ACHI
Arkansas Center for Health Improvement

ISSUE BRIEF

ACHI is a nonpartisan, independent, health policy center that serves as a catalyst to improve the health of Arkansans.

EXPLORING THE POTENTIAL OF TELEMEDICINE IN ARKANSAS

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Arkansas has become a reference point for many states seeking full-scale health system transformation.[1] The Arkansas Health System Transformation Initiative has four focus areas: payment innovation, health care workforce development, expanded health care coverage, and the adoption and enhanced use of health information technology.[2] The Initiative's continued progress, particularly with respect to ensuring access to providers upon expanded coverage, is dependent on the availability and deployment of new tools that connect patients with providers when and where they are needed. Among those tools is telemedicine, a term that describes the use of telecommunications and information technologies for the delivery of health care services unfettered by geographical location. Telemedicine may serve to lessen provider maldistribution and shortage issues in Arkansas, extend the reach of urban providers, and further promote team-based care.[3] While the use of telemedicine for the delivery of care offers benefits that are well-documented,[4] issues remain for its widespread adoption and integration into routine health care. This issue brief discusses telemedicine and its benefits, regulatory challenges to its adoption, and recommendations for the development of informed policies and regulations that promote its use.

INTRODUCTION TO TELEMEDICINE

Telemedicine has been advanced as a strategy to significantly impact some of the most challenging problems of our current health care system: access to care, cost effective delivery, and distribution of a limited number of providers. Telemedicine improves access to care by enabling practitioners to provide health care services to patients at a distance thus offering patients increased access to appropriate health care professionals. In Arkansas and across the states, this care delivery mechanism has been adopted as a strategy to overcome provider maldistribution and shortage of health infrastructure and human resources.[5]

There are three types of telemedicine delivery methods—video conferencing, remote patient monitoring, and "store-and-forward" technologies.[6] While video conferencing and remote patient monitoring provide real-time communication and consultation, store-and-forward technologies involve the transmission of pre-recorded images (e.g., videos, radiological films, photos, etc.) among care providers. These three delivery methods utilize a variety of communication technologies including digital cameras, video cameras, online questionnaires, call centers, smart phones, laptops, tablets, measurement devices, movement sensors, etc.

In many places, telemedicine is being integrated into the ongoing operations of hospitals, schools, specialty departments, home health agencies, private physician offices, and consumers' homes and workplaces.[5] Telemedicine technology is continually advancing and becoming less costly, thus allowing sophisticated communication strategies among health care professionals and patients.[7] While some contend that more research is needed to evaluate its cost-effectiveness, many states are responding to the rapid advancement of telemedicine as a mechanism for care delivery through legislative and regulatory processes.

Adoption and Implementation of Telemedicine Nationally

Health care providers across the nation are capitalizing on the advances in health information technology and telecommunications to expand and improve upon the delivery of quality health care by implementing telemedicine services. In the United States, there are more than 3,500 telemedicine

service sites, and over half of all the nation's hospitals use some form of telemedicine.[8] Increasing use and variation in telemedicine coverage and reimbursement has led many states to establish telemedicine regulation.

Emerging Evidence Based Studies

There is considerable national interest in the potential of telemedicine to improve health care access, quality, and cost. There is a large volume of work investigating the use of a range of telemedicine delivery models in a number of clinical contexts. Emerging trends from recent research studies have shown that telemedicine saves patients, providers, and payers money when compared with the costs of conventional approaches to providing care.[9] In addition, studies focusing on access to care concluded that there are no differences in the ability of the provider to obtain clinical information, make an accurate diagnosis, and develop a treatment plan to produce the same desired clinical outcome as compared to in-person clinical care situations.[4,a] While these reports are encouraging, there is still a need to monitor and evaluate emerging uses of telemedicine as it expands into different settings and services and to assess the evidence regarding the benefits, risks, and costs of telemedicine.

Telemedicine in Arkansas

In 2003, clinical leaders at the University of Arkansas for Medical Sciences (UAMS), with Medicaid funding support, established a statewide obstetrical telemedicine network—the Antenatal and Neonatal Guidelines, Education, and Learning System (ANGELS) program. ANGELS combined UAMS's perinatal physician expertise with telecommunication technologies to extend the expert care and address the uneven distribution of these of these specialists throughout the state. By connecting urban specialists with rural patients, the ANGELS program used telemedicine to deliver expert obstetrical care at a distance, thus relieving the perinatal specialty provider needs in underserved areas.[10] Notable among the outcomes from the ANGELS program has been the decrease in the rate of deliveries of babies with very low birth weights in hospitals without neonatal intensive care units from 13.1 percent in 2009 to 7.0 percent in 2010.[11] It also contributed toward a statewide decrease of infant mortality.

The success of the ANGELS program in delivering quality high-risk obstetrics care through telemedicine services led to the development of an additional statewide telemedicine initiative in 2006, known as the Center for Distance Health. This initiative spans medical specialties, including asthma care, pediatric cardiology, gynecology, stroke, and mental health. The Distance Health program has also expanded care to diverse populations, including incarcerated women and people with HIV/AIDS, and, in 2014, the program was expanded to include sickle cell disease management.[10]

In early 2014, Arkansas was the first state in the nation to implement a hand trauma telemedicine program. The time window is narrow for successfully treating severe hand injuries, especially those requiring reattachment surgery. In addition, Arkansas has a shortage of hand specialists on call at any given time. Combined, these factors have resulted in patients being sent out of state for emergency treatment and unnecessary amputations. Patients with hand injuries can now be quickly evaluated by hand experts via telemedicine, regardless of the location or staffing of the hospital emergency room, allowing for timely and appropriate care. Conceptualized in the Arkansas Trauma Communications Center located at Metropolitan Emergency Medical Services in Little Rock, the hand trauma telemedicine program is now part of the Distance Health program.

Given lessons from other states and the success of programs in Arkansas, telemedicine has the potential to play a critical role in achieving the Triple Aim of the Arkansas Health System Transformation

[a] The American Telemedicine Association publication referenced here is a compilation of studies supporting the noted statement.

Initiative by improving the health of the population; enhancing the patient experience of care; and reducing, or at least controlling, the cost of health care.[12]

In addition, telemedicine provides a means to fulfill the Initiative's four areas of focus—payment innovation, health care workforce development, expanded health coverage options, and adoption of health information technology—to improve the health of all Arkansans by using health information and communication technologies for coordinated care delivery.

Framework for Operational, Policy, and Regulatory Alignment

Three leading organizations for standardizing requirements for the delivery of care through telemedicine are the American Medical Association (AMA), the American Telemedicine Association (ATA), and the Federation of State Medical Boards (FSMB). The participation of these leaders in industry-wide discussions over telemedicine standardization reflects an increased awareness for the need to align operational, legal, and regulatory frameworks relative to telemedicine practice. These organizations have made recommendations for legislative consideration as illustrated in a Best Practices Crosswalk later in this brief (see Table 1).

> *"…the [AMA] Council recommends a set of principles to ensure the appropriate coverage of and payment for telemedicine services. These principles aim to support future innovation in the use of telemedicine, while ensuring patient safety, quality of care and the privacy of patient information, as well as protecting the patient-physician relationship and promoting improved care coordination and communication with medical homes."*
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> —American Medical Association

Reimbursement Issues

The lack of consistent overarching reimbursement policies is one of the greatest challenges to fully integrating telemedicine services for the delivery of quality patient care.[13] Key among the issues is the establishment of telemedicine parity statutes, which are laws that require that reimbursement to the health care professional delivering the clinical service is the same as the current fee schedule for the service provided. Several states have already established such "parity," through their regulatory or legislative processes.[14]

Telemedicine legislation is quickly advancing in the United States. In March 2013, 13 states had pending legislation addressing telemedicine issues, including parity. In contrast, as of October 2014, 31 states and the District of Columbia had passed legislation requiring telemedicine parity. States that have established parity for telemedicine have reported improved quality, health provider access disparities have lessened, and health care costs have declined.[15] Unlike its six border states, Arkansas has yet to legislate a telemedicine parity requirement.[16]

Medicare Reimbursement

Medicare provides reimbursement for telemedicine claims on par with reimbursement for the same service when provided face-to-face.[17] However, there are a number of limitations within the Medicare policy that create challenges to health care access through telemedicine service delivery. For instance, technology use for telemedicine service reimbursement is typically limited to real-time, interactive audio-video telecommunications, and generally not store–and-forward technology. Additionally, reimbursement eligibility is limited to services provided to a Medicare beneficiary located at an eligible site in specified geographic areas—either a rural health professional shortage area or a county outside of a metropolitan statistical area.

Medicaid Reimbursement

Telemedicine reimbursement for Medicaid programs varies from state to state. State Medicaid programs determine whether to cover telemedicine for eligible patient populations; what types of telemedicine

services to cover; where in the state telemedicine can be delivered; what types of telemedicine providers may be covered and reimbursed; and how much telemedicine services are to be reimbursed.[18] As of October 1, 2014, 13 states have legislatively addressed Medicaid telemedicine coverage. While Arkansas has not addressed coverage legislatively, Arkansas's Medicaid program has reimbursement policies for live video and store-and-forward services, as well as some behavioral health services for children and adults provided remotely.[19]

Private Payer Reimbursement

As of October 1, 2014, 22 states have legislated mandates of private coverage, and of that group, 19 states require that services provided via telemedicine must be reimbursed at parity. Unlike bordering states, Arkansas has no statutes regarding reimbursement in the private sector. Absent a requirement to reimburse for telemedicine services, some insurance companies have nonetheless chosen to reimburse a wide variety of services. For example, in April 2014, Arkansas Blue Cross and Blue Shield started providing coverage for telemedicine services under a pilot program. They are covering telemedicine services in the areas of maternal fetal medicine (high-risk pregnancy), psychology, and psychiatry.[20]

Telemedicine Legal Issues

Telemedicine technologies can alleviate health care barriers, but new technologies have uncovered many legal issues that must first be addressed.[21] A leading barrier to telemedicine's implementation is physician licensing. Providers are, in most cases, limited to practicing in states where they are licensed. Each state has different licensure policies, and while some states allow interstate delivery of health care, others do not. Secondly, there is little precedent on what telemedicine means for malpractice liability and, as telemedicine becomes more widespread, liability issues are expected to increase. Thirdly, online prescribing policies vary by state and trigger concerns about quality and safety. Finally, while the Centers for Medicare and Medicaid Services has issued a rule on credentialing and privileging for telemedicine providers, it conflicts with some state policies.

State Licensing

The licensing of medical professionals is a vital function to meet the increasing consumer demand for protection and to establish mechanisms to deal with the growth in the number and sophistication of fraudulent practitioners.[22] The granting of medical licensure is one of the powers of each individual state. Each state has its own rules, although they are broadly the same. Typically, a health care professional must be licensed by a state in order to practice in that state.

Licensure portability for the practice of telemedicine is an often-debated topic. Central to the debate is the fact that most states require physicians to be licensed to practice in the originating site's state, and some states require providers using medicine technology across state lines to have a valid state license in the state where the patient is located.[23] However, there are emerging legislative trends across the states that provide for more flexibility to practice telemedicine in limited circumstances across state lines where it improves access, particularly to specialists. For example, the District of Columbia, Maryland, New York, and Virginia allow licensure reciprocity from bordering states. Additionally, Alabama, Louisiana, Minnesota, Montana, Nevada, New Mexico, Ohio, Oregon, Tennessee, and Texas extend a conditional or telemedicine license to out-of-state physicians. Although some states have established legislative mechanisms that serve to facilitate telemedicine care delivery, other states—Massachusetts, Michigan, North Dakota, Pennsylvania, and South Dakota—legislatively inhibit licensure exemptions that would allow for physician-to-physician out-of-state consultation.[24] Arkansas statutes state that any out-of-state physician utilizing an electronic medium who performs an act resulting in the diagnosis, treatment, or ongoing monitoring of care of a patient initiated in Arkansas "is engaged in the practice of medicine in this state" and is subject to Arkansas State Medical Board regulation.[25] This includes a requirement to have an Arkansas medical license before engaging in such medical practice.

State Credentialing

Credentialing is the practice by which hospitals evaluate and verify the qualifications of their health care providers to ensure that each individual practitioner possess the necessary qualifications to provide medical services. The process of credentialing and privileging occurs after a physician has already met the state's licensure requirements. To practice hospital-to-hospital telemedicine, many hospital bylaws and state laws require physicians to be credentialed as if they were employees in the remote sites where the telemedicine transaction occurs.[26] In 2001, CMS issued a rule changing hospital Conditions of Participation to allow hospitals to rely upon the credentialing and privileging decisions of a distant-site hospital for telemedicine practitioners. The distant site must be either a Medicare participating hospital or a telemedicine facility.[27] The Arkansas Hospital Association (AHA) reports that Centralized Credentialing Verification Services recently made changes in its operations that allow hospitals to use cross-hospital credentialing agreements. As a result, AHA is seeing more Arkansas hospitals using cross-hospital credentialing for telemedicine privileges, and they expect hospitals' use of this process to increase in the future.

Online Prescribing

Online prescribing refers to a medical provider's ability to prescribe drugs to a patient who has been diagnosed and treated via telemedicine.[28] In Arkansas, online prescribing is allowable under current state law, providing there has been a "prior and proper patient-provider relationship."[29] The Arkansas State Medical Board defines a physician-patient relationship as one where the prescribing practitioner performs a history and in-person physical examination of the patient adequate to establish a diagnosis and to identify underlying conditions or contraindications to the recommended treatment.[30] This requirement to meet the "physician-patient" relationship definition serves to prevent fraudulent activities, thus ensuring patient safety. However, it also establishes restrictions for patient access to pharmaceutical services by not allowing for exceptions to the in-person examination requirement.

Medical Liability

Physicians must have both licensure and medical malpractice coverage in the state in which the patient resides.[31] Historically, most medical malpractice insurance covered only "face-to-face" encounters within the state in which the doctor practices and is licensed. However, many insurers are adjusting their coverage policies to account for the emergence of new telemedicine platforms. At least one insurer doing business in Arkansas has indicated that while telemedicine is not excluded from medical liability insurance, insurers do want to be made aware of the liability risks, and will therefore seek additional information to assess liability exposure for coverage consideration. Medical malpractice insurers across the states, including Arkansas, are seeking to establish a more standardized approach to underwriting policies for dealing with telemedicine care delivery.[32]

Best Practices for Developing Telemedicine Policies and Regulations

The Best Practices Crosswalk illustrated in Table 1 below compares some of the AMA, FSMB, and ATA recommendations that serve to guide state regulatory and legislative development regarding telemedicine services. The crosswalk establishes the relationship between the recommendations and the key challenges described in this brief.

Table 1: Best Practices Crosswalk

	American Medical Association[1]	Federation of State Medical Boards[2]	American Telemedicine Association[3]
Patient-Physician /Patient-Provider Relationship Establishment Requirements	**Established Prior to Providing Services** This may be established via: ○ **A face-to-face examination** ○ **Consultation** with another physician who has an ongoing patient–physician relationship	**Established With or Without an In-Person Encounter** Physicians **are discouraged** from providing telemedicine services without: ○ **Fully verifying** and authenticating the location and identity of the patient ○ **Disclosing and validating** the provider's identity and applicable credential(s); and ○ **Obtaining appropriate consents**	**Establishment of a Provider-Patient Relationship Is Required** Health professionals should **refer to existing specialty guidelines** to meet "patient-provider relationship" requirements
State Licensure/ Credentialing	Physicians and other practitioners delivering telemedicine services must abide **by state licensure and scope of practice laws** and requirements in the state **where the patient receives services.**	Under the Model Guidelines, the **practice of medicine** is defined to occur w**here the patient is located**, and **requires the physician to be licensed** or under the jurisdiction of the medical board of **the patient's state**.	Health professionals providing [telemedicine] services **shall have the necessary education, training/orientation, licensure, and ongoing continuing education/professional development**, in order to provide health services in their specialty area.
Online Prescribing	Providers of telemedicine services must abide by **state licensure laws and requirements** as well as state medical practice laws regarding prescribing medications.	"**Measures to assure** informed, accurate, and error prevention prescribing practices […] are encouraged."	Health professionals shall conform to **existing** practice guidelines.
Medical Liability	"**Before** physicians provide any telemedicine service, they should **verify that their medical liability insurance policy covers telemedicine services**, including telemedicine services provided across state lines if applicable."	Not addressed.	Not addressed.

1. American Medical Association. "Report 7 of the Council on Medical Service (A-14): Coverage of and Payment for Telemedicine." June 11, 2014. Accessed at http://www.modernhealthcare.com/assets/pdf/CH95086612.PDF.
2. Federation of State Medical Boards. "Model Policy for the Appropriate Use of Telemedicine Technologies in the Practice of Medicine." April 2014; Accessed at http://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/FSMB_Telemedicine_Policy.pdf.
3. American Telemedicine Association. "Core Operational Guidelines for Telehealth Services Involving Provider-Patient Interactions." May 2014. http://www.americantelemed.org/docs/default-source/standards/core-operational-guidelines-for-telehealth-services.pdf?sfvrsn=6

CONCLUSION

Arkansas has experienced early success in comprehensive health care system improvement. As the state extends health care coverage options to more Arkansans, increased utilization may stress the system and its workforce. Arkansas's health workforce strategic plan anticipated this and recommended approaches to address it, including the exploration of tools such as telemedicine to improve access to health care services. Arkansas's public and private payers are showing some movement toward expanded reimbursement for this technology. As the level of comfort with and demand for telemedicine grows among providers and patients, the state should pursue policies that promote access and provide optimal flexibility for the use of telemedicine while ensuring that services can be provided safely and effectively through this medium.

Arkansas is the nation's leader in health care reform. While telemedicine is in-step with the goals of the Arkansas Health System Transformation Initiative, policies and regulations currently restrict the use of telemedicine services as a mode to deliver quality patient care, thereby restricting further advancement of state initiatives. By considering the recommendations given by leaders in health care standards, Arkansas is

poised to develop the policies and regulations needed to remove the challenges to telemedicine, thus further advancing this mode of care delivery.

REFERENCES

[1] Bachrach D, du Pont L, Lipson M. "Arkansas: A Leading Laboratory for Health Care Payment and Delivery System Reform." Washington, DC: The Commonwealth Fund, August 2014. Accessed online at http://www.commonwealthfund.org/publications/issue-briefs/2014/aug/arkansas-payment-reform on November 20, 2014.

[2] Arkansas Center for Health Improvement. *State Innovation Plan: Arkansas Health System Transformation*. Little Rock, AR: Arkansas Center for Health Improvement, September 2012. Accessed online at http://www.paymentinitiative.org/referenceMaterials/Documents/SIM%20III.%20%20State%20Innovation%20Plan%202012%2009%2021%20%20FINAL%20-%20TO%20SUBMIT.pdf on November 17, 2014.

[3] Arkansas Center for Health Improvement. *Arkansas Health Care Workforce: A Guide for Policy Action*. Little Rock, AR: Arkansas Center for Health Improvement, March 2013.

[4] American Telemedicine Association. "Examples of Research Outcomes: Telemedicine's Impact on Healthcare Cost and Quality." Washington, DC: The American Telemedicine Association, April 2013. Accessed online at http://www.americantelemed.org/docs/default-source/policy/examples-of-research-outcomes---telemedicine's-impact-on-healthcare-cost-and-quality.pdf on November 5, 2014.

[5] American Telemedicine Association. "What is Telemedicine?" Accessed online at http://www.americantelemed.org/about-telemedicine/what-is-telemedicine on September 29, 2014.

[6] Center for Connected Health Policy. "What is Telehealth?" Accessed online at http://cchpca.org/whatistelehealth on August 25, 2014.

[7] Hjelm, NM. "Benefits and Drawbacks of Telemedicine." *Journal of Telemedicine and Telecare*. 2005; 11(60) doi: 10.1258/1357633053499886 .

[8] American Telemedicine Association. "Telemedicine Frequently Asked Questions (FAQs)." Accessed online at http://www.americantelemed.org/about-telemedicine/faqs#.VG4bOvnF9QY on November 20, 2015.

[9] Board on Health Care Services; Institute of Medicine. "The Role of Telehealth in an Evolving Health Care Environment: Workshop Summary." Washington, DC: National Academies Press (US), November 2012, Ch. 6, The Health Care Continuum. Available from: http://www.ncbi.nlm.nih.gov/books/NBK207138/

[10] Lowery CL, Bronstein JM, Benton TL, Fletcher DA. "Distributing Medical Expertise: The Evolution and Impact of Telemedicine in Arkansas." *Health Affairs*. 2014;33(2): 235-43; doi: 10.1377/hlthaff.2013.1001

[11] Lowery.etal. Distributing medical expertise: the evolution and impact of telemedicine in Arkansas. Health Affairs, 33, NO.2 (2014): 235-243)

[12] Arkansas Center for Health Improvement. "Arkansas Health System Improvement: Building a Healthier Future for All Arkansans." Little Rock, AR: Arkansas Center for Health Improvement. Accessed online at http://www.achi.net/Pages/OurWork/Project.aspx?ID=44 on November 3, 2014.

[13] Center for Telehealth and e-Health Law. "Reimbursement Overview". Accessed at http://ctel.org/expertise/reimbursement/reimbursement-overview/ on August 1, 2014.

[14] American Telemedicine Association. "2014 State Telemedicine Legislation Tracking (as of 10/31/2014)." Accessed online at http://www.americantelemed.org/docs/default-source/policy/state-telemedicine-policy-matrix.pdf?sfvrsn=64 on November 5, 2014.

[15] Steinbrook R. "Interstate Medical Licensure: Major Reform of Licensing to Encourage Medical Practice in Multiple States." *JAMA*. 2014;312(7):695-6.

[16] Thomas L, Capistrant, G; American Telemedicine Association. *50 State Telemedicine Gaps Analysis: Coverage & Reimbursement.* Washington, DC: American Telemedicine Association, September 2014. Accessed online at http://www.americantelemed.org/docs/default-source/policy/50-state-telemedicine-gaps-analysis---coverage-and-reimbursement.pdf?sfvrsn=6 on November 18, 2014.

[17] Department of Health and Human Services Centers for Medicare & Medicaid Services. "Medical Learning Network: Telehealth Services." CMS.gov, Fact sheet ICN 901705, 2014. Accessed online at http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf on November 17, 2014.

[18] Centers for Medicare and Medicaid Services. "Telemedicine." *Medicaid.gov*. Baltimore, MD: Centers for Medicare & Medicaid Services. Accessed online at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Delivery-Systems/Telemedicine.html on November 20, 2014.

[19] 016 06 Code of AR Rules and Regs. (CARR) 036 (2012) in "Internet Prescribing Language: State by State Overview." Federation of State Medical Boards. January 26, 2012.

[20] Arkansas Blue Cross and Blue Shield. "Providers News: A Publication for Participating Providers and Their Office." [News update.] Little Rock, AR: Arkansas Blue Cross and Blue Shield, March 2014. Accessed online at http://www.arkansasbluecross.com/doclib/publications/providers%20news%20-%20march%202014.pdf on November 17, 2014.

[21] The National Telehealth Policy Resource Center. "Center for Connected Health Policy: Common Legal Barriers." Accessed online at http://cchpca.org/common-legal-barriers on November 24, 2014

[22] American Medical Association. "Medical Licensure." Chicago, IL: American Medical Association. Accessed online at http://www.ama-assn.org/ama/pub/education-careers/becoming-physician/medical-licensure.page on November 19, 2014.

[23] HealthIT.gov. Are there state licensing issues related to telemedicine?FAQs/Providers and Professionsls. Accessed at http://www.healthit.gov/providers-professionals/faqs/are-there-state-licensing-issues-related-telehealth on November 22. 2014

[24] Thomas L, Capistrant, G; for the American Telemedicine Association. *50 State Telemedicine Gaps Analysis: Standards and Licensure.* Washington, DC: American Medical Association, September 2014. Accessed online at http://www.americantelemed.org/docs/default-source/policy/50-state-telemedicine-gaps-analysis--physician-practice-standards-licensure.pdf?sfvrsn=6 on November 18, 2014.

[25] AR Code § 17-95-206 (2012)

[26] Comstock J. "6 Regulatory and Procedural Hurdles for Multistate Telemedicine." *MobiHealthNews;* Chester Street Publishing, Inc.; 2014. Accessed online at http://mobihealthnews.com/28114/6-regulatory-and-procedural-hurdles-for-multistate-telemedicine/ on November 20, 2014.

[27] Arkansas code: 42 CFR 482.12; 482.22

[28] Center for Connected Health Policy. "Common Legal Barriers."Sacramento, CA: The Center for Connected Health Policy, 2014. Accessed at http://telehealthpolicy.us/legal-issues on August 1, 2014.

[29] AR Code Annotated Sec. 17-92-1003 (2012).

[30] Arkansas Medical Practices Act. https://www.armedicalboard.org/Professionals/pdf/mpa.pdf

[31] Telehealth Resource Centers. "Medical malpractice and Liability." *Telehealth Resource Centers*; 2014. Accessed online at http://www.telehealthresourcecenter.org/toolbox-module/medical-malpractice-and-liability on November 20, 2014.

[32] Personal communication from Edith Roberts, Arkansas Insurance Department informed by Jim Smith, President, State Volunteer Mutual Insurance Company, November 17, 2014.