Joint Board were the FCC Chairman, three other FCC commissioners, four commissioners of state public utility commissions, and one state consumer representative.
28. 47 U.S.C.A. § 254(c)(1).
29. *Id.* § 254(c)(1)(A).
30. *Id.* § 254(c)(1)(B).

telecommunications carriers;[31] and "consistent with the public interest, convenience, and necessity."[32]

In addition to the explicit universal service support for public health care providers, the Act also mandates discounted telecommunications rates for health care services under certain conditions. Telecommunications carriers must provide services to any public or non-profit health care provider that serves persons residing in rural areas.[33] The obligation applies to uses necessary for the provision of health care services, and includes telecommunications services used to provide instruction to health care providers.[34] The rates charged must be comparable to rates for similar services in the state's urban areas.[35] Finally, this comparability discount is not to be paid for by the telecommunications carriers, but rather by the universal service support fund to which the carriers otherwise contribute.[36] This mandate for equalization of rates charged to urban and rural users was a crucial and hard-fought victory for telemedicine proponents.[37]

The FCC took an important step in addressing the health care aspects of the Act when it formed and sought nominations for its Telecommunications and Health Care Advisory Committee (Telemedicine Committee) in April, 1996. The purpose of the Telemedicine Committee was to "review existing telecommunications efforts that impact health care; identify telecommunications regulatory, legal, and policy barriers to the development of the use of telecommunications in the areas of health care; and provide advice on telecommunications regulatory policies and law to further the development of the use of telecommunications in health care, both nationally and internationally."[38] Moreover, the Telemedicine Committee was to provide a report to the Joint Board to assist it in making recommendations to the FCC

31. *Id.* § 254(c)(1)(C).

32. *Id.* § 254(c)(1)(D).

33. *Id.* § 254(h)(1).

34. *Id.*

35. *Id.*

36. *Id.* Congress emphasized as the purpose of this provision the importance of making telemedicine affordable. S. CONF. REP. NO. 104-230, 131-32 (1996). "[I]t is intended that the rural health care provider receive an affordable rate for the services necessary for the purposes of telemedicine and instruction relating to such services." *Id.*

37. *See* Neal Neuberger, *Telecommunications Act Spells Victory for Telemedicine,* TELEMEDICINE, July 1995, at 8. As Mr. Neuberger points out, this provision originated in the Senate where Senators Snowe, Rockefeller, Exon, and Kerrey were able to successfully amend Senate Bill 652, the Telecommunications and Deregulation Act of 1995, to provide for comparable rates for urban and rural services. *Id.* Such a rate mandate is an anomaly in legislation whose purpose is to unleash the free market into the world of telecommunications. *Id.* Section 310 became known as the Snowe-Rockefeller amendment in the Senate and ultimately survived the House telecommunications bill and the subsequent conference committee that authored the Act. *Id.*

38. *FCC Announces Members of its Telecommunications and Health Care Advisory Committee*, FEDERAL COMMUNICATIONS COMM'N PUB. UPDATE NEWS (Fed. Communications Comm'n, Washington D.C.) June 5, 1996.

concerning implementation of the universal service provisions of the Act.[39] It was this last responsibility of the Telemedicine Committee that caught the Governors' attention given the importance of the universal service provisions to the future of telemedicine. Accordingly, the WGA successfully nominated a representative to the Committee.[40]

Because of their duty to report to the to the Joint Board, the Telemedicine Committee was given the first opportunity to interpret and develop the language of the Act regarding healthcare and universal service. As to the discounted rates for health care, the Act states that they should be granted to "any public or nonprofit health care provider that serves persons who reside in rural areas in the State."[41] The definition of "rural" was not specified by the Act. As a result of their three meetings during the summer of 1996, the Telemedicine Committee recommended that the FCC use the Office of Management and Budget's (OMB) designation of metropolitan and non-metropolitan counties for purposes of defining "rural."[42] To account for the very large counties found predominately in the West, which contain areas that are clearly rural, the Telemedicine Committee also recommended that the OMB designation be used with the "Goldsmith modification."[43] The Goldsmith modification is used in conjunction with the OMB designation by the Office of Rural Health Policy of the Department of Health and Human Services "to identify small towns and rural parts of large metropolitan counties (covering at least 1250 square miles) that do not have easy access to central areas."[44] Recommending an existing definition of "rural" that had the flexibility to cover rural populations in need, and that had been tested in actual practice, gave comfort to the Governors and other interested parties seeking to ensure the equitable provision of discounted rates.

A second issue of interest to the Governors was the interpretation of the Act's "reasonably comparable" language regarding rates to be

39. *Id.*

40. *See* letter from Edward T. Schafer, Governor of North Dakota, WGA Vice-Chairman and WGA Lead Governor for Rural Health, to Reed Hundt, Chairman, Federal Communications Commission, (May 14, 1996) (nominating Charles F. Holum, a Denver, Colorado attorney) (on file with author). Mr. Holum's telecommunications expertise was previously used by the WGA through his participation on the WGA's Telemedicine Policy Review Group, and through his authorship of a background paper for the WGA TELEMEDICINE ACTION REPORT, entitled *Regulatory and Institutional Barriers to Telemedicine*. *See* Holum, *supra* note 12; *see also FCC Announces Members of its Telecommunications and Health Care Advisory Committee*, FEDERAL COMMUNICATIONS COMM'N PUB. UPDATE NEWS (Fed. Communications Comm'n, Washington D.C.) June 5, 1996. Thirty-three members of the Committee were selected representing a range of interests. *Id.*

41. 47 U.S.C.A. § 254(h)(1).

42. FEDERAL COMMUNICATIONS COMM'N TELECOMMUNICATIONS AND HEALTH CARE ADVISORY COMM., FED. COMMUNICATIONS COMM'N SUMMARY OF FINDINGS AND RECOMMENDATIONS 2 (1996) [hereinafter FCC TELEMEDICINE COMMITTEE REPORT].

43. *Id.*

44. *Id.*

charged to health care providers.[45] This provision required that telecommunication rates charged to health care providers must be "reasonably comparable to rates charged for similar services in urban areas in that State."[46] Many questions are raised by this language, including which urban area should be chosen for comparability, and more importantly, whether this standard is sufficient to adequately lower the costs of telemedicine transmissions by, for example, eliminating often prohibitively expensive mileage charges.

The Telemedicine Committee did not directly resolve these matters. Rather, while generally noting that mileage charges are a concern to health care providers, their report simply calls for discounted rates that "obviate the differences in urban and rural areas created by distance."[47] However, they "take no position on how states or federal [communications] commissions ought to deal with the general issue of whether or not tariffs should be distance sensitive."[48] In a subsequent letter to the FCC Chairman commenting on the Telemedicine Committee's report, the Governors note the important telemedicine hurdle posed by mileage charges: "[u]niversal support payments should be used to eliminate the use of mileage charges therefore making access to telemedicine and other important rural telecommunications services more available."[49]

Resale is another issue of importance to Governors and telemedicine providers. As summarized in the Committee's report:

> Section 254(h)(3) of the Act prohibits the resale of telecommunications services and network capacity provided to eligible users at discounted rates. This prohibition ensures that the services provided are used by eligible healthcare providers for the purposes intended by law. For example, if a public or non-profit institution that is provided subsidized network services resells those services, it is, in effect unfairly competing with private sector telecommunications providers by reselling network services and network capacity at a price that could be below the telecommunications provider's standard rates yet at or above the rate charged to the eligible healthcare provider. Such actions not only violate the prohibition on resale in the

45. *Id.* at 2-3.

46. 47 U.S.C.A. § 254 (h)(1).

47. FCC TELEMEDICINE COMMITTEE REPORT, *supra* note 42, at 10.

48. *Id.* The inability of the Telemedicine Committee to take a stronger stand on mileage charges may have something to do with the preference of the telecommunications carriers to maintain this billing mechanism.

49. Letter from Edward T. Schafer, *supra* note 40.

> law but provide an economic disincentive for telecommunications providers to build the infrastructure needed by rural areas for healthcare and other needs.[50]

According to the Act, however, this necessary resale restriction should not interfere with the ability of a consortium of eligible health care providers to purchase discounted services for other eligible providers and to be reimbursed by these providers for the telecommunications services used for telemedicine. "By combining demand, such users could purchase high capacity telecommunications services, which are often less expensive than multiple lower capacity services, to achieve the same total capacity, reducing the cost of telecommunications services the members of the consortium would have paid individually."[51] Many rural cooperatives function by combining the demand of a number of small entities and because of their success, are a model that the Governors strongly endorse for telemedicine purposes.[52]

Finally, those telecommunications services that would be eligible for universal service support, the so-called "minimum package requirement," were also important to the Governors. As described above, the Act contains a number of principles to assist the FCC in making this determination. Based on these principles and input from its members, the Telemedicine Committee developed a *market basket* of available telemedicine services as a guide to estimating the level of telecommunications needs required to support rural telemedicine. The market basket of services should include at a minimum: (a) healthcare provider to healthcare provider consultation that includes the ability to transmit medical data and images; (b) healthcare provider to patient consultation using a variety of examination devices; (c) continuing medical education programs and Internet access to current medical information for rural healthcare providers; (d) urban support for rural emergency departments; and (e) the ability to transmit high speed data and high quality images to enable specialty services such as obstetrics, selected cardiology,

50. FCC TELEMEDICINE COMMITTEE REPORT, *supra* note 42, at 11.

51. *Id*; *see also* 47 U.S.C.A. § 254(h)(5)(B)(vii) (stating that a health care provider may be a "consortia of health care providers").

52. The ability of consortia to provide telemedicine services needs to be strongly encouraged, as should efforts by these consortia to include users from education, library and similar groups. This would only add even greater telecommunications deregulation benefits to rural communities. In North Dakota for example, we are witnessing a new and very successful generation of "value-added" rural-based cooperatives. I can certainly see how telemedicine and related networks would benefit by the use of these models. Restrictions on resale should not interfere with these types of activities.

Letter from Edward T. Schafer, *supra* note 40. *See also* WGA TELEMEDICINE ACTION REPORT, *infra* app. at 59.

and pathology.[53] The Governors agreed conditionally with this market basket approach to universal service support for telecommunications services.[54]

With the information in hand from the Telemedicine Committee, the Joint Board made its recommendations to the FCC on implementing the Act with respect to universal service.[55] Disregarding the deadline imposed on the Joint Board by the Act,[56] the Joint Board declined to make specific recommendations on many of the issues addressed by the Telemedicine Committee.[57] First, despite its belief that the Act says that "disparities in telecommunications rates based on distance should be reduced or eliminated by universal service support," the Joint Board declined to recommend such a course of action.[58] Instead, the Joint Board recommended that the FCC seek more data on the cost of supporting distance-based fees with universal service funds.[59] Similarly, as to telemedicine services eligible for universal service support, Internet access, and the infrastructure needed for advanced telemedicine services, the Joint Board also sought further information.[60] The Joint Board

53. *See* FCC TELEMEDICINE COMMITTEE REPORT, *supra* note 42, at 5.

54. *See* Letter from Edward T. Schafer, *supra* note 40. Specifically, the governors stated that the "market basket" approach is a:

> valid strategy if it is sensibly applied. Given the rapid evolution of telemedicine applications and technologies, the biennial review of the minimum package of essential services is vital and should be undertaken by a broad range of interests that include healthcare providers and telecommunications companies. Healthcare providers should have as much flexibility as possible in their choice of services over the coming years and their participation in the review process will help to assure this flexibility.

Id.

55. *Joint Board Adopts Universal Service Recommendations*, FEDERAL COMMUNICATIONS COMM'N NEWS RELEASE, (Fed. Communications Comm'n, Washington D.C.) June 5, 1996 [hereinafter *Joint Board News Release*].

56. *See* 47 U.S.C.A. § 254(a) (stating that the Joint Board was to make its recommendations by November 8, 1996).

57. According to FCC staff:

> Joint Board members were concerned by the overall size of the universal service fund, the bulk of which will be used to subsidize telecommunications services for general uses in rural, insular, and high-cost areas as well as members of lower-income groups. Some estimates place the total annual size of the fund as high as $10 billion, which includes the $2.25 billion which the Board allocated to the provision of telecommunication services at 'affordable rates' for the nation's more than 100,000 (rural and urban) schools and libraries.

Letter from Lygeia Ricciardi, FCC Staff Liaison, to Telemedicine Committee Members, (Nov. 8, 1996) (on file with author).

This level of funding apparently created a situation whereby Joint Board members, one of whom is the FCC Chairman and two of which are FCC Commissioners, decided that the full FCC should make the final determinations six months later as stated in the Act. By the time of that decision, the FCC would have the information it believed necessary to make informed choices.

58. Recommended Decision of the Federal-State Joint Board on Universal Service: Section XI, Paragraph 672, (visited May 20, 1997) <http://www.fcc.gov/ccb/universal_service/section11.html> [hereinafter Joint Board Decision].

59. *Id.* Such a process was underway at the FCC as this article was written.

60. *Joint Board News Release*, *supra* note 55, at 5. The Joint Board estimated that approximately 9,600 healthcare providers in rural areas will be eligible to receive telecommunications services

noted that this information was necessary because health care providers should be able to choose the telecommunications services they require, while at the same time the Act requires that universal service support "should be tied to those services 'necessary for the provision of health care in a state.'"[61] Determining a cost-effective manner of delivering necessary health care related telecommunications services to rural America will be the future job of the FCC.

The health care recommendations made by the Joint Board included the adoption of the "Goldsmith variation" in defining rural users.[62] The rules for determining a discount for rural health care providers based on a comparison with urban rates were also decided by the Joint Board. They found that "comparable" in the context of the Act "is most reasonably defined to mean 'no higher than the highest' rate charged in the nearest city (excluding distance-based charges)."[63] As to the resale restriction, the Joint Board agreed with the Governors and the telemedicine committee in determining that "this prohibition should not restrict or inhibit joint purchasing and network-sharing arrangements with both public and private entities and individuals."[64]

Thus, the Joint Board recommendations, to the extent that they were made, were generally consistent with the WGA's views on universal service. However, the shape of future decisions by the entire FCC regarding the outstanding issues will determine how effective the Act's universal service provisions are in lowering telecommunications costs for rural telemedicine users.

At the time the *WGA Telemedicine Action Report* was formulated, national reform of telecommunications law was not a viable option by which the Governors could support or promote telemedicine. With the passage of the Telecommunications Act of 1996, however, the Governors have a new and valuable vehicle on which to push for meaningful reform with respect to universal service and other issues critical to the future of telemedicine. As the Act is implemented, the Governors will continue to express their views on these issues.

supported by universal service funds. *Id.* Without adequate cost information, the Joint Board was unwilling to commit the telecommunications companies to provide certain basic and advanced services. *Id.*

61. *Id.*; *see also* 47 U.S.C.A. § 254(h)(1)(A).

62. Joint Board Decision, *supra* note 58, para. 680.

63. *Id.* para. 671.

64. *Id.* para. 735. According to the Joint Board, "these arrangements can be used to substantially reduce costs and in some cases their availability might make the difference between success and failure of a rural telecommunications network." *Id.* In fact, the Joint Board goes so far as to encourage health care providers "to enter into aggregate purchasing and maintenance agreements for telecommunications services with other public and private entities and individuals." *Id.* para. 736.

III. LICENSURE

State licensure of physicians helps to ensure that the state's citizens are protected from unqualified doctors. This licensure function also has the effect of limiting the competition that a state's physicians face from doctors in other states.[65] Yet, in an era of telecommunications technology that can allow a person seeking medical advice to receive it from any where in the country or the world, it would seem that an individual's choice should not be restricted to only those physicians licensed by his or her state. Furthermore, such regulations restrict a physician to practicing the healing arts in her or his state only because of the administrative burden and expense necessary to be licensed in multiple states.

Some may advocate that national licensure of physicians would eliminate this barrier and open up the practice of interstate telemedicine. The Governors and others are loathe to cede this authority to Washington, D.C., when state leadership and cooperation among other interested parties could help to alleviate the licensure burden placed on physicians and patients in a telemedicine context.[66] As a result, and in an effort to standardize varying requirements between states, the *WGA Telemedicine Action Report* recommended broad stakeholder participation in drafting a uniform state licensure code.[67]

Yet, at the same time the Governors were endorsing this recommendation, the Federation of State Medical Boards was developing "A Model Act to Regulate the Practice of Medicine by Other Means Across State Lines" (the FSMB Model Act).[68] In commenting on the FSMB Model Act, North Dakota Governor Ed Schafer wrote, "[a] model regulatory statute that establishes a special license limited to the practice of telemedicine across state lines, and that helps to standardize states' licensure requirements, would be a statute that I would work to enact in my own state of North Dakota while recommending it to my WGA colleagues."[69] The FSMB Model Act does recognize the importance of

65. *See* WGA TELEMEDICINE ACTION REPORT, *infra* app. at 61; *see also*, Françoise Gilbert, *Licensure and Credentialing Barriers to the Practice of Telemedicine*, *in* WESTERN GOVERNORS ASS'N, TELEMEDICINE ACTION REPORT BACKGROUND PAPERS 27 (1995) (describing the framework of state licensing). "Local physicians fear technology will bring competition from big, well-heeled clinics and hospitals, such as the Mayo Clinic in Rochester, Minn[esota] . . . Doctors suspect that hospitals with national ambitions could become so pervasive they would be like Wal-Marts of medicine, overwhelming local specialists." Bill Richards, *The 300-Mile Stethoscope*, WALL ST. J., Jan. 17, 1996, at A1.

66. *See* WGA TELEMEDICINE ACTION REPORT, *infra* app. at 61.

67. *Id.*

68. FEDERATION OF STATE MED. BOARDS OF THE U.S., TELEMEDICINE: A DISCUSSION OF THE PRACTICE OF MEDICINE ACROSS STATE LINES, SYMPOSIUM PROCEEDINGS OF THE FEDERATION OF STATE MEDICAL BOARDS OF THE U.S. (Jan. 17, 1996) [hereinafter FSMB PROCEEDINGS]. The FSMB has been described as "one of national licensing's fiercest opponents."

69. *See* FSMB PROCEEDINGS, *supra* note 68, at 56. The Governor's original letter to the FSMB of

interstate telemedicine by proposing a limited telemedicine license.[70] The FSMB proposal would allow a licensed medical practitioner in one state the opportunity to acquire a license in another state solely for the purpose of practicing medicine across the state line.[71] The limited license would prohibit the practitioner from physically practicing medicine within the state unless a full license is obtained there.[72]

As to the standardization of definitions and requirements between states that Governor Schafer requests, the FSMB Model Act regrettably falls short. For example, in defining the "practice of medicine across state lines" for purposes of determining the need for a limited telemedicine license, the FSMB Model Act requires simply "the rendering of a written or otherwise documented medical opinion concerning diagnosis or treatment of a patient" or the "rendering of treatment to a patient."[73] No further detail is provided by the FSMB Model Act. In fact, it leaves it to the individual medical boards in each state to define these phrases. Individual state boards adopting the FSMB Model Act are also to define "emergency" situations and consultations made on an "informal or irregular basis."[74] In these situations, a limited telemedicine license would not be required.[75] It is this lack of precision in the FSMB Model Act that substantially lowers its value as a telemedicine barrier buster. Different states are likely to adopt different standards. The situation would therefore be left as it exists at present, whereby varying state licensure requirements deter practitioners from undertaking interstate telemedicine consultations.[76]

Other specifications that the FSMB Model Act should have endeavored to establish include the process and procedure that a practitioner

January 8, 1996, is on file with the author.

70. *Id.* at 4-5. Previous disciplinary or other action against the practitioner applicant may weigh against the issuance of the limited license. *Id.*

71. *Id.*

72. *Id.*

73. *Id.* at 4.

74. *Id.*

75. *Id.*

76. *Id.* at 55. John A. Kitzhaber, the Governor of Oregon and a physician, also wrote to the FSMB regarding the FSMB Model Act. As to the need for standardization, he states:

> To be effective in an interstate telemedicine context, however, a model state code must also ease the burden of physicians to comprehend and comply with differing licensure requirements in different states. Accordingly, a model state code should encourage the development of uniform requirements among the states so that doctors and patients are not deterred from participating in interstate consultations. Despite your organization's efforts to this point, the Model Act could be substantially improved if it would encourage uniformity or consultation among states rather than allowing each state's medical board to individually establish important standards and definitions. The Model Act's impact, as written and if enacted, may well be to further enshrine the present hodgepodge of state licensure requirements resulting in a continuation of or increase in barriers to the practice of medicine across state lines.

Id.

must go through to apply for and renew a limited license and the meaning of "physician to physician consultation." The comments to the FSMB Model Act indicate that such consults via telemedicine would not be regulated.[77] Again, without specificity, definitions of these terms would likely differ from state to state. Additional issues raised by Governor Schafer in his letter to the FSMB include the ability of a medical board to discipline an out-of-state physician or a physician who has committed an allegedly wrongful act in another state, and standards to ensure the proficiency of practitioners in the use of telemedicine equipment.[78]

Despite the request of two governors and numerous telemedicine experts that the draft of the FSMB Model Act be revised with the assistance of a range of stakeholders to address its significant deficiencies, the FSMB approved the proposal in early 1996. If a state were to adopt the FSMB Model Act as a whole, it would likely have the effect of increasing barriers to interstate telemedicine. As a result, it must be questioned whether the actual motivation behind the FSMB was to *promote* interstate telemedicine. The FSMB Model Act was developed solely by FSMB members and other national medical organizations.[79] Given the competitive impact that many doctors may face as telemedicine advances, there is the possibility that these groups do not whole heartedly endorse a partial opening up of a state's borders for purposes of interstate telemedicine.[80] Without more positive support for this concept from this important constituency, Governors and others will be hard pressed to resolve the licensure barrier to interstate telemedicine.

IV. CONFIDENTIALITY

If the protection of patient's confidential medical information cannot be assured, telemedicine is unlikely to prosper over the long term. Many patients legitimately fear the information superhighway for its potential to transport their private medical information to locations unknown and undesired.[81] The stakes in the case of disclosure are also

77. *Id.* at 3, 56. Governor Schafer's letter specifically lists the need for definition of these items.

78. *Id.* at 56. Specifically, the FSMB Model Act provides only that there shall be no limits on the ability of a state's medical board, "to discipline any physician licensed to practice in this state who violates the Medical Practices Act while engaging in the practice of medicine within this or any other state." *Id.* at 5. This language appears to allow one state's medical board to exercise its domestic police power in another state. *Id.* For a more detailed and broader review of the substantial flaws in the FSMB Model Act, see the oral statement of Françoise Gilbert. *See id.* at 33 (showing the statements by Françoise Gilbert). Ms. Gilbert is a member of the WGA's Telemedicine Policy Review Group and an advisor to the WGA and other organizations on telemedicine.

79. *Id.* at 1.

80. *See, e.g.*, Bill Richards, *Hold the Phone: Doctors Can Diagnose Illnesses Long Distance, To the Dismay of Some*, WALL ST. J., Jan. 17, 1996, at A1.

81. Insurance companies, drug manufacturers, and direct mail outfits may already have access to records of personal medical consultations depending on the state in which a consultation takes place. *See Who's Reading Your Medical Records*, CONSUMER REP., Oct. 1994, at 628.

likely to escalate in coming years as genetic information that can predict future maladies becomes part of an individual's health record.

Presently, state laws protect and hold confidential a patient's medical records. Yet, the content of these laws varies widely between states. This variation makes enforcement difficult in the case of an interstate electronic transfer of information.[82] As a result, a variety of proposals have been made to make medical records protection more uniform, including a model state code to establish a minimum standard of protection and adoption of a federal privacy protection law for medical records.[83]

Recently, the most significant proposal made to federalize medical records confidentiality protection was the Medical Records Confidentiality Act of 1995.[84] This Act would require providers, health care plans, and others to allow individuals access to their own health information and the opportunity to correct it.[85] Clear written notice of an individual's right to this access would also need to be provided.[86] Moreover, those maintaining health information would be required to develop safeguards to protect its confidentiality.[87] This protected health information could not be disclosed without the individual's permission, except in a few limited circumstances provided for in Senate Bill 1360.[88] Civil penalties up to $250,000 and exclusion from any federally funded health care program would be authorized for violations, as well as civil actions to recover damages.[89] Criminal penalties of up to ten years imprisonment and fines of up to $500,000 could also be assessed.[90] Given these provisions, state laws would be preempted to a large extent, as Senate Bill 1360 states explicitly.[91]

82. *See, e.g.*, Troy A. Eid, *Privacy Protection for Patient-Identifiable Medical Information, in* WESTERN GOVERNORS ASS'N, TELEMEDICINE ACTION REPORT BACKGROUND PAPERS 42, 45 (1995). For an illustration of the variance between state laws *compare* N.D. CENT. CODE §§ 25-03.1-43 (1995) (providing a fairly comprehensive protection for medical records) *with* KAN. STAT. ANN. §§ 65-5601 to 5606 (1992) (providing limited statutory protection for health information).

83. *See* WGA TELEMEDICINE ACTION REPORT, *infra* app. at 63.

84. S. 1360, 104th Cong. (1995). Also known as the "Bennett Bill" after its principal sponsor, Senator William Bennett (R-UT), Senate Bill 1360 was introduced on October 24, 1995. Companion legislation, known as The Fair Health Information Practices Act of 1995, was introduced in the House of Representatives by Congressman Gary Condit (D-CA). H.R. 435, 104th Cong. (1995).

85. S. 1360.

86. *Id.*

87. *Id.* §§ 101 to 112.

88. *Id.* §§ 201 to 213. Examples of these limited circumstances where protected health information may be disclosed without the individual's consent include emergencies, public health reporting, judicial and administrative purposes, and law enforcement purposes. *Id.*

89. *Id.* §§ 301 to 302.

90. *Id.* § 311.

91. *Id.* § 401. But the operation of some state laws would not be preempted, including the reporting of vital statistics, the reporting of abuse or neglect information, and state laws relating to public or mental health that prevents or restricts disclosure of protected health information. *Id.*

Debate over this proposed legislation was vigorous. Proponents argued that any protection on the federal level would be an improvement over the patchwork of state laws that were presently in existence.[92] Opponents felt that by superseding state laws, Congress would ease the path for the establishment of national medical databases while also setting a loose standard of accessibility to health information.[93] Western Governors did not take a position on the legislation. While recognizing that there may be a need for a single federal standard in this area given the interstate nature of telemedicine, the Governors nevertheless continue to zealously work to protect authorities presently under state jurisdiction from any attempt by the federal government to preempt them. Before taking a position on Senate Bill 1360, the Governors would have required a careful review of their own state's confidentiality protections and the impact the legislation would have had upon them.

Such a review of state laws became a moot point for a period with the passage of the Health Insurance Portability and Accountability Act of 1996.[94] Although the bulk of this legislation makes important changes to the regulation of health insurance, a small part of it also calls for the Secretary of Health and Human Services (Secretary) to submit to Congress within twelve months of the date of its enactment "detailed recommendations on standards with respect to the privacy of individually identifiable health information."[95] The recommendations are to set forth the rights of the individual, the procedures for the individual to exercise those rights, and the authorized and required uses and disclosures of personally identifiable health information.[96] Congress also provided itself with an incentive to enact federal confidentiality protections by giving the Secretary an opportunity to promulgate final regulations.[97] These potential regulations are to be issued by January, 2000, if Congress has not enacted specific legislation on confidentiality before that time.[98]

92. *See* Gina Kolata, *When Patients' Records are Commodities for Sale*, N.Y. TIMES, Nov. 15, 1995, at A1 (discussing the hearings that were held on the Medical Records Confidentiality Act).

93. *Id.*

94. Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 1996 U.S.C.C.A.N. (110 Stat.) 1936 (codified in scattered sections of 42 U.S.C.A.). The legislation was also known as the Kassebaum-Kennedy bill after its two main Senate sponsors.

95. 42 U.S.C.A. § 1320d-2 note (West Supp. IVA 1996) (Recommendations With Respect to Privacy of Certain Health Information).

96. *Id.*

97. *Id.* The incentive comes from the reluctance of Congress to cede their potential authority in this area to the Secretary of Health and Human Services (Secretary).

98. *Id.* Should the Secretary need to issue regulations under this provision, they may not preempt state laws on confidentiality to the extent that the state law "imposes requirements, standards, or implementation specifications that are more stringent than the requirements, standards, or implementation specification imposed under the regulation." *Id.*

Protection of electronically transmitted personal health information may be an area the Governors would cede to federal jurisdiction. The wide variance in state laws on the subject can create particular difficulty for an individual hoping to protect confidential information in an interstate electronic context. Moreover, the perception that confidential health information may be difficult to protect gives the public reason to avoid telemedicine and other worthwhile technology applications. A federal standard might be the only way to address these difficulties and to allay these concerns. However, any federal confidentiality protections need not preempt state laws in instances where a state already provides equivalent or higher levels of protection. Setting a reasonable floor that permits states with presently low confidentiality standards to meet or exceed the federal protections would be a logical approach. Accordingly, states should have a strong voice in either the legislative or administrative process that develops a federal confidentiality protection regime.

V. CALIFORNIA'S TELEMEDICINE DEVELOPMENT ACT

As another example justifying California's reputation for being ahead of the curve, its Governor signed into law the Telemedicine Development Act of 1996 (California Act) on September 24, 1996.[99] The state examined telemedicine barriers and methodically moved to eliminate them to a great extent. The barriers addressed by the California Act are reimbursement, confidentiality and informed consent, and licensure. These barriers were addressed, despite the fact that California is the most urban state in the West, with a rural population of only 3.2% and a population per square mile of 197.9 persons as of 1992.[100]

Of the issues addressed by the California Act, reimbursement is probably the most critical barrier impacting telemedicine at the present time. If no one is willing to pay for a patient's treatment via telemedicine, the other barriers to the practice will likely become irrelevant in the long term. The *WGA Telemedicine Action Report* summarized the problem as follows:

> Reimbursement policies for telemedicine services by HCFA [The Health Care Financing Administration], private insurers, and state Medicaid programs are currently limited and inconsistent. . . . Both public and private payers are reluctant

99. S. 1665, 1996-97 Reg. Sess. (Cal. 1996) (enacted). The Telemedicine Development Act, Senate Bill 1665, was introduced and co-authored by California State Senator Mike Thompson (D-Napa Valley). *Id.* It will be implemented through amendments, additions to, and deletions from California's Business and Professions Code, Health and Safety Code, Insurance Code, and Welfare and Institutions Code.

100. Korczyk, *supra* note 1, at 3. As a comparison, in 1992 the State of Wyoming had a rural population of 70.4% with 4.8 persons per square mile. *Id.*

> to set policy for telemedicine reimbursement without detailed information about the costs and effectiveness of specific telemedicine procedures and applications. In the absence of reimbursement policies, physicians and other health care practitioners are unlikely to offer medical services via telemedicine networks.[101]

California addresses the reimbursement issue head on. First of all, the California Act "recognize[s] the practice of telemedicine as a legitimate means by which an individual may receive medical services from a health care provider without person-to-person contact with the provider."[102] The California Act also requires the Medi-Cal Program and private payers to integrate telemedicine into their existing reimbursement policies and prohibits requiring face-to-face contact between the provider and the patient as a precondition to reimbursement.[103]

As to confidentiality, the California Act takes two approaches to protecting patients from the potential pitfalls of telemedicine and today's information technology. First, it provides that a patient's medical information transmitted electronically during the delivery of healthcare via telemedicine becomes part of the patient's medical record.[104] Under California law, a licensed health care provider has certain legal obligations—use, disclosure, confidentiality, retention of contents, maintenance, and access to patient information.[105] These obligations would all remain in place for purposes of electronically transmitted patient information.[106]

Second, the California Act further protects the confidentiality of telemedicine patients through the use of a written informed consent procedure. All health care providers are now required to obtain verbal and

101. WGA TELEMEDICINE ACTION REPORT, *infra* app. at 60; *see also* Jim Grigsby, *Lack of Coverage for Telemedicine Services: A Barrier to the Implementation of Telemedicine*, *in* WESTERN GOVERNORS ASS'N, TELEMEDICINE ACTION REPORT BACKGROUND PAPERS 20 (1995). On a national scale, action on reimbursement has recently been given an important push with the passage of the Kassebaum-Kennedy Bill. It requires HCFA to complete its ongoing study of Medicare reimbursement for all telemedicine services and submit it to the Congress by March 1, 1997. The report is to include a proposal for Medicare reimbursement for telemedicine.

102. S. 1665 § 8.

103. *Id.* It was estimated that by reimbursing telemedicine, the Medi-Cal Program could save at least $8 million per year. CALIFORNIA STATE SENATE NEWS, GOVERNOR SIGNS LANDMARK TELEMEDICINE BILL (Oct. 10, 1996). Most of this amount would be saved in medical transportation costs, based on the fact that telemedicine programs in California and other states demonstrated their ability to reduce transportation costs by at least ten percent. *Id.* Other savings might be realized through the early intervention permitted by telemedicine and the resulting decrease in hospital stays and medical tests. *Id.* At least ten other states, Arkansas, Georgia, New Mexico, North Dakota, Montana, South Dakota, Utah, Virginia, Wisconsin, and West Virginia also permit Medicaid reimbursement for telemedicine. CENTER FOR TELEMEDICINE LAW, LEGAL AND REGULATORY UPDATE, DID YOU KNOW? - - TELEMEDICINE TIDBITS! (Aug. 1996).

104. S. 1665 § 8.

105. *Id.*

106. *Id.*

written consent from the patient prior to the delivery of health care via telemedicine. The following information must be disclosed as part of the consent procedure: 1) the ability of the patient to withhold or withdraw consent at any time without losing the right to care or benefits; 2) a description of the risks and benefits of telemedicine; 3) acknowledgment that existing confidentiality protections will continue to apply; 4) access to and copies of information transmitted during a telemedicine consult are guaranteed; and 5) dissemination of patient identifiable images or information from a telemedicine consult to other entities will not occur without additional consent being obtained.[107] Taken together, extending the state's confidentiality protections as well as the consent procedures may be an effective approach to alleviating a patient's apprehension regarding telemedicine.

Finally, the California Act clarifies existing California law regarding physician licensure. Previously, the state's Medical Practices Act regulating physician licensure did not apply to any practitioner when in actual consultation with a California licensed practitioner.[108] The new law provides that the Medical Practices Act does not apply in the following circumstances:

> to any practitioner located outside this state, when in actual consultation, whether within this state or across state lines, with a licensed practitioner of this state . . . if he or she is at the time of the consultation . . . a licensed physician and surgeon in the state or country in which he or she resides. This practitioner shall not open an office, appoint a place to meet patients, receive calls from patients within the limits of this state, give orders, or have ultimate authority over the care or primary diagnosis of a patient who is located within this state.[109]

By further defining the consultation requirement and by squarely placing authority over the telemedicine patient with the California practitioner, the legislation seems to set clear parameters for non-California and California care givers contemplating telemedicine consults. It is this clarity that will allow for California patients to have greater access to medical resources outside of the state via telemedicine.

The California Act is an important example of what an individual state can do to foster telemedicine within its own boundaries and across state lines. Establishing the legitimacy of telemedicine through the provision of state funded reimbursement is a critical first step. California goes

107. *Id.* § 4.
108. CAL. BUS. & PROF. CODE § 2060 (West 1990 & Supp. 1997).
109. S. 1665 § 3.

even further by providing clear legal guidance to patients and practitioners regarding confidentiality and interstate consultations. It would certainly behoove other states to consider the California Act and to stay abreast of its impacts on the practice of telemedicine in that state as it is implemented in the coming years.

VI. CONCLUSION

There is certainly the potential for telemedicine to bring significant new resources to rural residents and to otherwise play an important role in the rapid evolution of the health care system of the United States. Western Governors are cognizant of this potential and are eager to ensure that telemedicine be given an opportunity to flourish. Expanding the market for the technology by eliminating barriers between states is one way for the Governors to promote telemedicine. Another, as exemplified by the California Act, is to make sure their own house is in order. The *WGA Telemedicine Action Report* was designed to give states a grasp of the barriers as well as a range of ideas for broaching them.

States are a critical component of the telemedicine equation. Governors are positioned to seize opportunities to eliminate barriers and to promote the practice of telemedicine should they so choose. In addition, governors need to let their voices be heard as the federal government moves to legislate and administer on the subject of telemedicine. At the same time, Congress and the Administration should consult closely with the states on telemedicine issues ranging from telecommunications regulation to confidentiality protection. Close coordination between the different levels of government and the different political parties can ensure that politics does not interfere with the promise that telemedicine brings.

APPENDIX

THE WESTERN GOVERNORS' ASSOCIATION TELEMEDICINE ACTION REPORT*

PREFACE

Western Governors are committed to improving access to and quality of health care for people living in the rural west. To support this goal, the WGA convened a Telemedicine Policy Review Group consisting of telemedicine experts, senior state health officials, and other interested parties. Six background papers were prepared on major barriers to telemedicine, providing the basis for consensus recommendations developed by the Group and contained in this document. The project was supported by grants from the Henry J. Kaiser Family Foundation, Menlo Park, California and the United States Office of Rural Health Policy. The Governors thank everyone who participated in crafting the Telemedicine Action Report.

INTRODUCTION: A VISION FOR TELEMEDICINE

Nationally known neurologist Theresa Myers, M.D., is conducting rounds at the Community Hospital in Coffee Creek, Idaho, as she does every two weeks. After pulling up the latest X-rays and lab results on a computer for her patient Barbara Collins, Dr. Myers asks the local Physician's Assistant to describe Barbara's worsening tremor. Dr. Myers then asks Barbara to walk across the room, touch her finger to her nose and write her name. After watching Barbara, the doctor and the PA are able to make a firm diagnosis, discuss a plan for treatment and arrange for a follow up visit. Her patient appointments completed, Dr. Myers looks out her office window at downtown Salt Lake City, thinking about her

* The Telemedicine Action Report was originally published by the Western Governors' Association in June of 1995. It is reprinted here in its original format with the permission of the Western Governors' Association. The following individuals served as editors for the WGA Telemedicine Action Report: Robert Flaherty, MD; Douglas Perednia, MD; Thomas Singer; and Paul Orbuch, Esq. The WGA's Telemedicine Policy Review Group consisted of: John J. Ambre, M.D., Ph.D., of the American Medical Association; Ed Bostick of the High Plains Rural Health Network; Margaret Cary, M.D., of the U.S. Department of Health & Human Services; Francis H. Chang of the Henry J. Kaiser Family Foundation; Helen Collins of the Health Care Financing Administration; Jerry Hoffman of the Nebraska Health Policy Project; Sally Johnstone of the Western Interstate Commission for Higher Education; Kathy Kelly of the Office of the Governor, Washington; Jerry McCarthy of the Colorado Rural Health Telecommunications Coalition; A. Richard Melton of the Utah Department of Health; Deb Muller of the South Dakota Department of Health; Dena S. Puskin, Sc.D., of the U.S. Office of Rural Health Policy, Jon R. Rice, M.D., of the North Dakota Department of Health; Leslie Sandberg of the Center for the New West; Richard Schultz of the Idaho Department of Health and Welfare; Bill Steele of the Colorado Public Utilities Commission; and Russ Webb of the Arkansas Department of Health.

"visit" to Alaska tomorrow while Barbara Collins drives back to her ranch in rural Idaho.

Dr. Myers visited Coffee Creek through a video conferencing link and before days end, she will be reviewing charts and providing consults to physicians located in North Dakota and Washington state through the use of electronic mail. These linkages are part of a far reaching network that provides rural citizens access to the best specialists in the region. And although the meeting between Dr. Myers and Barbara Collins has yet to take place, projects are now underway that would make such meetings a reality.

Each Western Governor knows only too well that people living in rural areas have limited access to basic health care, and uncertain prospects for the future. Access is limited by geographic isolation, as well as the relative scarcity of rural physicians, limitations on physician reimbursement, poor public transportation to larger cities, and even vagaries of weather that impede travel.

Efforts to encourage physicians and other health professionals to establish practices in rural under served areas have been only partly realized. Many western states continue to look for solutions to the problems of access and quality in health care for rural citizens, particularly when health professionals are not available in rural communities.

Although not a panacea, telemedicine holds great promise to enhance health care delivery in rural areas by allowing a physician or other health professional to examine a patient while linked by video or other means to an expert consultant at a distant medical center. Radiologists and other specialists can review medical images transmitted over telephone lines. University-based pathologists can review biopsies done in a rural hospital while the patient is still under anesthesia. Without telemedicine, these services would require travel on the part of either the patient or the consultant, or would simply not be available at all.

Rural health professionals who use telemedicine are also likely to feel less isolated from medical colleagues and resources, thanks to the specialty "back-up" and educational opportunities now available. Continuing education and consultations via telemedicine is expected to improve recruitment and retention of health professionals in rural areas, many of which would otherwise be without any local medical care.

Telemedicine's potential goes beyond improving the health of individuals. Telemedicine has been used effectively to improve public health in rural communities by providing timely information and training for rural county health departments. Several projects will use telemedicine to assist local citizens' organizations to improve the overall health of their communities by supporting anti-smoking, accident preven-

tion, prenatal care and other public information programs. Interest in telemedicine is also growing among private physicians, other health care practitioners, and managed care organizations as a way to provide high quality care in a more cost effective manner.

Today, telemedicine holds more potential than ever to fulfill its promise of improved access to health care for under served rural citizens. Previous high costs and technical limitations on telemedicine technology have been significantly reduced and are no longer a primary barrier. The most significant barriers to telemedicine are:

- inadequate information infrastructure and uncoordinated infrastructure planning;
- regulatory distortions, limitations on competition, and fragmented demand;
- public and private reimbursement policies that do not compensate for telemedicine services;
- physician licensing and credentialing rules that discourage physicians from practicing telemedicine within states and across state lines;
- concerns about malpractice liability associated with telemedicine; and,
- concerns regarding the confidentiality of patient information.

If it succeeds in improving access and quality, telemedicine is likely to increase health care costs for society. On the other hand, telemedicine is expected to improve health outcomes, reduce patient travel and time off work, and retain more health care dollars in rural communities—all likely to result in savings. Given our limited experience with telemedicine to date, these costs and savings, and their distribution throughout the economy, cannot be estimated accurately. The purpose of the Telemedicine Action Report is to describe telemedicine barriers and to provide the Governors with steps they can take to help reduce these barriers in order to stimulate the development and utilization of telemedicine networks in the West. Close examination of the telemedicine activity that results will enable us to answer critical policy questions about telemedicine's costs and benefits. Western Governors, united by the need to improve medical services in remote areas common throughout the region, are well positioned to develop, advocate, and implement strategies that can address telemedicine barriers and foster experimentation.[1]

1. Additional information on the telemedicine barriers discussed in the Action Report was provided in the WGA Telemedicine Background Papers, which was published under a separate cover from the Action Report.

BARRIER ONE: INFRASTRUCTURE PLANNING AND DEVELOPMENT

It is rare for emerging health care applications to be factored into western state telecommunications and information technology planning or procurement. Failure by state policy makers to consider needs and solutions across the range of state activities (education, criminal justice, health and social services, etc.) can result not only in missed opportunities for capacity and cost sharing, but also can lead to costly redundancies and incompatibilities. State legislation to deregulate the telecommunications industry also often fails to integrate health care concerns. While few believe that advanced telemedicine applications can be cost effective as stand alone systems, many are convinced that telemedicine is a significant component of an overall policy that seeks increased public and private investment in and increased use of network capacity, especially in rural areas.

Disregard of the need for integrated planning and coordination can be expensive not only within a state, but also when networks cross state lines. While the west is a national leader in telemedicine, demonstrations have begun only recently. When these systems reach the state line, it is essential that they be compatible with the technical environment in neighboring states. Two western demonstrations are pioneering interstate telemedicine—the WAMI network in Alaska, Idaho, Montana, and Washington and the High Plains Rural Health Network in Colorado, Kansas, and Nebraska.

RECOMMENDED ACTIONS

1. Governors should direct their cabinet officials and budget directors to integrate information technology planning and development across state agencies and within communities, to consider the needs of telemedicine and other health care applications, and to foster continuing competition. Integrated planning should occur not only as part of periodic high-level initiatives but also in the course of the regular budget process. Governors should also ensure that telemedicine and other health care applications are considered during legislative deliberations on telecommunications deregulation.
2. Governors should encourage all vendors that support telecommunication, cable, wireless, and alternative access providers, to create multi-provider public/private partnerships and to support non-urban information infrastructure deployment and use.

3. The Governors should direct the WGA to facilitate communication and coordination among the western states as they consider how infrastructure development will impact telemedicine. The Governors should direct the WGA to assist member states just beginning to address these issues to learn from states such as Utah, Nebraska, North Dakota, and California which have engaged in extensive information technology planning.

BARRIER TWO: TELECOMMUNICATIONS REGULATION

Limited competition for telecommunications services in rural areas and regulatory distortions created by arbitrary boundaries, such as Local Access and Transport Areas (LATAs), result in prohibitively high costs for transmission services needed to support high bandwidth applications like interactive video. In many rural communities, prices for intra-LATA calls are unusually high and there is no local access to the Internet.

State laws governing utility regulatory commissions include prohibitions on discrimination through rates or services between similarly situated customers. These rules do not permit incentive prices for telemedicine users and result in unnecessarily high telecommunications costs.

On the demand side, small disparate rural telemedicine networks and users lack sufficient market power to negotiate favorable rates and service from telecommunications providers.

RECOMMENDED ACTIONS

1. Governors should direct their state utility regulatory commissions and state Attorneys General to review and recommend modifications to state public utility laws and regulations governing competition, pricing and pricing standards, and depreciation. Changes should be considered that could help to lower prices for telemedicine services likely to improve rural public health and benefit society at large, and that would encourage investment and extend services to under and unserved areas.
2. Governors should encourage physicians, other health care practitioners, rural communities, educational organizations, and patient groups to unite, both within states and regionally, to create organizations of telemedicine consumers that can yield economies of scale in purchasing, greater influence in policy making, and interoperability in technology across systems. Existing rural cooperatives provide useful models for telemedicine users.

BARRIER THREE: REIMBURSEMENT FOR TELEMEDICINE SERVICES

Reimbursement policies for telemedicine services by HCFA, private insurers, and state Medicaid programs are currently limited and inconsistent. HCFA has not yet established a national coverage policy for Medicare, but is working toward one. HCFA does allow state Medicaid agencies to establish their own coverage policies for telemedicine. The lack of clear and consistent policy makes it difficult to cover the costs of telemedicine systems with reliable sources of revenue.

Both public and private payers are reluctant to set policy for telemedicine reimbursement without detailed information about the costs and effectiveness of specific telemedicine procedures and applications. In the absence of reimbursement policies, physicians and other health care practitioners are unlikely to offer medical services via telemedicine networks. Currently, most telemedicine systems are supported by state, federal, and private demonstration grants that do not provide stable sources of revenue for long-term viability.

Despite the uncertainties surrounding the effectiveness of telemedicine's various applications, public and private payers need to begin to set reimbursement policy. Even limited certainty regarding payment will enable telemedicine activity to continue and expand. Greater experience and rigorous evaluation will provide a better understanding of the costs and effectiveness of telemedicine, supporting further policy making on reimbursement and adoption of telemedicine in managed care. This "bootstrap" approach will enable policy to be developed and adapted as our understanding of these issues increases, and as the development of telemedicine continues.

RECOMMENDED ACTIONS

1. For the near term, Governors should direct their Health Departments to establish a task force consisting of physicians and other health care practitioners; managed care organizations, third party payers, state insurance commissions, rural consumer groups, federal agencies, and other interested parties to negotiate and set initial statewide policy on telemedicine reimbursement. The task force should set policy in such areas as:

- what telemedicine services to reimburse and in what amount;
- how to reimburse physicians and other health care practitioners (i.e., the referring vs. consulting practitioner);

- how to finance reimbursement for telemedicine services; and,
- what incentives can encourage reimbursement for telemedicine.

To provide a framework for a regional approach to reimbursement, the Governors should direct the WGA to support and coordinate task force activities among the states. The WGA should also survey and disseminate current reimbursement policy in western states.

2. To provide a basis for the development of reimbursement policy, Governors should encourage and support universities, public and private payers, and other organizations to study the cost effectiveness of telemedicine services within states and within the region. Information gained from these studies should be disseminated broadly.

BARRIER FOUR: LICENSURE AND CREDENTIALING

Currently, physicians and other health care practitioners must satisfy numerous requirements to obtain a license to practice medicine in each state, and to be credentialed to practice at individual health care facilities. Practitioners are understandably reluctant to use multi-state telemedicine networks because of the costs and administrative burdens of complying with multiple licensure and credentialing rules compared to the expected frequency of network use.

There are two purposes for licensure requirements. The first is to ensure quality health care services. The second is to regulate the commercial activities of individuals that practice the healing arts. Credentialing by health care facilities acts to limit the license that the state has granted. Local physicians and other health care practitioners can therefore use licensure and credentialing as a means to protect their markets from out-of-state competition. This market regulation conflicts with policies that aim to optimize the delivery of health care within a region.

A long-running debate about the wisdom of licensing and credentialing physicians and other health care practitioners at the state and facility level has been taking place in Washington, D.C. Decisive action by the Western Governors will demonstrate state capacity to develop solutions to this barrier and will help avoid federal preemption in this area.

RECOMMENDED ACTIONS

1. The Governors should direct the WGA to form a task force of interested parties to draft a Uniform State Code for Telemedicine Licensure and Credentialing (similar in principle to the Uniform Commercial Code). Participants should include state, regional, and national medical

societies, legal and hospital associations, the Federation of State Medical Boards, rural consumer groups, and relevant state regulators. The task force should consider issues such as: definition(s) of telemedicine, simplified licensing of individuals, licensure of networks, and requirements and grants of credit for continuing medical education. The task force could explore the possibility of expanded interstate reciprocity in licensing and credentialing as an alternative to a model code.

2. To address the potential concerns of affected constituencies, the Governors should also direct the task force to analyze the costs and benefits for patients and telemedicine practitioners of opening health care markets via telemedicine.

BARRIER FIVE: MEDICAL MALPRACTICE LIABILITY

There is significant uncertainty regarding whether malpractice insurance policies cover services provided by telemedicine. Telemedicine networks that cross state lines create additional uncertainties regarding the state where a malpractice lawsuit may be litigated and the law that will be used. Will the lawsuit be heard in the state of the provider, the patient, or in another state covered by the network? Which state's law will govern the case? Choice of venue and choice of law issues can have significant financial implications for the parties to litigation as states differ in the statutory limits placed on the amount of malpractice awards.

RECOMMENDED ACTIONS

1. Governors should direct their state insurance commissions to review the current practices of the malpractice insurance industry with regards to telemedicine, and to recommend changes that encourage the insurers to develop clear and consistent coverage policies.

2. Choice of venue and law questions will be decided by the courts. The Governors should request appropriate legal bodies, such as the American Bar Association and the National Association of Attorneys General, to draft legal policy opinions that review federal procedures and state statutes to give guidance to the courts and assist in the resolution of venue and choice of law issues in a telemedicine malpractice lawsuit.

3. To help create more certainty, Governors should introduce legislation to amend their state's malpractice liability limitation statute so that it applies to out-of-state telemedicine physicians and other health care practitioners.

BARRIER SIX: CONFIDENTIALITY

There are many views on the security of personal information in electronic form. Some believe that there is greater risk of unauthorized access and dissemination of electronic patient information than from paper charts on hospital wards. Others believe that proper safeguards make electronic information more secure than paper records.

Patients wary of electronic data may be reluctant to use telemedicine systems that result in the creation or transmission of this information. Physicians and other health care practitioners with these perceptions may be reluctant to use electronic systems which they believe may increase the risk of breaching patient confidentiality.

Concerns about the confidentiality of patient-identifiable medical information are not unique to telemedicine. As a result, proposals exist that seek to establish a federal privacy protection law for medical records generally or that propose a uniform model state code to establish a minimum standard of privacy protection that would be adopted by individual states.

RECOMMENDED ACTIONS

1. Governors should direct their Attorneys General to examine and consider proposed model state privacy codes that would create uniform standards for the protection of electronic medical records. Any model law considered should integrate telemedicine privacy concerns as well as address issues such as: standards for third-party disclosure of patient-identifiable medical information, informed patient consent for telemedicine services, regulation of data banks to limit disclosure of medical information, and exemptions for emergency and trauma situations.
2. The Governors should direct the WGA to monitor and assist in developing policy on federal efforts to enact privacy protections for medical records to ensure that states have a substantial role in shaping these policies and that particular privacy concerns relating to telemedicine are addressed.