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Legal Impediments to the Diffusion of Telemedicine

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LEGAL IMPEDIMENTS TO THE DIFFUSION OF TELEMEDICINE

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I. TELEMEDICINE INTRODUCTION

Throughout history, as technology (including information technology) has evolved, so has the way that disease is diagnosed, treated, and managed. For close to half a century, clinicians and health services researchers have been investigating the use of telecommunication and information technology to provide access to care outside the traditional model of face-to-face encounters between providers and patients.[1] The use of technology to provide health care to patients where distance separates the participants is generally referred to as telemedicine.[2] Although the practice is not new,

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1. *See* Claudio Cipolat & Michael Geiges, *The History of Telemedicine*, *in* 32 TELEMEDICINE & TELEDERMATOLOGY 6, 7 (Gunter Burg ed., 2003) (tracing the development of the use of telecommunications in medicine over the last century); *see also* Patricia C. Kuszler, *Telemedicine and Integrated Health Care Delivery: Compounding Malpractice Liability*, 25 AM. J.L. & MED. 297, 300–01 (1999) (discussing the advent of telemedicial experiments within the space program in the 1960s).

2. Cipolat & Geiges, *supra* note 1, at 6. The term telemedicine is often used interchangeably with "telehealth," "ehealth," or cybermedicine, despite obvious differences in their referents. *See, e.g.*, Rashid Bashshur, *Telemedicine and State-Based Licensure in the United States, Revisited*, 14 TELEMEDICINE AND E-HEALTH 310, 310 (2008) (grouping "telemedicine/telehealth/e-health" together for purposes of a discussion about problems in health care delivery); Lindsey T. Goehring, Comment, *H.R. 2068: Expansion of Quality or Quantity in Telemedicine in the Rural Trenches of America?*, 11 N.C. J.L. & TECH. ON. 99, 102 n.13 (2009), *available at* http://jolt.unc.edu/sites/default/files/Goehring.pdf (noting the interchangeability of the terms "telehealth" and "telemedicine" for purposes of particular legislation). Although there is substantial overlap between these terms, for legal and regulatory purposes, the distinctions are important. In this paper by telemedicine we mean the use of technology to practice medicine where the physician and patient are at different locations. Telehealth is a broader term and

changes in the health care system and ongoing concerns about access, quality, and the cost of health care are making telemedicine more and more attractive to health care providers, insurers, and patients.[3] Some of the potential benefits of telemedicine include increased access to health care (especially in underserved areas and among underserved populations),[4] expanded utilization of specialty expertise,[5] system coordination and integration,[6] ready availability of patient records,[7] and reduced opportunity costs of care for patients.[8]

Telemedicine is generally thought to include two modalities: store-and-forward (or asynchronous communication) and real time.[9] Services include remote consultations, in-home monitoring, and remote mentoring.[10] Store-and-forward telemedicine involves transmitting medical data (such as radiological images and EEG readings) to a medical specialist for assessment offline.[11] Store-and-forward services do not require the sending and receiving parties to communicate at the same time, and these services are most commonly used for diagnosis and treatment decisions.[12]

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includes health education and delivery of health care by a range of health care providers including physicians, nurses, pharmacists, and therapists. *See, e.g.*, Sabine Koch, *Home Telehealth: Current State and Future Trends*, 75 INT'L J. MED. INFORMATICS 565, 566 (2006) (stating that "telehealth" is considered broader in scope). Cybermedicine is the delivery of health information and medical advice via the internet. *See* Ronald Pies, Letter to the Editor, *Cybermedicine*, 339 NEW ENG. J. MED. 573, 638–39 (1998) (distinguishing "telemedicine" from "cybermedicine," which is the provision of "diagnostic and treatment services over the Internet").

3. *See* Bashshur, *supra* note 2, at 310 (arguing that telemedicine can address healthcare issues including access, delivery, and cost).

4. *See* Kuszler, *supra* note 1, at 302–03 (stating that telemedicine has "revolutioniz[ed]" health care delivery for rural and other underserved populations).

5. *See, e.g.*, *Position Statement on Telemedicine*, N.C. MED. BD. (July 1, 2010), http://www.ncmedboard.org/position_statements/detail/telemedicine/ (noting that one of the important benefits to patients is "expanded utilization of specialty expertise").

6. Bashshur, *supra* note 2, at 310.

7. *Position Statement on Telemedicine*, *supra* note 5.

8. Bashshur, *supra* note 2, at 310.

9. *See* Maria A. Loane et al., *A Comparison of Real-Time and Store-and-Forward Teledermatology: A Cost-Benefit Study*, 143 BRIT. J. DERMATOLOGY 1241, 1241 (2000) (discussing the real-time and store-and-forward modalities of telemedicine).

10. *See* WILLIAM R. HERSH ET AL., AHRQ PUBL'N NO. 06 E007, TELEMEDICINE FOR THE MEDICARE POPULATION: UPDATE 13 (2006), *available at* http://www.ahrq.gov/downloads/pub/evidence/pdf/telemedup/telemedup.pdf (explaining that telemedical services can include, *inter alia*, remote consultations and home visits).

11. *See* Pamela S. Whitten, *Teledermatology Delivery Modalities: Real Time versus Store and Forward*, *in* 32 TELEMEDICINE & TELEDERMATOLOGY 24, 27 (Gunter Burg ed., 2003) (describing store-and-forward telemedicine).

12. *See* Kip Poe, *Telemedicine Liability: Texas and Other States Delve Into the Uncertainties of Heath Care Delivery Via Advanced Communications Technology*, 20 REV. LITIG. 681, 682–83 & n.6 (2001) (noting that store-and-forward telemedicine allows patients and doctors to be

Dermatology, radiology, and pathology are specialties that are conducive to using store-and-forward asynchronous telemedicine.[13] Remote monitoring, also known as self-monitoring, allows medical professionals to monitor a patient remotely using various technological devices. This method is primarily used for managing chronic diseases or specific conditions, such as congestive heart failure, chronic obstructive pulmonary disease, diabetes mellitus, and asthma.[14] Real-time interactions between patient and provider (or provider and provider) include phone calls and videoconferencing. Remote mentoring involves interaction between providers performing medical procedures and surgeries to ensure quality and patient safety.

In all its forms, telemedicine is designed to substitute for the traditional face-to-face encounter between patients and providers, as well as between providers and other providers.[15] Recent reports in the popular press describe how telemedicine allows physicians to provide care to a more widely dispersed set of patients than would be possible in a traditional practice and that the cost of such care can be significantly lower for the patient than coming to the hospital or doctor's office.[16] The federal government has supported the growing use of telemedicine through developmental grants and research.[17] The Departments of Health and Human Services,[18] Agriculture,[19] Defense,[20] Education,[21] as well as

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separate in time and that the technology is most utilized by diagnostic fields like radiology and pathology).

13. *See id.* at 682–83 (stating that store-and-forward technology is most often used by radiologists and pathologists); *see also* HERSH ET AL., *supra* note 10, at 3 (discussing the use of store-and-forward telemedicine in dermatology).

14. *See* Marilyn J. Field & Jim Grigsby, *Telemedicine and Remote Patient Monitoring*, 288 JAMA 423, 424–25 (2002) (detailing the use of remote monitoring to manage diseases like congestive heart failure, diabetes, and pulmonary disease); *see also* HERSH ET AL., *supra* note 10, at 4 (noting that home-based telemedicine is most commonly used to manage, *inter alia*, heart disease and diabetes).

15. Rashid L. Bashshur, *Telemedicine Effects: Cost, Quality, and Access*, 19 J. MED. SYS. 81, 82 (1995).

16. *See* Milt Freudenheim, *The Doctor Will See You Now. Please Log On.*, N.Y. TIMES, May 29, 2010, http://www.nytimes.com/2010/05/30/business/30telemed.html (reporting that a man who worked on an oil rig in the South China Sea was able to save money by utilizing telemedical services to diagnose a kidney stone).

17. *See* Jim Grigsby & Jay H. Saunders, *Telemedicine: Where It Is and Where It's Going*, 129 ANNALS INTERNAL MED. 123, 125 (1998) (discussing the federal government's role in the development of telemedicine, including the provision of grants and contracts).

18. *See, e.g.*, *Telemedicine Activities at the Department of Health and Human Services: Hearing Before the Subcomm. on Health of the H. Comm. on Veterans Affairs*, 109th Cong. (2005) (statement of Carolyn M. Clancy, Director, Agency for Healthcare Research and Quality), *available at* http://www.hhs.gov/asl/testify/t050518a.html (discussing HHS agencies' increased interest in telemedicine over the last decade and HHS' supportive role).

19. *See, e.g.*, *Distance Learning and Telemedicine Program*, U.S. DEP'T OF AGRIC. RURAL DEV., http://www.rurdev.usda.gov/UTP_DLT.html (last visited Sept. 24, 2010) (describing USDA

several agencies and administrations, including the Centers for Medicare and Medicaid Services (CMS),[22] Office for the Advancement of Telehealth,[23] National Library of Medicine,[24] Agency for Health Care Research and Quality,[25] NASA,[26] and others have supported telemedicine research and development for the past few decades. Further, as a 1996 report states, "[i]ncreased competiti[on] in the medical marketplace has also resulted in a marked increase in the practice of medicine across state lines."[27] For example, a large number of pathological specimens are "shipped routinely to reference laboratories in distant states for processing and interpretation by pathologists," and close to half of all radiology services are now conducted at remote facilities.[28]

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grants that are designed to provide better health care and learning opportunities to rural communities).

20. *See, e.g.*, Donna Miles, *Avatar Project Seeks to Help Military Amputees*, AM. FORCES PRESS SERV., Apr. 28, 2010, http://www.defense.gov/news/newsarticle.aspx?id=58932 (reporting on the use of telemedicine in an Army project for military amputees).

21. *See, e.g.*, Final Funding Priority for Fiscal Years 1997-1998 for a Rehabilitation Research and Training Center, 62 Fed. Reg. 37,646, 37,650 (July 14, 1997) (directing the Secretary of Education to consider telemedince when designing assessment measures for a Rehabilitation Research and Training Center).

22. *See, e.g.*, CTR. FOR MEDICARE & MEDICAID SERVS., APPLICATION GUIDELINES AND REQUIREMENTS FOR RESEARCH AND DEMONSTRATION PROJECTS AT THE CENTERS FOR MEDICARE & MEDICAID SERVICES (2009), *available at* http://www.cms.gov/ResearchDemoGrantsOpt/Downloads/GrantApplicationGuidelinesDecember2009.pdf (explaining CMS' research and demonstration program priorities, including the use of telemedicine to expand health care delivery).

23. *See, e.g.*, AMY FITZPATRICK & ANDREA HASSOL, OFF. FOR THE ADVANCEMENT OF TELEHEALTH, PROGRAM REPORT: INTEGRIS HEALTH 1, 8 (2005), *available at* http://integrisok.com/upload/docs/Telehealth/integrispartall.pdf (discussing the performance of organizations receiving OAT funds to promote telemedical programming).

24. *See, e.g.*, Nat'l Insts. of Health, *Fact Sheet: Telemedicine Related Programs*, NAT'L LIBR. OF MED., http://www.nlm.nih.gov/pubs/factsheets/telemedicine.html (last visited Sept. 24, 2010) (describing the National Library of Medicine's efforts to support the research and development of telemedicine).

25. *See, e.g.*, *Using a Telemedicine System to Promote Patient Care Among Underserved Individuals Pennsylvania*, AGENCY FOR HEALTH CARE RES. & QUALITY, http://healthit.ahrq.gov/portal/server.pt?open=512&objID=654 (last visited Sept 24, 2010) (discussing project activities in Pennsylvania).

26. *See, e.g.*, *Telemedicine Program*, NASA, http://www.sti/nasa.gov/tto/spinoff1996/27.html (last visited Sept. 24, 2010) (detailing NASA's commitment to the development of telemedicine, especially as it pertains to the ability to deliver medical services to astronauts).

27. AD HOC COMM. ON TELEMEDICINE, FED'N OF STATE MED. BDS. OF THE U.S., A MODEL ACT TO REGULATE THE PRACTICE OF MEDICINE ACROSS STATE LINES 1 (1996).

28. *Id.* A 2009 study found that 44% of all radiology practices in the United States reported using teleradiology in 2007, while in 2003, 15% of practices used teleradiology. Rebecca S. Lewis et al., *Radiology Practices' Use of External Off-Hours Teleradiology Services in 2007 and Changes Since 2003*, 193 AM. J. ROENTGENOLOGY 1333, 1333–34 (2009).

While telemedicine is poised to grow, there are some impediments to its further diffusion, especially on a national scale.[29] The current legal framework is one of these barriers, including the constraint on the practice of medicine across state lines. As technology has improved in quality and its price has declined, interest in telemedicine has grown.[30] However, the regulatory structure has yet to evolve to meet the unique legal issues raised by telemedicine. The current laws and regulations that govern medical practice at both the state and federal levels reflect a time when physicians and patients lived and worked in the same location. The laws and regulations governing licensure, credentialing and privileging, and malpractice were never designed to enable or regulate health care that is provided remotely by a practitioner in another hospital or, as is becoming more common, in another state.

II. THE ROUNDTABLE

A. Background

In an effort to better understand the reasons and suggest solutions to the legal obstacles that challenge the expanded adoption of telemedicine, on April 16, 2010, the Law & Health Care Program at the University of Maryland School of Law held a Roundtable on the Legal Impediments to Telemedicine. The Roundtable focused on three issues: physician licensure, credentialing and privileging, and medical malpractice. The Roundtable brought together over 20 telemedicine stakeholders – including telemedicine experts, government regulators, health care providers, and policy makers – along with several legal academics.[31] Using case studies in each area as a springboard for analysis and discussion, the Roundtable was organized to bring the stakeholders and academics together to discuss the legal impediments to a more robust implementation of telemedicine; identify regulatory and legal options to address the identified impediments; and develop recommendations that might be used to establish new guidelines to govern the practice of telemedicine.

The genesis of the Roundtable was a confluence of factors that came together to convince Law & Health Care Program faculty that providing a forum to discuss the legal impediments to telemedicine was both timely and important. The Law & Health Care Program has a long history of

29. Bashshur, *supra* note 2, at 310.

30. *See* Steven R. Normandin, *Telemedicine: An International Quality Care Solution*, PATIENT SAFETY & QUALITY HEALTHCARE, Jan.–Feb. 2008, at 46, 47, *available at* http://www.amdtelemedicine.com/downloads/QualityCareSolution.pdf (explaining that "telemedicine market mushroom" has occurred as high-quality services have decreased in cost).

31. *See infra* Appendix A.

collaborating with the health sciences schools at the University of Maryland (UM) on issues of mutual interest. Telemedicine presented an opportunity to examine an issue that has both wide-ranging medical *and* legal implications.

UM was an early leader in the deployment of telemedicine, particularly in emergency care. Through its Brain Attack Center, UM supports an innovative program to help patients who suffer from stroke and brain trauma.[32] The telemedicine component of the program combines real-time video and audio communication using advanced computers and cellular technology to allow medical specialists to diagnose and treat patients at distant locations.[33] The Center was the first in the nation to put telemedicine equipment on board ambulances so that specialists could examine patients in transit to a medical center.[34] At UM's Greenebaum Cancer Center, specialists use telemedicine to review patient cases with physicians at hospitals that do not have experts on site.[35] Similarly, physicians and nurses in UM's Department of Obstetrics, Gynecology and Reproductive Sciences use telemedicine to consult on high-risk pregnancy cases.[36] This program allows women to get their care at local hospitals rather than travel to Baltimore for care. Finally, the Department of Psychiatry at the UM School of Medicine is developing a TeleMental Health Center of Excellence for the State of Maryland and beyond.[37]

Beyond these University initiatives, there have been a number of efforts by the State of Maryland to promote telemedicine. The State Office of Rural Health within Maryland's Department of Health and Mental

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32. *Maryland Brain Attack Center, Departments of Neurology and Neurosurgery*, UNIV. OF MD. MED. CTR., http://www.umm.edu/neurosciences/brainattack.html (last visited Sept. 24, 2010).

33. *See* News Release, Univ. of Md. Med. Ctr., Specialized Help for Rural Stroke Patients is a "Click" Away (Feb. 1999), *available at* http://www.umm.edu/news/releases/click.htm (discussing how this system allows stroke patients and their doctors in Leonardtown, Md. to see and speak with doctors in Baltimore, Md.).

34. *See* News Release, Univ. of Md. Med. Ctr., Mobile Telemedicine System is Highlighted by National Library of Medicine Conference (March 13, 2001), *available at* http://www.umm.edu/news/releases/telemedicine.htm (announcing that the University of Maryland's Medical Center was the first in the nation to put telemedicine equipment on ambulances).

35. *New Telemedicine Program Brings Top-Notch Cancer Care to More Marylanders*, UNIV. OF MD. GREENBAUM CANCER CTR., (Sept. 29, 2009), http://www.umgcc.org/news/telemed.html.

36. Press Release, Univ. of Md. Med. Ctr., Telemedicine Program Links High-Risk Pregnant Women with University of Maryland Specialists (July 28, 2005), *available at* http://www.umm.edu/news/releases/teleconsultations.htm.

37. *TeleMental Health*, DEP'T OF PSYCHIATRY, UNIV. OF MD. SCH. OF MED., http://medschool.umaryland.edu/Departments/Department-of-Psychiatry/TeleMental-Health.asp (last visited Sept. 18, 2010).

Hygiene and the Rural Maryland Council have held a number of roundtables and are working on an action plan to help improve rural health in Maryland through telemedicine. At a February 2009 meeting entitled "Rural Roundtable on Creating a Telehealth Consortium," participants at the meeting identified a number of legal barriers to moving ahead with telemedicine in Maryland – these included concerns relating to medical malpractice, provider licensure, and liability insurance.[38]

Telemedicine is currently a significant issue at the federal level. As indicated earlier, funding for research and development in this field has been substantial.[39] Further, the Federal Communication Commission (FCC) issued its long-awaited National Broadband Plan in early 2010.[40] The plan emphasizes the role of broadband in health care and makes a number of recommendations relating to electronic health record adoption and use, health data exchanges, telemedicine, and mobile health services.[41] In that plan, the FCC calls for the federal government to expand telemedicine reimbursements and to remove barriers to adoption of telemedicine by updating regulations for device approval, credentialing, privileging, and licensing.[42] Perhaps more importantly, the Health Information Technology for Economic and Clinical Health Act (HITECH) was enacted as part of the American Recovery and Reinvestment Act (ARRA) of 2009.[43] The law will be implemented in stages,[44] but ultimately provides both incentives for the adoption of technology and penalties for non-adoption.[45]

Congress has also addressed the issue of telemedicine in the last year as part of health care reform. The recent national health care reform legislation contains several incentives for the deployment of telemedicine. Among other things, the law directs the new Center for Medicare and

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38. RURAL MD. COUNCIL & STATE OFF. OF RURAL HEALTH, A REPORT ON THE FEBRUARY 20, 2009 RURAL ROUNDTABLE ON CREATING A TELEHEALTH CONSORTIUM 8 (2009), *available at* http://www.ruralforvm.state.md.us/Roundtables/RRT04/Telehealth_Roundtable_Report.pdf.

39. *See* Freudenheim, *supra* note 16 (reporting that the new federal health care law provides $1 billion a year for the study of telemedicine and other innovations).

40. The National Broadband Plan was unveiled by the FCC on March 16, 2010. The American Recovery and Reinvestment Act of 2009 (Pub.L. 111-5 (2/17/09)) required the FCC to prepare the plan in order to improve broadband Internet access throughout the United States. The plan is available at http://www.broadband.gov/plan/.

41. FED. COMMC'N COMM'N, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 200–08 (2010), *available at* http://download.broadband.gov/plan/national-broadband-plan-chapter-10-health-care.pdf.

42. *Id.* at 202, 204–07.

43. §§ 13001–13424, 123 Stat. at 226–79 (codified in scattered sections of 42 U.S.C.).

44. *Id.* § 13101, 123 Stat. at 240. For a brief sketch of the HITECH Act's various stages of implementation and evaluation, see generally David Blumenthal, *Launching HITECH*, 362 NEW ENG. J. MED. 382, 384 (2010).

45. §§ 13301, 13410, 123 Stat. at 246–58, 271–76.

Medicaid Innovation (CMI) to explore the use of remote monitoring and to study the use of telemedicine in medically underserved areas to treat behavioral health problems (such as post-traumatic stress disorder), strokes, and certain chronic conditions.[46] The law also creates new "accountable care organizations" within the Medicare program to develop ways to "promote evidence-based medicine . . . through the use of telehealth, remote patient monitoring, and other such enabling technologies."[47] Finally, in the Medicaid program, the law provides states with a "health home" option for chronic illness that includes the use of health information technology and wireless patient technology to improve disease management and "patient adherence to recommendations made by their provider."[48]

B. Structure of Roundtable

Roundtable organizers prepared case studies for discussion in each of the three topical areas, namely licensure, credentialing and privileging, and malpractice. Several Roundtable participants prepared short papers responding to a series of questions related to each case study and the broader topic.[49] These papers were shared with all Roundtable participants prior to the meeting.

The day-long meeting began with a keynote speech "Whither Telemedicine: Are We There Yet?" by Rashid Bashshur, PhD, Professor Emeritus, Department of Health Management and Policy, University of Michigan School of Public Health and Director of the University of Michigan Health System Telemedicine Resource Center. Following his presentation, the day was divided into three parts based on the three focus areas. In each of the three segments, the participants presented their views as set forth in their papers. This was followed by a moderated discussion of the entire group with a final segment that was devoted to defining areas of consensus and developing recommendations in that area. A summary of the discussion, along with background information and areas of consensus and recommendations for each topic, is presented below.

C. Physician Licensure

State laws regarding physician licensure present the greatest challenge to the interstate practice of telemedicine. Every state and U.S. territory has

46. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, § 3021, 124 Stat. 119, 389, 392 (2010) (establishing the Center for Medicare and Medicaid Innovation within CMS).

47. *Id.* § 3022, 124 Stat. at 395–96.

48. *Id.* § 2703, 124 Stat. 319–20.

49. The case studies appear *infra* in Appendix B–D.

enacted laws relating to the practice of medicine within that state's boundaries, including laws that delegate authority for enforcing licensure laws to a state board of medical licensure.[50] These boards were created under the powers reserved to the states by the U.S. Constitution to adopt laws to protect the health, safety, and general welfare of their citizens. All medical boards perform essentially the same services but have different administrative structures and rules, including the tests and procedures required for licensure in that state.

Physician licensure laws were enacted in the early 1900s when medicine was practiced at the local level.[51] Under this traditional model, an out-of-state practitioner could not consult, assess, or treat a patient in a state in which the practitioner did not have a full license to practice medicine.[52] This ensured that the state had control over all the physicians practicing within state boundaries, including the right to discipline physicians who were not in compliance with state medical practice rules. Telemedicine challenges this traditional medical practice model by facilitating the practice of medicine that transcends state boundaries. The current state-based medical licensure system will need to evolve to facilitate the growth of telemedicine, but any changes in the framework for physician licensure will need to take into account all of the principles underlying the state-based system, i.e., a uniform standard of medical care and protection of the public.

In recent years, individual state boards, the Federation of State Medical Boards (FSMB), physician organizations, and academics have

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50. There are 70 licensing jurisdictions in the United States and its territories. *See Directory of State Medical Boards*, FED'N OF STATE MED. BDS., http://www.fsmb.org/directory_smb.html (last visited Nov. 12, 2010) (listing the state medical and osteopathic boards). This number includes states that have separate boards for allopathic and osteopathic physicians. *Id.* Each licensing jurisdiction functions under an authorizing state statute that sets forth licensing requirements. *See Physician Licensure: An Update of Trends*, AM. MED. ASS'N, http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/young-physicians-section/advocacy-resources/physician-licensure-an-update-trends_print.html (last visited Sept. 21, 2010) (noting that all fifty states, the District of Columbia, and the United States territories have laws governing the practice of medicine). Although states also have boards that license and discipline a variety of other health professions—some of which also engage in telemedicine—the Roundtable discussion focused on physician licensure.

51. *See* Bashshur, *supra* note 2, at 310–11 (noting that medical licensure is based on state statutes enacted in the early 20th century); *see also* Karen M. Zundel, *Telemedicine: History, Applications, and Impact on Librarianship*, 84 BULL. MED. LIBR. ASS'N 71, 71–74 (1996) (detailing early uses of telemedicine and indicating that its geographic scope has markedly widened in the latter half of the 20th century).

52. *See Physician Licensure: An Update of Trends*, *supra* note 50 ("[T]he out-of-state practice of medicine without a license is prohibited, whether the physician is treating the patient in person or from a distant location.").

studied the issues that are raised by state licensure for telemedicine.[53] Some states have enacted laws to facilitate telemedicine,[54] whereas others have tightened their laws,[55] to ensure that anyone practicing medicine (whether in person or remotely) in their state has a full medical license – therefore making it harder for out of state telemedicine practitioners to practice in that state.

A telemedicine practitioner who seeks multiple state licenses may find the current system burdensome because of the time and expense of applying for multiple licenses. A patchwork of medical record, patient confidentiality, continuing medical education , and mandatory reporting laws, along with differing medical practice acts, complicate the process. The National Broadband Plan, released by the FCC in March 2010 noted, "[s]tate-by-state licensing requirements limit practitioners' ability to treat patients across state lines. This hinders access to care, especially for residents of states that do not have needed expertise in-state." [56]

The administrative burden and confusion posed by the patchwork of state laws was the focus of the Roundtable discussion on physician licensure. Roundtable participants were initially asked to consider a case study[57] in which a major academic medical center in a large western city is

53. *See* FED'N OF STATE MED. BDS., REPORT OF THE SPECIAL COMMITTEE ON LICENSE PORTABILITY (2002), *available at* http://www.fsmb.org/pdf/2002_grpol_License_Portability.pdf (reporting that in April 2000, FSMB President, George C. Barrett, established the Special Committee on License Portability to explore mechanisms that could significantly improve the portability of state medical licensure).

54. *See generally* CTR. FOR TELEMEDICINE LAW, U.S. DEP'T OF HEALTH & HUMAN SERVS., TELEMEDICINE LICENSURE REPORT 7 (2003), *available at* http://www.hrsa.gov/telehealth/pubs/licensure.htm (explaining that "thirty-three states have specifically addressed medical practice across state lines[,]" some of which allow for telemedicine consultations, emergencies, or services unavailable in-state); *Health Law Resources–Telemedicine*, AM. HEALTH LAWYERS ASS'N, http://www.healthlawyers.org/Resources/Health%20Law%20Wiki/Telemedicine.aspx (last visited Sept. 21, 2010) (noting that some states have a general definition of the practice of medicine that seems to imply inclusion of telemedicine, while others have revised their definition of the practice of medicine to specifically include telemedicine; states with specific laws in place have taken a variety of approaches to deal with out-of-state physicians practicing within their borders). For an example of a telemedicine-facilitating law, see OKLA. STAT. ANN., tit. 63, § 1-2702 (West 2010).

55. *See* AM. TELEMEDICINE ASS'N, LICENSE PORTABILITY: POSITION STATEMENT AND RECOMMENDATIONS 2 (2007) (explaining that "[r]ecent state regulations and laws, purportedly put in place to protect the public," place additional restrictions on licensure); JOINT WORKING GRP. ON TELEHEALTH, U.S. DEP'T OF HEALTH & HUMAN SERVS., TELEMEDICINE REPORT TO CONGRESS: LEGAL ISSUES--LICENSURE AND TELEMEDICINE (1997), *available at* http://www.ntia.doc.gov/reports/telemed/legal.htm (revealing Kansas' action to tighten licensure laws in response to telemedicine). For an example of a comparatively restrictive state law regulating the practice of telemedicine, see 225 ILL. COMP. STAT. ANN., 60/49.5 (West 2010).

56. FED. COMMC'N COMM'N, *supra* note 41, at 206.

57. *See infra* Appendix B–D.

planning to provide telepsychiatric services to individuals in underserved areas throughout the western United States. The Director of Telemedicine for the medical center is seeking ways to minimize the burden of requiring all of his psychiatrists to apply for full and unrestricted licensure in each state in which the medical center plans to provide services. He has arranged a meeting with the directors of several of the Western state medical boards as well as the U.S. Senators in those states to discuss various models for licensure. The framework for the Roundtable discussion was the range of licensure models that have been proposed by various groups and individuals. These models included several identified in the Telemedicine Report to Congress (prepared by a federal interagency Joint Working Group on Telemedicine) and outlined in an AMA white paper,[58] as well as models identified in the literature and by the Roundtable participants. The models are described briefly below along a spectrum from full state licensure on one end to national licensure on the other end.

1. Full State Licensure

In a state that requires full state licensure for all physicians, an out-of-state physician cannot legally consult with, diagnose or treat a patient in that state without a full state license to practice medicine.[59]

2. Consultation Exception

Several states have (or had) a consulting exception to their state licensure laws under which a physician who is not licensed in that particular state can practice medicine at the behest of, and in consultation with, a referring in-state physician.[60] The scope of these exceptions varies from state to state.[61] Most consultation exceptions prohibit the out-of-state physician from opening an office or receiving calls in the state.[62] Consultation exceptions to medical licensure laws were enacted in most

58. JOINT WORKING GRP. ON TELEHEALTH, *supra* note 55; *Physician Licensure: An Update of Trends*, *supra* note 50.

59. *Physician Licensure: An Update of Trends*, *supra* note 50.

60. *See id.* (discussing the consulting exception, where a physician who is unlicensed in one state is permitted to practice medicine in that state in conjunction with a referring physician). For example, in Massachusetts an out-of-state physician can take advantage of the state's consultation exception by providing patients with teleconsultations, but only if the out-of-state physician is consulting with an in-state physician who shares his or her specialty. Susan E. Volkert, *Telemedicine: Rx for the Future of Health Care*, 6 MICH. TELECOMM. & TECH. L. REV. 147, 168–69 (2000).

61. *Physician Licensure: An Update of Trends*, *supra* note 50.

62. *Id.*; *see, e.g.*, CAL. BUS. & PROF. CODE § 2060 (West 2010) (providing consultation exception for out-of-state physicians who do not maintain offices or receive calls in California).

states before the advent of telemedicine.[63] Although they may be well-suited to some telemedicine applications, it is unlikely these exceptions were intended to apply to regular, ongoing telemedicine links.

3. Limited Licensure or Special Purpose License

For more than a decade, FSMB promoted a limited licensure model for physicians engaged in the practice of medicine across state lines, by electronic or other means.[64] A limited license allows a physician who will not be practicing physically within another state's jurisdiction, but who wishes to provide services to patients electronically, to apply to a state medical board for a "special purpose license." The special purpose license is generally 1) based upon a full and unrestricted license in another jurisdiction, 2) subjects the physician to the jurisdiction of the issuing state medical board, and 3) does not permit the licensee to physically practice in the state.[65]

4. Endorsement

In the past, when a physician moved from one state to another, state boards would use a system of endorsement to recognize providers not initially licensed in their state.[66] Endorsement is a process whereby a state issues an unrestricted license to practice medicine to an individual who holds a valid and unrestricted license in another state.[67] Licensure by endorsement "requires a full review and analysis of the applicant's qualifications, and can be a lengthy, complicated, and expensive process."[68] While endorsement is "the most common method used by states to recognize an individual already licensed by another state,"[69] the process entails "significant delays and duplication." Practitioners must still apply for a license in each state where they want to practice.[70] State boards can grant licenses to health professionals licensed in other states that have

63. *Physician Licensure: An Update of Trends*, *supra* note 50.

64. Fed'n of State Med. Bds., Response to Licensure Case Study (Apr. 16, 2010) (unpublished comments, University of Maryland School of Law Roundtable), (on file with authors).

65. *Id.*

66. *See* Ctr. for Telemedicine Law, *Telemedicine and Interstate Licensure: Findings and Recommendations of the CTL Licensure Task Force*, 73 N.D. L. REV. 109, 115 (1997) (noting a "substantial increase" in endorsement licensing between 1935 and 1993).

67. CTR. FOR TELEMEDICINE LAW, *supra* note 54, at 2.

68. *Id.*

69. *Id.*

70. *Id.*

equivalent standards or the state board can require additional qualifications or documentation before endorsing a license issued by another state.[71]

5. Uniform Application and Expedited License

A Uniform Application and Expedited License Model is currently endorsed by FSMB.[72] Under this process, states medical boards would offer an expedited licensure by endorsement process to physicians meeting the following qualifications: full and unrestricted licensure (in all jurisdictions where a medical license is held); free of disciplinary history, license restrictions, or pending investigations (in all jurisdictions where a medical license is or has been held); graduation from an approved medical school or hold current Educational Commission for Foreign Medical Graduates (ECFMG) certification; passage of a licensing examination acceptable for initial licensure within three attempts per step/level and within a seven (7) year time period; completion of three (3) years of progressive postgraduate training in an accredited program; and/or current certification from a medical specialty board recognized by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA). The expedited endorsement model is supported by the online FSMB Uniform Application. FSMB recommends using this process in conjunction with a common credentials verification service and repository.

6. Interstate Collaboration or Mutual Recognition

Under an Interstate Collaboration model, endorsed by the American Telemedicine Association (ATA), states would enter into collaborative agreements with other states to create a system of medical license portability. Based on reciprocal recognition, this model resembles the arrangement for driver's licenses in which each state recognizes the driver licenses of other states.[73] Such an approach has "been adopted by the European Community and Australia to enable the cross-border practice of medicine."[74] It also has been successfully utilized by the Veterans

71. *Id.*

72. *See* FED'N OF STATE MED. BDS., *supra* note 53 (recommending that "state medical boards offer an expedited licensure by endorsement process" to qualified physicians); Fed'n of State Med. Bds., *supra* note 64 (explaining that the FSMB has advocated a limited licensure model for more than a decade).

73. *See* Jonathon Linkous, President of the American Telemedicine Association, statement at Roundtable on Impediments to Telemedicine (on file with authors).

74. *Physician Licensure: An Update of Trends*, *supra* note 50.

Administration,[75] U.S. Military Branches,[76] Indian Health Service (IHS)[77] and Public Health Service (PHS)."[78] Licensure based on mutual recognition is comprised of "three components: a home state, a host state and a harmonization of standards for licensure and professional conduct" deemed essential to the health care system.[79] Under a mutual recognition scheme, "the health professional secures a license in his or her home state and is not required to obtain additional licenses to practice in the other states."[80]

7. Compact

Similar to the interstate collaboration and mutual recognition model, the Compact model has been adopted successfully by boards of nursing in the United States and has been suggested as a model for physician boards.[81] Under the compact model, a physician has one license (in his or her state of residency) and is permitted to practice in other Compact states (both in

75. *Id.*; *see also* Alison M. Sulentic, *Crossing Borders: The Licensure of Interstate Telemedicine Practitioners*, 25 J. LEGIS. 1, 36 (1999) (noting that the Veterans Administration has a program whereby a licensed physician can practice without first securing a local license in each jurisdiction).

76. *Physician Licensure: An Update of Trends*, *supra* note 50. For a more detailed discussion of how mutual recognition physician licensure operates in the context of the U.S. Military, see Sulentic, *supra* note 75, at 36 (citing 10 U.S.C. § 1094 (2006)).

77. *Physician Licensure: An Update of Trends*, *supra* note 50. See also MARTIN L. SMITH & MICHELE F. GEMELAS, U.S. PUB. HEALTH SERV., INDIAN HEALTH SERVICE MEDICAL STAFF CREDENTIALING AND PRIVILEGING GUIDE 1–2, 11 (2005), *available at* http://www.ihs.gov/NonMedicalPrograms/nc4/Documents/revisedIHScredentialingguide.pdf (describing the process by which physicians with out-of-state licenses may be credentialed to practice under the IHS).

78. *Physician Licensure: An Update of Trends*, *supra* note 50. Physicians who enter in the PHS' Commissioned Corps carry out a wide variety of functions, including traditional clinical services, through federal programs located throughout the country. *See Patient Care, Disease Prevention at Commissioned Corps*, U.S. DEP'T HEALTH & HUMAN SERVS, http://www.usphs.gov/profession/physician/activities.aspx (last visited Dec. 2, 2010) (detailing the services of medical officers in the Commissioned Corps). In order to qualify, a physician must, *inter alia*, have completed one year of postgraduate medical education and submit proof of valid medical licensure in one of the fifty states, the District of Columbia, or the U.S. territories. *Medical Education, Medical Officer at Commissioned Corps*, U.S. DEP'T HEALTH & HUMAN SERVS., http://www.usphs.gov/profession/physician/requirements.aspx (last visited Dec. 2, 2010).

79. OFF. FOR THE ADVANCEMENT OF TELEHEALTH, U.S. DEP'T OF HEALTH & HUMAN SERVS., 2001 TELEMEDICINE REPORT TO CONGRESS 22 (2001), *available at* ftp://ftp.hrsa.gov/telehealth/report2001.pdf [hereinafter 2001 TELEMEDICINE REPORT].

80. *Id.*

81. *See* Sulentic, *supra* note 75, at 3–4 (suggesting that the Nurse Licensure Compact might provide a model resolution to some of the challenges of physician licensing); *Physician Licensure: An Update of Trends*, *supra* note 50 (detailing the multistate licensure compact in the nursing profession).

person or remotely) subject to each state's practice laws and regulations.[82] Under a Compact, a physician would be able to practice across state lines unless the physician was under discipline or a monitoring agreement that restricts practice across state lines. The Compact is a system in which each state adopts comparable legislation authorizing licensing agencies to enter into an agreement with other states to grant licensees the authority to practice in any state that has adopted the agreed upon legislation. The compact "necessitates that states define a common set of requirements governing the agreement."[83]

8. National Licensure (Two Models)

There are two national licensure models: federalization of licensure and a hybrid model combining some aspects of national licensure and state regulation. Under a federalization of licensure model,"[a] license would be issued based on a standardized set of criteria for the practice of healthcare throughout the [United States]."[84] All national-level administration, including discipline, at the national level would be performed by a national organization or agency; such a model could apply to all aspects of licensing or could be limited to the practice of telemedicine.[85] Under the hybrid model, a national licensure system would be implemented at the state level, requiring states "to voluntarily incorporate the national standards into their laws."[86] In such a system, the states would be unable to impose significant additional standards. Health professionals would still be required to obtain a license from every jurisdiction in which they practice, but a common set of

82. NURSE LICENSURE COMPACT ADM'RS, NAT'L COUNCIL OF STATE BDS. OF NURSING, FACT SHEET FOR LICENSEES AND NURSING STUDENTS 1 (2010), *available at* https://www.ncsbn.org/2010_NLCA_factsheet_students_licensees_FINAL.pdf.

83. CTR. FOR TELEMEDICINE LAW, *supra* note 54, at 3.

84. *Physician Licensure: An Update of Trends*, *supra* note 50.

85. *Id.* A national licensure system may raise Tenth Amendment concerns. *See, e.g.*, Volkert, *supra* note 60, at 221 & n.322 (detailing the constitutional and federalist tensions present in the context of medical privacy and confidentiality issues). However, arguments that the current state based system constrains interstate commerce could counter such concerns, especially if the license is limited to telemedicine. Amar Gupta & Deth Sao, The Unconstitutionality of Current Legal Barriers to Telemedicine in the United States: Analysis and Future Directions of its Relationship to National and International Health Care Reform 39–40 (unpublished manuscript), *available at* http://works.bepress.com/deth_sao/2/; *see also* Goehring, *supra* note 2, at 112–13 (discussing regulation of telemedicine under the Commerce Clause). A national license could also be linked to physicians providing federally funded services, i.e., Medicare. Such a federal requirement would be justified under the Spending Clause. *Id.* at 38, 60.

86. *Physician Licensure: An Update of Trends*, *supra* note 50.

criteria would facilitate the administrative process. States could, however, "retain some flexibility in the administrative process."[87]

III. DISCUSSION

To stimulate discussion, we posed the following questions to Roundtable participants:

1) What are the major issues of concern underlying physician licensure in the context of telemedicine?

2) Will any of the models for consideration inhibit disciplinary actions against physicians? Consider the issue of who has jurisdiction to conduct investigations if an injury occurs – the state in which the patient is located? The state in which the physician is located? Where the treatment took place? How will subpoenas and discovery be handled?

3) Which model of licensure best ensures patient safety? What relevance do the different models of licensure have to standard of care determinations?

As a foundational matter, Roundtable participants acknowledged that the historical model of state licensure is a constraint on the growing field of telemedicine but agreed that any alternative must preserve the goals of licensure – to protect the public from incompetent physicians and sub-standard care. Many states and the federal government have been investigating the issue of establishing a licensure process that facilitates telemedicine practice while protecting patient safety for a number of years. To date, they have not reached a consensus on how to move forward on the issue. In 2009, FSMB received a three-year grant from the U.S. Health Resources and Services Administration (HRSA) to work on license portability initiatives to encourage telemedicine.[88] Nineteen states have expressed interest in participating in the grant along with FSMB.[89] This initiative is likely to lead to licensure reform in several states although what model will emerge from the grant is not yet clear.

In response to the various models identified for consideration, Roundtable participants expressed a wide range of views. In written remarks prepared for the Roundtable, FSMB representatives Lisa Robin and Tim Miller reported that "[f]or more than a decade, the FSMB . . . promoted

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87. *Id.* This model would also raise Tenth Amendment issues, but these concerns could be overcome if the federal government conditioned state receipt of designated federal funds on states implementing the federal licensing standards. Gupta & Sao, *supra* note 85, at 38, 60.

88. *License Portability Efforts Advance with New Federal Grant*, NEWSLINE (Fed'n of State Med. Bds. of the U.S., Washington, D.C.), Sept./Oct. 2009, at 1, *available at* http://www.fsmb.org/pdf/pub_nl_09_10_2009.pdf.

89. *Id.*

a limited licensure model for physicians engaged in the practice of medicine across state lines, by electronic or other means."[90] In fact, 8 states have established a limited licensure/special purpose license for out of state telemedicine practitioners.[91] These special purpose licenses vary from state to state with some states creating narrow special purpose licenses that only allow physician-to-physician telemedicine consultations (e.g. radiology) while other states allow for physician-to-patient telemedicine consultations.[92]

Recently the FSMB has proposed an "expedited endorsement" model for licensure supported by a uniform application form.[93] Thirty-three state medical and osteopathic boards are now using in some form the uniform medical license application developed by FSMB.[94] Although the uniform application was developed to encourage uniformity across the boards rather than to promote telemedicine,[95] FSMB believes that the uniform application will make it easier for states to license out of state practitioners in a consistent and expedited manner.

Advocates of telemedicine have proposed a compromise between full state licensure and a national licensing system. In his written remarks, Jonathan Linkous, CEO of the ATA, identified three issues as "[f]undamental to the controversies swirling around the state-based licensure of physicians:

1. Assurance of quality of care
2. Protection of state's rights; and
3. Protection of trade from outside competition."[96]

Linkous proposed that while quality of care is often cited as the primary basis for state-based licensure, "the other two issues have been motivating factors in many, if not most, cases and are the primary reasons why national licensure approaches will probably not be adopted anytime soon."[97] Quality differences, he argues, are less and less of an issue as all licensing jurisdictions require successful completion of three parts of the United States Medical Licensing Exam (USLME). Moreover, differences in

90. Fed'n of State Med. Bds., *supra* note 64.

91. CTR. FOR TELEMEDICINE LAW, *supra* note 54, at 7.

92. *See Physician Licensure: An Update of Trends*, *supra* note 50 (explaining how different licenses either limit or expand a physician's scope of practice).

93. Fed'n of State Med. Bds., *supra* note 64.

94. *Id.*

95. *Benefits of Using FCVS*, FED'N OF STATE MED. BDS., http://www.fsmb.org/fcvs_benefits.html (last visited Sept. 22, 2010).

96. Linkous, *supra* note 73, at 1.

97. *Id.*

licensing requirements between states "are fewer and fewer each year."[98] States, however, are reluctant to cede their power to license and collect licensing fees. "Money is a part of the state's rights debate," Linkous argues, and "[i]nitial licensing fees range from $200 to $1,000 per state. With almost a million doctors licensed to practice medicine in the United States the amount of state revenues raised through licensing fees is substantial."[99] Linkous states that another reason that we are unlikely to move to a national licensing scheme is trade protection, i.e., physicians have defended strong licensure laws in order to prevent out-of-state physicians from practicing in their state where they would compete for patients.[100]

In order to facilitate expansion of interstate telemedicine, the ATA supports two approaches to physician licensure. The first is national preemption of state licensing laws for all physicians providing federally funded health services, i.e., services provided under Medicare and/or Medicaid. The second approach is the interstate collaboration model which requires the establishment of a "national multi-state clearinghouse where out-of-state physicians can register with other states."[101] The clearinghouse would also provide "assurance of the physician's training and competency as determined by the physician's home state and provide a single conduit for physicians to pay applicable state licensing fees."[102] This model would allow patients to receive medical advice 'virtually' from an out-of-state provider. Primary responsibility for the patient, however, would rest with the requesting physician in the patient's home state.

Jim Puente, an Associate with the Nursing Licensure Compact (NLC) of the National Council of State Boards of Nursing, and Joey Ridenour, Chair of the Executive Committee of the Nurse Licensure Compact Administrators (NLCA), described their experience with the NLC. Since 2000, nurses have been permitted to practice in a number of states through a "compact" licensure model.[103] The NLC "allows a nurse to have one license (in his or her state of residency) and to practice in other states (both

98. *Id.* The only substantive differences, he points out, "are in the number of years required for postgraduate training (one or two years and generally three years for graduates of non-U.S. medical schools) and the number of attempts and time limit for completing the examination." *Id.*

99. *Id.*

100. *Id.*

101. *Id.*

102. *Id.*

103. Jim Puente & Joey Ridenour, Response to Licensure Case Study—Telepsychiatry 1 (Apr. 16, 2010) (unpublished comments, Legal Obstacles to Telemedicine Roundtable) (on file with the authors); *see also* Ross D. Silverman, *Regulating Medical Practice in the Cyber Age: Issues and Challenges for State Medical Boards*, 26 AM. J.L. & MED. 255, 270 (2000) (noting that eight states had passed the Interstate Nurse Licensure Compact as of February 2000).

physically and electronically), subject to each state's practice law and regulation."[104] The Compact was not established for the purpose of facilitating telenursing *per se*, but it could be used to allow the practice of telemedicine across state lines. The NCSBN explored several licensure arrangements before adopting a "mutual recognition" model in 1997.[105] Benefits of the model included the fact that it could be implemented incrementally and begin without uniform requirements. Initial concerns expressed about the compact model included:

1) Licensing in the state of primary residence of the provider versus the state of practice,

2) The potential loss of revenue associated with decreased licensure,

3) The possibility that compact states cannot identify all licensees practicing in the state,

4) The likelihood that there may be an increase in the number of multi-state discipline cases and potential increased costs associated with pursuing those cases,

5) Inconsistencies across states in relation to licensure, mandatory continuing education and disciplinary causes of action, and

6) The claim that the compact supersedes states' rights and authority.[106]

After a decade of experience, the National Council of State Boards of Nursing considers the Compact a success and has found that the early concerns were not warranted. The Compact has adopted clear policies about jurisdiction and disciplinary action and has facilitated information sharing across the member states.[107] In terms of disciplinary action, a complaint is

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104. *Nurse Licensure Compact*, NURSE LICENSURE COMPACT ADM'RS, NAT'L COUNCIL OF STATE BDS. OF NURSING, https://www.ncsbn.org/nlc.htm (last visited Sept. 21, 2010); *see also* Puente & Ridenour, *supra* note 102, at 1 (quoting same language).

105. *NCSBN Reaffirms Support for Single State and Mutual Recognition Models of State Nurse Licensure*, NAT'L COUNCIL OF STATE BDS. OF NURSING (Oct. 2002), https://www.ncsbn.org/1270.htm.

106. Puente & Ridenour, *supra* note 103, at 2. For examples of criticisms and concerns contemporary to the advent of the Nurse Licensing Compact see Susan E. King, *Multistate Licensure: Premature Policy*, ONLINE J. OF ISSUES IN NURSING (May 31, 1999), http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume41999/No1May1999/MultistateLicensure.aspx (detailing concerns about multistate licensing, including that standards will be weakened and inconsistent, that privacy of nurses' personal information might be compromised, and that the program costs are unknown); Beverly L. Malone, Letter to the Editor, *Multistate Licensure?*, 99 AM. J. NURSING 14, 14–15 (1999) (expressing concern that, under a multistate licensing scheme, states will have difficulty keeping track of nurses licensed to practice therein, and also that nurses' due process rights in disciplinary proceedings might be burdened).

107. *See Model NLC Legislation*, NURSE LICENSURE COMPACT ADM'RS, NAT'L COUNCIL OF STATE BDS. OF NURSING, https://www.ncsbn.org/1100.htm (last visited Dec. 2, 2010) (providing

filed in the state where the violation occurs, the primary state of licensure is notified, and investigative staff decides who should take the lead in the case.[108] Although either the home state or the remote state may take disciplinary action, only the home state can take action on the license.[109] If a violation of the Nurse Practice Act occurs in a state that is a party to the Compact, the Board in that state takes action on the nurse's privilege to practice and issues an Order of Cease and Desist or any other action allowed by the state.[110] The state of licensure is notified of the final outcome of any disciplinary proceeding.[111] Also, any state that is party to the Compact may deny an individual the right to practice in that state.[112]

Completing the spectrum, Rashid Bashshur advocated a national licensing system as an optimal solution for the interstate practice of telemedicine.[113] Such a system would ensure that physicians meet the knowledge and experience requirements necessary to protect patients and assure quality while leaving the policing powers to the states to deal with unscrupulous behavior and substandard practice.[114] Licensing fees would be allocated between the states and the federal government.[115] This system would avoid problems inherent in partial solutions to the obstacles to interstate telemedicine practice that "contain uncertainties and vagueness."[116]

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model policy for multistate licensing and addressing jurisdictional, disciplinary, and information sharing issues).

108. Puente & Ridenour, *supra* note 103, at 3; *see also Frequently Asked Questions about the Nurse Licensure Compact*, NURSE LICENSURE COMPACT ADM'RS, NAT'L COUNCIL OF STATE BDS. OF NURSING, https://www.ncsbn.org/2002.htm (answering questions regarding the NLC disciplinary process).

109. *Id.*

110. *Id.*

111. Puente & Ridenour, *supra* note 103, at 3; *see also Frequently Asked Questions about the Nurse Licensure Compact*, *supra* note 108 (answering questions regarding the NLC disciplinary process). For a comprehensive overview of how the NLC works to promote competence in nursing and consistent disciplinary standards, see generally Lisa L. Dahm, *Regulation of Nurses: Should the NPDB Be Expanded?*, 11 MICH. ST. U. J. MED. & L. 33, 63–65 (2007).

112. Puente & Ridenour, *supra* note 103, at 3; *see also* Dahm, *supra* note 112, at 66 (detailing the power of state boards to revoke a multistate license); *Frequently Asked Questions about the Nurse Licensure Compact*, *supra* note 108 (answering questions regarding the NLC disciplinary process).

113. Bashshur, *supra* note 2, at 311 (arguing that a national licensing system is superior to the current state-based physician licensing system).

114. *See id.* (suggesting that a national scheme focus on licensing and competency while allowing state medical boards to discipline physician misconduct).

115. *But see* Roger Downey, *Telemedicine and State Licensure*, GLOB. MEDIA BLOG (Apr. 20, 2010, 10:20 am), http://blog.globalmedia.com/?p=108 (suggesting that state boards would receive little, if any, revenue from a national licensing scheme).

116. Bashshur, *supra* note 2, at 311.

Three Roundtable participants were asked to respond to the positions taken by the various stakeholders in the telemedicine licensing debate. Both Carl Ameringer, Professor of Health Policy and Politics at Virginia Commonwealth University, and John Blum, Professor of Law at Loyola University Chicago School of Law, while acknowledging the need for more flexibility in physician licensure laws to facilitate telemedicine practice, raised concerns about proposals to nationalize or federalize medical licensure for telemedicine practitioners. Ameringer urged caution in separating out telemedicine from the practice of medicine for separate licensure, questioning the ability of regulatory authorities to disentangle the standards of diagnosis, treatment, and follow-up care when a physician breaches a standard of care while diagnosing a patient using electronic means.[117] Furthermore, he raised the interconnectedness of licensure and discipline that may be overlooked by a national scheme.[118] For example, board disciplinary actions may implicate licensure renewal. If telemedicine licensure is handled at the national level and discipline at the state level, it is unclear whether the federal implementing authority would take into account the state disciplinary actions. On the other hand, if states are left to determine discipline for violation of federal telemedicine standards, it could lead to significant variation across states in disciplinary action for similar infractions.[119]

John Blum, similarly, did not think that a federal licensing scheme would be the solution to the challenges faced by the interstate practice of telemedicine.[120] He pointed to the strong federalism tradition in the licensing arena and the need to change laws at both the state and federal levels if we were to adopt a national preemption of licensure authority.[121] He also highlighted the financial considerations stating that "[a] national licensing scheme would take revenues away from state bureaucracies at a time when they are revenue starved. In addition, the states would need to create a new mechanism to track their members who have national telemedicine licenses and harmonize oversight to match the operations of what would, in effect, be a 51st licensing jurisdiction."[122] Blum believes

117. Carl F. Ameringer, *State Medical Boards and the Regulation of Telemedicine: A Framework for Analysis*, 14 J. HEALTH CARE L. & POL'Y 53, 63–66 (2010).

118. *See id.* at 80-82 (arguing that the national licensing scheme could disrupt current regulatory procedure).

119. *Id.*

120. *See generally* John D. Blum, Licensing Thoughts (Apr. 16, 2010) (unpublished comments, University of Maryland School of Law Roundtable) (on file with authors) (arguing against the suggested implementation of a national licensing scheme).

121. *Id.*

122. *Id.*

that one of the intermediate solutions, e.g., mutual recognition or reciprocity, may be a more workable solution.[123] He also suggested that, if we are concerned about quality of care related to the practice of telemedicine, rather than a separate national licensure scheme for telemedicine, the ATA (or a comparable group), should create a national specialty board for telemedicine.[124] This would be in addition to a state based license. Such a board would have significant expertise in telemedicine and could "respond to the needs for practice standard development that will arise as technology evolves."[125] In addition, board certification would ensure that providers who offer telemedicine services have the requisite skills and training necessary to undertake delivery of telemedicine services.

A third commenter, Daniel Gilman, from the Office of Policy and Planning at the Federal Trade Commission, offered a consumer perspective on the licensure issue, raising concerns about the anticompetitive nature of state licensure laws and urging that the costs and benefits of licensure be further studied.[126] He cited studies indicating that licensing increases costs for consumers and that "state-based licensure can serve as a barrier to provider mobility, to the detriment of consumer welfare."[127] He advocates [f]orced (under federal law) reciprocity of some sort that involves some consensus on best and worst licensure practices, as well as the costs and benefits of various licensure systems.[128]

Further discussion at the Roundtable focused on the merits of the different licensure models without reaching a consensus on a single model. However, several principles emerged from the discussion. The great majority of participants agreed that any model adopted on the state or federal level should be based on uniform licensure rules across the United States and integration of licensure with national databases.[129] In addition, although not uniformly embraced, a majority of those at the meeting believed that telemedicine is not a separate medical specialty and should not

123. *Id.*

124. *Id.*

125. *Id.*

126. *See generally* Daniel J. Gilman, *Physician Licensure and Telemedicine: Some Competitive Issues Facing Those Who Would Practice Globally While Being Regulated Locally*, 14 J. HEALTH CARE L. & POL'Y 85 (2010) (discussing the possible issues that could arise for consumers as a result of the implementation of national licensing).

127. *Id.* at 107.

128. *See id.* at 112–113.

129. A member of the defense bar who participated in the Roundtable expressed concern that uniform licensure and integration of licensure with national databases might increase the number of experts permitted to testify to the standard of care and therefore expand liability exposure for health care professionals and institutions.

be singled out as a special area of medical practice because it is part and parcel of many other medical specialties.

Participants agreed that the lack of uniformity in licensing laws across the seventy licensing jurisdictions[130] creates an administrative burden for practitioners who wish to provide telemedicine services across state lines, and may not make sense given the move toward national practice standards over the last several decades. Several participants noted that this lack of uniformity is anachronistic given that all medical students must pass the USMLE administered by FSMB and the National Board of Medical Examiners prior to seeking state licensure. As noted above, FSMB has developed a uniform state licensure application which allows physicians who apply in states that have adopted the application to fill out and submit their initial application online. The uniform application allows participating state boards to require completion of addendums that address any specific state requirements. While participants did not specifically recommend use of the uniform application, they agreed that uniform rules and procedures across the seventy licensing jurisdictions[131] would make it easier for telemedicine providers to practice across state lines.

Participants also reacted favorably to a national clearinghouse for all medical licensure based on a uniform, central application. States would retain their medical boards and assess licensing fees as they do now, and physicians would have to pay licensing fees in each state where they want to practice (in person or remotely). In addition, states would be responsible for disciplining physicians who practice in that state, when standards or laws are violated. The clearinghouse would have access to national databases with up-to-date information on physicians' credentials, privileging history, disciplinary or legal action, and other information pertinent to licensure. A national database would also be useful for making credentialing and privileging decisions.

Participants also generally agreed that uniform up-to-date national databases that are interoperable with electronic health records and other forms of medical information technology are critical to ensure seamless and accurate licensing and policing of physicians. Access to such technology would make licensing easier and more accurate and help medical boards perform their traditional task of protecting the public from poor physicians. Information gathered by a national database could also be used to measure individual state board performance.

130. *See supra* note 50.

131. *See supra* note 50.

Finally, many participants expressed the view that telemedicine should not be treated differently in terms of licensure from other types of medical practice. A number of participants expressed concern that any process that singles out telemedicine is likely to create the perception that telemedicine is different from other medical practices or presents unique or severe risks.

IV. CREDENTIALING AND PRIVILEGING

A second legal impediment to the successful dissemination of telemedicine services is the current CMS rules regarding credentialing and privileging of health care providers. The rules are especially problematic for rural and critical access hospitals (CAHs). The process of credentialing and privileging refers to the policies and procedures that health care organizations use to determine whether a health care professional has the qualifications to be employed and practice at the organization.[132] Credentialing refers to obtaining, reviewing and confirming the credentials and professional documentation of health care providers including documentation of education, licensure, certifications, medical professional liability insurance and malpractice history.[133] Most hospitals engage the services of "credentials verification organizations" to check the credentials of their providers.

Privileging is "the process whereby a specific scope and content of patient care services . . . are authorized for a health care practitioner by a health care organization, on the basis of its evaluation of the individual's credentials *and* performance."[134] Health care organizations also conduct reprivileging – usually every two years. Reprivileging is similar to privileging but is heavily dependent on the experience and competence the provider has demonstrated since the last privileging decision.[135] Unlike credentialing, both privileging processes are conducted by peer review[136] and are thus considered more subjective processes than credentialing, which might therefore be harder to do externally by a third party organization.

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132. *See* HEALTH RES. & SERVS. ADMIN., U.S. DEP'T OF HEALTH & HUMAN SERVS., POL'Y INFO. NOTICE 01-16: CREDENTIALING AND PRIVILEGING OF HEALTH CENTER PRACTITIONERS 2 (2001), *available at* http://bphc.hrsa.gov/policy/2001-16.pdf (discussing the federal government's policy regarding the credentialing and privileging requirement for health care practitioners).

133. *Id.*

134. Kimberly Galt, *Credentialing and Privileging for Pharmacists*, 61 AM. J. HEALTH-SYS. PHARMACY 661, 662 (2004) (emphasis added). *See also* HEALTH RES. & SERVS. ADMIN., *supra* note 131, at 2–3 (discussing privileging policy).

135. *See* THE JOINT COMM'N, ASSESSING HOSPITAL STAFF COMPETENCE 11–12 (2d ed. 2002) (outlining privileging requirements for health care practitioners).

136. *Id.*

Credentialing and privileging are routinely conducted at the institutions in which the health professional is providing service, although they may be conducted at the federal level if the professional is primarily employed by the federal government. Given that most telemedicine services involve two hospitals, the question for hospitals in the telemedicine context is which hospital is responsible for credentialing and privileging the practitioner – the originating site receiving the telemedicine consult or the distant site giving the assistance?

Most hospitals follow the nationally accepted standards regarding credentialing and privileging that are provided by the Joint Commission.[137] The Joint Commission is a private not-for-profit organization that operates accreditation programs for a fee to over 18,000 health care organizations and programs in the United States.[138] The Medicare statute of the Social Security Amendments of 1965 granted the Joint Commission's hospital accreditation program unique "deeming" authority,[139] meaning that hospitals with Joint Commission accreditation are deemed to meet the federal Conditions of Participation (CoPs) and are therefore eligible for reimbursement from the Medicare or Medicaid programs.[140]

For years, the Joint Commission permitted "credentialing and privileging by proxy" for telemedicine services.[141] This meant that the originating Joint Commission-accredited hospital (i.e., the hospital receiving telemedicine services for its patients) could rely on the credentialing and privileging decisions of the distant Joint Commission-accredited facility (i.e., the hospital where the telemedicine provider is located).[142] Although the Joint Commission's policy was widely used, the policy conflicted with longstanding Medicare CoP requirements and Joint Commission-accredited hospitals were at risk of citation by CMS. Under CMS regulations, all Medicare practitioners must undergo credentialing and privileging by each originating site.[143] While CMS has permitted hospitals

137. *See About The Joint Commission*, THE JOINT COMM'N, http://www.jointcommission.org/AboutUs (last visited Sept. 22, 2010) (noting that accreditation by the Joint Commission is recognized nationally as a commitment to quality).

138. *Id.*

139. 42 U.S.C. § 1395bb(a) (2006 & Supp. 2009).

140. *State/Federal Relations*, THE JOINT COMM'N, http://www.jointcommission.org/StateFederal/deemed_status.htm (last visited Sept. 18, 2010).

141. Proposed Changes Affecting Hospital and Critical Access Hospital (CAH) Conditions of Participation (CoPs): Credentialing and Privileging of Telemedicine Physicians and Practitioners, 75 Fed. Reg. 29,479, 29,480 (proposed May 26, 2010) (to be codified at 42 C.F.R. pts. 482, 485) (noting the Joint Commission's use of privileging by proxy, but also explaining that this practice is in direct conflict with CMS's Conditions of Participation).

142. *Id.*

143. 42 C.F.R. § 482.22 (2009).

to use Credentials Verification Organizations for credentialing,[144] it has not permitted them to use third parties for privileging. According to current CMS regulations, all hospitals and CAHs receiving telemedicine services must privilege each health care practitioner providing services to its patients "as if the practitioner were on site."[145] The rule against using a third party organization to conduct privileging was based on the belief that privileging decisions are always specific to a particular hospital because they take into account not only the practitioner's qualifications, but also the services offered by the hospital.[146] In practice, most hospitals have used credential verifying organizations, but have relied heavily on privileging by proxy notwithstanding the CMS rule.[147] Therefore, although "credentialing and privileging" are often considered in tandem, it is *privileging* of telemedicine practitioners that is of greater concern to telemedicine stakeholders.

The long-standing practice of ignoring this CMS rule against privileging by proxy came under scrutiny with the passage of the Medicare Improvements for Patients and Providers Act of 2008.[148] The new law removed the Joint Commission's statutorily granted accrediting authority as of July 15, 2010[149] and required all accrediting bodies, including the Joint Commission, to apply to CMS for hospital deeming authority.[150] As part of this new application process, the Joint Commission was required to make changes to its hospital accreditation standards in order to comply with Medicare CoPs. In 2009, the Joint Commission informed hospitals that, as of July 15, 2010, the Commission would enforce the longstanding CMS credentialing and privileging requirements found in the Medicare Hospital CoPs.[151]

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144. Proposed Changes Affecting Hospital and Critical Access Hospital (CAH) Conditions of Participation (CoPs), 75 Fed. Reg. at 29,480.

145. *Id.* For CMS regulations governing telemedicine generally, see 42 C.F.R. § 410.78 (2009).

146. *See* Proposed Changes Affecting Hospital and Critical Access Hospital (CAH) Conditions of Participation (CoPs), 75 Fed. Reg. at 29,480 (detailing factors that must be considered when making privileging decisions at specific hospitals); *see also* 42 C.F.R. §§ 482.12, 482.22 (2009) (providing regulations for selecting members of a hospital's governing body and medical staff, and requiring consideration of the qualifications of practitioners as well as the services offered by the hospital).

147. *See generally* Proposed Changes Affecting Hospital and Critical Access Hospital (CAH) Conditions of Participation (CoPs), 75 Fed. Reg. at 29,480 (noting that hospitals have been partaking in privileging by proxy even though it does not meet the CMS requirements).

148. *See id.* (detailing the deficiencies that scrutiny relating to the Medicare Improvements for Patients and Providers Act of 2008 revealed in the Joint Commission's accreditation policies).

149. *Id.*

150. *Id.*

151. Joint Comm'n, Telemedicine Requirements for Hospitals and CAHs Are Delayed Until March 2011, (June 3, 2010), *available at*

This decision caused an uproar in the telemedicine and hospital administration worlds. Telemedicine advocates met with Congressional leaders and, as a result of those meetings, the Senate health care reform bill contained a provision that would require CMS to develop regulations to implement both a process for telemedicine practitioners to be credentialed and privileged by proxy, as well as "hold harmless" criteria for those institutions using credentialing and privileging by proxy that would remain in effect until CMS's regulations regarding remote credentialing and privileging were finalized. [152] The Senate provision did not appear in the final Senate bill but telemedicine advocates continued to push for changes in CMS policy.

The issue of credentialing and privileging by proxy was a focus of Roundtable discussion. The case study used as the backdrop for discussion involved the same Western Academic Medical Center (WAMC) that served as the basis for the licensing discussion.[153] The WAMC is seeking to provide telepsychiatry services to multiple remote hospital sites to meet "the vast unmet need for mental health services in rural communities." Given the number of hospitals the WAMC could potentially serve, the Director of Telemedicine is "seeking ways to minimize the burden of requiring all WAMC providers to be credentialed [and privileged] in all the remote hospital sites in which they consult with patients. The Medical Director at WAMC wants to ensure that patients in remote sites receive appropriate care and argues that the hospitals in which the patients are located may be in the best position to consider a physician's qualifications, scope of services that will be provided, and the type of patients seen at the rural location." Roundtable organizers asked participants to think about the following questions:

1) What are the pros and cons of credentialing and privileging by proxy?

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http://www.jointcommission.org/AccreditationPrograms/Hospitals/telemed_requirements_hap_ca h_delayed.htm. On June 3, 2010, the Joint Commission announced that the deadline would be delayed until March 2011. *Id.*

152. *See, e.g.*, 7th Annual Telehealth Leadership Conference, TELEHEALTH LEADERSHIP INITIATIVE, http://www.telehealthleadership.org/Events.html (last visited Dec. 4, 2010) (inviting telehealth stakeholders to participate in a nation-wide lobby day on June 3, 2009 to ask members of Congress to include telehealth provisions in health care reform); *see also* 155 CONG. REC. S11216, S11217 (daily ed. Nov. 5, 2009) (listing the telemedicine-related organizations supporting the inclusion of teleheath provisions in health care reform). Senator Udall included such a provision in the Rural Telemedicine Enhancing Community Health (TECH) Act of 2009, S. 2741, 111th Cong. § 5 (2009). He also included the credentialing and privileging provisions in that bill as an amendment to the Senate health care reform amendment as SA 3136. 155 CONG. REC. S12,835, S12934–35 (daily ed. Dec. 10, 2009).

153. *See infra* Appendix C.

2) Under which model of credentialing and privileging (by proxy or by the originating hospital) is patient safety best protected?

3) What consequences will arise if hospitals can no longer privilege by proxy?

4) Are rural or critical access hospitals in a position to provide effective privileging of telemedicine practitioners?

In his written remarks, Robert Wise, M.D., Vice President of the Division of Standards and Survey Methods for the Joint Commission, emphasized that given CMS' willingness to allow credentialing by third parties, the real issue for recipients of telemedicine services is privileging. According to Wise, the "pros" of privileging by proxy include allowing patients "access to care in underserved areas while maintaining a reasonable model of assuring competency" [154] and allowing patients access to the "best specialists" through a telemedicine link. The "cons" he identified included "remov[ing] some control from the accountable site" and possibly making it "more difficult to stop fraudulent behavior."[155] Joseph Ternullo, JD, MPH, Associate Director of Partners Center for Connected Health, similarly identified loss of control of the accountable hospital as a negative factor when those hospitals have financial and reputational responsibility for credentialing or privileging errors. In response to the question about patient safety, Dr. Wise stated that patient safety is best preserved when patients have access to the best qualified providers.[156] He sees potential risks of bad outcomes if hospitals can no longer privilege by proxy, including the possibility that originating hospitals will lose access to critical services or privilege practitioners without the ability to discern the quality of the care they are delivering. In response to the last question, relating to rural or critical access hospitals, Dr. Wise pointed out that "generally rural hospitals seek services for which they are lacking expertise" and that rural hospitals are "not in the position to do initial privileging or accurately analyze previous experience to determine continued competency at the time of re-privileging."[157]

Roundtable participants, including representatives from CMS, discussed the CMS rule and its impact on rural and critical access hospitals. The foundational theme that emerged during the Roundtable is that privileging is a complex and difficult process for small hospitals. Privileging requires peer review of a physician's qualifications and abilities

154. Robert Wise, Response to Licensure Case Study (Apr. 16, 2010) (unpublished comments, University of Maryland School of Law Roundtable) (on file with authors).

155. *Id.*

156. *Id.*

157. *Id.*

which is difficult if the hospital has no other similar practitioners on staff. In fact, this lack of onsite professional expertise is often why small hospitals seek out telemedicine services. As more telemedicine services have become available to small hospitals, the burden of privileging numerous physicians has grown. Roundtable participants agreed that it is expensive and time-consuming for small hospitals to privilege numerous physicians. Many also noted that the distant site (providing telemedicine services) is in a better position to privilege telemedicine practitioners because it has access to more information regarding the physician's practice history and has an administrative staff in place that is experienced in facilitating privileging decisions.

Roundtable participants discussed the following negative consequences that might arise if small hospitals were required to privilege all practitioners that provide telemedicine services:

1) Small hospitals may choose not to use telemedicine because of the cost and administrative burden of privileging all telemedicine practitioners. If so, telemedicine may be performed outside of hospitals in facilities where privileging is not required.

2) Small hospitals may privilege practitioners based on little or no background information about the actual qualifications of the practitioner.

3) Physicians will not seek out telemedicine opportunities because of the administrative burden associated with becoming privileged in numerous sites and maintaining those privileges over time.

Roundtable organizers asked participants to describe the optimal process for privileging telemedicine physicians that would protect patient safety and would be reasonable for small hospitals. Several Roundtable participants argued that privileging by proxy as currently allowed by the Joint Commission may not be the best process. Although very few problems have been reported during the period that the Joint Commission standard has been in place, the standard is ten years old and was developed primarily with teleradiology in mind.[158] In terms of the optimal process for

158. *See* 2001 TELEMEDICINE REPORT, *supra* note 79, at 25–26 (reporting on the Joint Commission on Accreditation of Health Care Organizations' (JCAHO) 2000 adoption of a new credentialing standard for hospitals using telemedicine). For insight into the close link between JCAHO/The Joint Commission accreditation and the field of teleradiology, see for example L. Jarvis & B. Stanberry, *Teleradiology: Threat or Opportunity?*, 60 CLINICAL RADIOLOGY 840, 841–42, 845 n.7 (2005); John C. Hayes, *Joint Commission Sees Strong Demand for Accreditation*, DIAGNOSTIC IMAGING (Nov. 1, 2006), http://www.diagnosticimaging.com/display/article/113619/1193667; Tom Hoffman, *Teleradiology: An Underdeveloped Legal Frontier*, AM. C. RADIOLOGY (Sept. 2005), http://www.acr.org/SecondaryMainMenuCategories/NewsPublications/FeaturedCategories/ACRBulletin/Archives/2005/September2005/TeleradiologyAnUnderdevelopedLegalFrontierDoc10.aspx.

privileging of telemedicine practitioners by small hospitals, Roundtable participants made the following suggestions and recommendations:

1) Hospitals should be accountable for, and provide quality control over, the telemedicine practitioners that provide services to the hospitals' patients.

2) If some form of privileging by proxy is allowed, a process should be put in place that protects small hospitals from accepting more telemedicine services than they can handle or afford.

3) The optimal process would take risk management into consideration and clarify which hospital or entity is legally responsible for the privileging decision.

4) Telemedicine practitioners should not benefit from a double standard that allows them to be privileged without the same rigor as other physicians who may also perform very few services in a particular hospital. The process of privileging should be looked at beyond the telemedicine context as a medical staffing issue.

5) A third party organization, similar to a credentials verification organization, should be able to privilege physicians. The Joint Commission is one organization that could perform this service.

6) The distant site should be permitted to privilege the physician if the physician has conducted a certain number of telemedicine procedures.

7) Small hospitals should be allowed to temporarily privilege a proctor to oversee the activities of a telemedicine practitioner to determine if that practitioner should be privileged.

8) The privileging rules required of hospitals should be extended to the ambulatory care setting.

Roundtable participants also discussed the importance of having complete information regarding a practitioner's practice history when making privileging decisions. Information sharing would make privileging easier and more accurate generally, not just in the telemedicine context. Several participants noted that professional liability insurance companies have access to a physician's aggregate experience and that a similar up-to-date database should be available to hospitals. This suggestion dovetails with similar suggestions made during the licensure discussion.

Not long after the Roundtable, on May 26, 2010, CMS proposed new regulations in the *Federal Register* addressing the credentialing and privileging of physicians and practitioners providing telemedicine

services.[159] The proposed rule would streamline the process that Medicare-participating hospitals use to credential and grant privileges to telemedicine physicians.[160] A hospital that provides telemedicine services to its patients via an agreement with a distant hospital would be allowed to rely upon information furnished by the distant hospital in making privileging decisions for the distant hospital's physicians and practitioners who provide the telemedicine services. Under this option, an originating hospital (usually a small or rural hospital) would be able to "rely upon the credentialing and privileging decisions of the distant-site hospital in lieu of the current requirements . . . which require the hospital's medical staff to conduct individual appraisals of its members and examine the credentials of each candidate in order to make a privileging recommendation to the [hospital's] governing body." In a thoughtful statement, CMS acknowledged that:

> [u]pon reflection, we came to the conclusion that our present requirement is a duplicative and burdensome process for physicians, practitioners, and the hospitals involved in this process, particularly small hospitals, which often lack adequate resources to fully carry out the traditional credentialing and privileging process for all of the physicians and practitioners that may be available to provide telemedicine services. In addition to the costs involved, small hospitals often do not have in-house medical staff with the clinical expertise to adequately evaluate and privilege the wide range of specialty physicians that larger hospitals can provide through telemedicine services.
>
> CMS has become increasingly aware, through outreach efforts and communications with the various stakeholders in the telemedicine community . . . of the urgent need to revise the CoPs in this area so that access to these vital services may continue in a manner that is both safe and beneficial for patients and is free of unnecessary and duplicative regulatory impediments.[161]

Comments on the proposed rule were due on July 26, 2010, and the final rule will be published in late Spring 2011. During the rulemaking

159. Proposed Changes Affecting Hospital and Critical Access Hospital (CAH) Conditions of Participation (CoPs): Credentialing and Privileging of Telemedicine Physicians and Practitioners, 75 Fed. Reg. 29,479 (proposed May 26, 2010) (to be codified at 42 C.F.R. pts. 482, 485).

160. *Id.* at 29,480 (stating that the two primary rationales for the proposed change are a desire to reduce the credentialing burden on telemedicine-using hospitals and a concern for patient safety).

161. *Id.*

process, CMS has allowed the Joint Commission to delay implementation of CMS credentialing and privileging standards for both general and critical access hospitals until March 2011.[162]

V. MEDICAL MALPRACTICE AND PROFESSIONAL LIABILITY INSURANCE

The third set of topics addressed by Roundtable participants were medical malpractice and professional liability insurance issues raised by telemedicine. To date, there has been a lack of telemedicine malpractice cases from which to draw ground rules about legal risks associated with telemedicine.[163] The majority of legal actions that have been associated with telemedicine were brought against providers who prescribed medication over the internet, rather than claims brought against providers for negligent care administered through telemedicine.[164] Although there are few legal cases involving telemedicine, there is a widespread assumption that telemedicine may pose new complications to traditional medical malpractice claims, in particular jurisdictional, choice of law, and procedural issues, as well as duty of care concerns. As the use of telemedicine grows, malpractice claims relating to telemedicine services may increase and, if so, these complications are likely to create a new body of law. As the specter of telemedicine-related claims grows, the professional liability insurance industry is studying how to write and price medical malpractice policies for telemedicine practitioners. The goal of this segment of the Roundtable was to identify issues that will be raised by telemedicine for medical malpractice law and for professional liability insurers and discuss whether there is a need to change the laws relating to medical malpractice in order to better protect patients and reduce liability risk for physicians.

The case study designed to stimulate discussion involved the provision of teleoncology consultation services by a medical center in one state to patients in another state.[165] The complicated fact pattern included a patient

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162. Joint Comm'n, *supra* note 151.

163. CHRISTA M. NATOLI, CTR. FOR TELEHEALTH & E-HEALTH LAW, SUMMARY OF FINDINGS: MALPRACTICE AND TELEMEDICINE 1–3 (2009), *available at* http://www.ctel.org/research/SummaryofFindingsMalpracticeandTelemedicine.pdf; *see also* Keith J. Kaplan, *Telecytopathology for Immediate Evaluation of Fine-Needle Aspiration Specimens*, 118 CANCER CYTOPATHOLOGY 115, 117 (2010) (observing that there is little case law addressing the liability issues that may arise in telemedicine). For a brief overview of the current medical malpractice climate as it relates to telemedicine, see generally Glenn W. Wachter, *Malpractice and Telemedicine Liability: The Uncharted Waters of Medical Risk*, RICKMORTIMER.COM (July 2002), http://www.rickmortimer.com/malpracticeandtelemedicineliability.htm.

164. *See* NATOLI, *supra* note 163, at 3–4 (citing cases).

165. *See infra* Appendix D.

(Kay) located in Oklahoma and diagnosed by her attending physician (Dr. Local) with lung cancer but also being seen by a consulting oncologist (Dr. Grand) located in Kansas, via a remote teleoncology clinic in her hometown. Dr. Grand prescribes a course of chemotherapy and asks to see Kay at three week intervals. Three months into her chemotherapy Kay's health starts to decline. Upon the recommendation of Dr. Local, Kay schedules an appointment with Dr. Grand but misses it because of a family emergency. Dr. Local is not informed of the cancellation. Kay sees Dr. Grand at her next regularly scheduled appointment. She is accompanied by a nurse from Dr. Local's office who has ten years experience working with cancer patients but no training in teleoncology. Kay tells Dr. Grand her symptoms. Dr. Grand asks the nurse to examine Kay for signs of lymphadenopathy and to palpate the patient's abdomen for signs of hepatomegaly (enlargement of the liver). During the exam, the internet connection is lost and video-conferencing is no longer possible. Dr. Grand and the nurse complete the consultation via cell phone. No lymphadenopapthy or hepatomegaly is reported. Dr. Grand does not get to "see" the patient since the video feed is lost. At the end of the consultation, Dr. Grand makes some changes to Kay's chemotherapy regime and asks to see her again in three weeks. Two weeks later Kay is rushed to the hospital and found to have lung cancer that has metastasized to the liver. Additionally, she is diagnosed with pneumonia and sepsis, resulting in multiple organ failure. Despite aggressive treatment, Kay dies a few days later.

Assuming something could and should have been done differently that would have saved Kay, the situation could lead to claims of malpractice.

The case raised numerous questions including:

1) Jurisdiction and choice of laws:

A) Which state's law applies – the law of the state in which the patient resides or the law where the physician is located?

B) Which state's standard of care applies?

2) Is the standard of care the same for an in-person consultation vs. a telemedicine consultation? Would it be helpful to establish telemedicine practice guidelines to help define or set the standard of care in a telemedicine consultation?

3) Are the requirements for informed consent different with telemedicine?

A) What additional or different information, if any, should patients have for a telemedicine consult, and who should make that determination?

B) Does a patient have to be informed that the provider might be out of state?

4) If telemedicine becomes widely available in rural areas, is a local physician negligent for not recommending it?

5) Who, if anyone, is responsible for the failure of the equipment or internet connection?

A) Can any steps be taken to minimize risks and responsibilities for communication failures – such as prohibiting telemedicine consultations when a communication failure could lead to serious injury or death?

B) What degree of internet availability should be required for telemedicine and who should make that determination? Does it depend on the type of telemedicine service being offered – i.e. a higher degree of availability for telesurgery vs. teleradiology?

As regards jurisdiction and choice of law issues, both Roundtable participants, Joseph McMenamin, MD, JD, and Natalie McSherry, JD, medical malpractice defense attorneys, agreed that the plaintiff would be able to sue the defendant in her home state, although the plaintiff might wish to sue in the consulting physician's state if its law is more favorable to her.[166] If both states have sufficient jurisdictional ties, "most courts [will] give deference to the plaintiff's choice of jurisdiction" and if jurisdiction is found, "that court will then apply general choice of law principles to determine the law as to standard of care."[167]

Whether telemedicine practitioners should be held to the same standard as others in their field or to a separate "telemedicine standard" is a source of debate. In written comments prepared for the Roundtable, Dr. McMenamin reviewed the literature on the issue and found a diversity of opinions.[168] He states that the matter will likely be a question of state law but, in most cases, the standard will be the same for telemedicine practitioners as it is for traditional practitioners.[169] He notes that "[i]n at least one state, the physician disciplinary authority has declared that treatment via the Internet or over the phone will be held to the same standard of care as is applied in traditional face-to-face settings."[170] Other

166. Joseph P. McMenamin, Response to Medical Malpractice Hypothetical (Apr. 16, 2010) (unpublished comments, University of Maryland School of Law Roundtable) (on file with authors); M. Natalie McSherry, Preliminary Responses to the Malpractice Case Study—Teleoncology (Apr. 16, 2010) (unpublished comments, University of Maryland School of Law Roundtable) (on file with authors).

167. McSherry, *supra* note 166.

168. *See* McMenamin, *supra* note 166, at 15–16 (noting the various standards of care that different states apply to practitioners of telemedicine).

169. *Id.* ("Whether 'tele-oncology' is a 'specialty' distinct from oncology will likely be a question of state law, but most likely it would be scrutinized the same way conventional oncology is.").

170. *Id.* at 16. The state to which Mr. McMenamin refers is Illinois. *See* John D. Blum, *Internet Medicine and the Evolving Status of the Physician-Patient Relationship*, 24 J. LEGAL MED. 413,

states, he points out, have argued that the practice of medicine over the Internet should be considered a separate specialty with a separate standard of care.[171] In her written remarks, Natalie McSherry states that "[t]he standard of care for most jurisdictions is that the health care provider will be held to the standard of a reasonably prudent practitioner of the same or similar background, acting under the same or similar circumstances" and that the issue for the courts will be how to interpret "same or similar circumstances" for physicians practicing telemedicine.[172] The limitations of the circumstances, she argues, will "establish some limits to the applicable standard of care."[173]

Both McMenamin and McSherry were skeptical of the benefit of guidelines for telemedicine practice, at least for practitioners, arguing that they can be prejudicial in an individual case and that "compliance with guidelines may not preclude a finding of liability."[174] The ATA published "Core Standards for Telemedicine" in 2007 but the "[s]tandards recognize and even reiterate the need for practitioners who use an approach 'significantly different from [the] guidelines' to provide documentation in the patient record 'adequate to explain the approach pursued.'"[175] The guidelines are primarily administrative and technical. Regarding clinical standards, the ATA recommends that telemedicine providers uphold their own professional standards for their discipline "considering the specific context, location and timing, and services delivered to the patient."[176] Some specialty areas have published specific standards for telemedicine, e.g., the Society of American Gastrointestinal and Endoscopic Surgeons published Guidelines for the Surgical Practice of Telemedicine in 2004.[177]

Roundtable participants agreed that patients be provided with information specific to telemedicine in the process of obtaining informed

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445–46 (2003) (discussing Illinois' guidelines for physicians using telecommunications to provide patient care).

171. *Id. See* Lisa Rannefeld, *The Doctor Will E-Mail You Now: Physicians' Use of Telemedicine to Treat Patients Over the Internet*, 19 J.L. & HEALTH 75, 100 (2004) (arguing that in some instances the standard of care for the practice of telemedicine should be higher than it is for traditional practice); Kelly K. Gelein, Note, *Are Online Consultations a Prescription for Trouble? The Uncharted Waters of Cybermedicine*, 66 BROOK. L. REV. 209, 252–53 (2000) (listing reasons why telemedicine should be considered a separate specialty).

172. McSherry, *supra* note 166.

173. *Id.*

174. McMenamin, *supra* note 166 at 19–20; *see also* McSherry, *supra* note 167 (suggesting that juries interpret published guidelines as setting a standard of care, making it more difficult for physicians who did not follow guidelines to defend themselves).

175. McSherry, *supra* note 166 (quoting AM. TELEMEDICINE ASS'N, CORE STANDARDS FOR TELEMEDICINE OPERATIONS (2007)).

176. *Id.*

177. *Id.*

consent. Others have pointed out that telemedicine raises questions both about the source and scope of informed consent. Professor Judith Daar and Dr. Spencer Koerner raise the question of who should "disclose and obtain consent for the initiation of a telemedicine consultation . . . the attending physician, the telephysician, or both?"[178] They assert that this responsibility may turn on the type of telemedicine being provided.[179] Generally, they argue that when a remote physician is talking directly to the patient or performing treatment remotely, the remote physician should obtain the informed consent.[180] However, they concede that the issue may be a matter of state law and refer to California's Telemedicine Development Act which provides that the attending physician is the one who must obtain the patient's informed consent.[181] Daar and Koerner see this as problematic in that it may mean that a non-specialist is discussing with the patient the risks and benefits of a procedure to be performed by a specialist without having the same knowledge or experience as the specialist.[182] On the other hand, they acknowledge the practicality of the California law in that it "places the burden of disclosure on the physician who is meeting face-to-face with the patient."[183]

The second informed consent issue raised by telemedicine is what the patient should be told. In addition to the risks of any proposed treatment or procedure, should the patient be informed of risks associated with providing the services remotely, e.g., interruption of lines of communication, "the failure of a fiber optic cable to deliver a readable image of the patient's injury. . .[or] the possibility that a cardiac monitoring mechanism will transmit the wrong readings to the interpreting physician?"[184]

Both McMenamin and McSherry add to these issues that the patient should be advised, when relevant, that the treating physician/consultant will be unable to perform a physical examination, and that the consultant may be out of state and will have to rely on information told to him or her by the patient and on-site providers.[185] McSherry also contemplates that

178. Judith F. Daar & Spencer Koerner, *Telemedicine: Legal and Practical Implications*, 19 WHITTIER L. REV. 3, 24 (1997).

179. *See id.* (discussing instances in which a patient's informed consent may or may not be required).

180. *Id.*

181. *Id.* at 26–27. *See also* CAL. BUS. & PROF. CODE § 2290.5(c) (West Supp. 2010) (describing the verbal and written consent that the practitioner with ultimate authority over the patient's care or primary diagnosis must obtain prior to delivering health care via telemedicine).

182. Daar & Koerner, *supra* note 178, at 27.

183. *Id.*

184. *Id.* at 26.

185. *See* McMenamin, *supra* note 166, at 22–23 (describing the risks that, without a physical examination, a physician will not be able to make any physical findings, and that problems may

> [b]efore agreeing to a telemedicine consult or care, the reasonable patient would probably want to be informed of the pros and cons of the care: what are the limitations, what are the benefits? Is there someone who could provide the same level of care personally in the same location as the patient is? If not, how far away is the nearest comparable provider? What happens if one or more of the avenues of communication/examination are lost? What is the availability of follow up or emergency care? Where are the patient's records to be kept, and by whom?[186]

Although most states have not yet addressed the issue, California has enacted a statute specifically addressing informed consent in the context of telemedicine, and listing the information that patients receiving telemedicine services must be told.[187]

Both McMenamin and McSherry also agreed that a court could hold a physician liable for failure to recommend telemedicine if his or her peers would have done so under similar circumstances.[188] This is consistent with

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also occur with the use of communication devices); McSherry, *supra* note 167 (noting that the patient may want to know both that the telephysician will not perform the examination in person and also where the physician is located in case the patient files suit against the physician).

186. McSherry, *supra* note 166.

187. *See* McMenamin, *supra* note 166. California law provides that:

> Prior to the delivery of health care via telemedicine, the health care practitioner who has ultimate authority over the care or primary diagnosis of the patient shall obtain verbal and written informed consent from the patient or the patient's legal representative. The informed consent procedure shall ensure that at least all of the following information is given to the patient or the patient's legal representative verbally and in writing:
>
> (1) The patient or the patient's legal representative retains the option to withhold or withdraw consent at any time without affecting the right to future care or treatment nor risking the loss or withdrawal of any program benefits to which the patient or the patient's legal representative would otherwise be entitled.
>
> (2) A description of the potential risks, consequences, and benefits of telemedicine.
>
> (3) All existing confidentiality protections apply.
>
> (4) All existing laws regarding patient access to medical information and copies of medical records apply.
>
> (5)Dissemination of any patient identifiable images or information from the telemedicine interaction to researchers or other entities shall not occur without the consent of the patient.

CAL. BUS. & PROF. CODE § 2290.5(c) (West Supp. 2010).

188. *See* McNenamin, *supra* note 166, at 29–30 (explaining that a physician's liability is evaluated via a comparison to how the physician's colleagues would have acted under the same circumstances); McSherry, *supra* note 166 (suggesting that a local doctor may breach the standard of care by not recommending telemedicine where it is available).

court decisions that have found a health care provider liable for failure to use a new technology even if it was not the prevailing professional practice.[189] In order to prevail, however, a plaintiff would have to show that use of telemedicine would have made a difference in the plaintiff's outcome.

There was also agreement on the part of the malpractice attorneys that liability for equipment failure would generally lie with the "entity that established and services the connection" and that such liability should be addressed in any agreements that the entity enters into with providers. McSherry asserts that such allocation of liability should also be disclosed to patients and that if it is not, "issues of apparent agency would most likely arise, resulting as a practical matter in liability for all involved."[190]

There was a general consensus among Roundtable participants that telemedicine may not present many unique challenges in the area of medical malpractice. In terms of jurisdiction, there are numerous situations in which a plaintiff can sue for damages in more than one state. For instance, in a product liability case, a plaintiff can sue in the state he or she resides or in the state the product is manufactured.[191] However, the participants did raise issues relating to medical malpractice and telemedicine that may require additional study and provided some suggestions to practitioners providing telemedicine services:

1) Large academic medical centers are often located in cities which tend to be more plaintiff friendly than rural areas. This may be of concern to practitioners in urban hospitals and their insurers.

2) Informed consent should be tailored to specific telemedicine consults but should generally:

A) Include a choice of laws provision;

B) Set forth which state's standard of care applies;

C) Clarify the responsibility of provider, originating site, remote site, and all other parties involved in a telemedicine transaction; and

3) Inform people that their provider may not be located in the same location as the patient.

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189. *See* McMenamin, *supra* note 166. As example, Dr. McMenamin cites Helling v. Carey, 519 P.2d 981, 982–83 (Wash. 1974) (en banc) (holding an ophthalmologist liable for failing to diagnose glaucoma in a young patient even though reasonably prudent ophthalmologists did not test for that condition at the time).

190. McSherry, *supra* note 166.

191. *See generally* Gary Knapp, Annotation, *Forum Non Conveniens in Products Liability Cases*, 76 A.L.R. 4th 22 (2010) (reviewing law relating to plaintiffs' choice of forum in products liability cases).

4) Because of variations in technology a hospital could be liable for using an earlier or less sophisticated technology where a specific standard is not spelled out.

5) Breaches in privacy may be an issue in telemedicine especially if conducted with low-security devices such as cell phones, Skype, and email. Providers should consider using appropriate encryption technology.

As to whether there is a need to modify laws to address fear of liability related to telemedicine practice, Roundtable participants did not seem to think such changes were necessary. Proposals such as a no-fault fund were thought to be implausible for claims of negligent medical care, although there was some acknowledgement that if the field began to generate a significant number of malpractice claims it might be helpful to establish such a fund for injuries or damages "arising solely from technology failures." McSherry adds that concerns about liability could also be addressed statutorily if and when states recognize and allow interstate practice, if the statutes allowing interstate practice also address issues such as choice of laws, licensing reciprocity, and/or limitations on liability for technical failures.[192]

VII. MEDICAL PROFESSIONAL LIABILITY (MALPRACTICE) INSURANCE

Another issue that may affect the widespread dissemination of telemedicine is the availability of medical professional liability (MPL) insurance coverage for the practice. The industry is still relatively young so there is not a great deal of published literature about liability risks associated with telemedicine or how the professional liability insurance industry is responding to the practice. There are few published case opinions in which a telemedicine practitioner has been sued and some argue that telemedicine technology may actually reduce the risk of liability "since two or more practitioners working together may be more comprehensive than one working alone."[193] In 1999, the Physician Insurers Association of America (PIAA) surveyed its members regarding telemedicine coverage and has some preliminary data from the industry.[194] The survey findings indicated that eighteen of nineteen PIAA member companies surveyed said

192. *See* McSherry, *supra* note 166 (stating that if telemedicine between states is not being pursued for fear of liability, statutes specifically addressing the liability questions should be enacted).

193. Joseph C. Kvedar & Eric R. Menn, *Developing Standards of Care Specific to Telemedicine* 19 FORUM, Sept. 1998, at 6, 7.

194. Lori A. Bartholomew, Physician Insurers Ass'n of Am., Malpractice Insurance and Telehealth (presentation available at http://www.nga.org/Files/pdf/0702ehealthhcpbartholomew.pdf).

they had a provision to provide MPL coverage for telemedicine.[195] Perhaps of more interest, thirteen of those eighteen companies said they selectively denied MPL coverage for telemedicine.[196] Reasons for denial included the patient or service being provided was not located in a state where the insurance company was licensed,[197] the physician or exposure presented an above average risk,[198] and the treatment exchange venue was undesirable, i.e., had an above average lawsuit rate.[199] Also, five of the eighteen companies providing some coverage for telemedicine retained the right to place a surcharge on the physician's premium.[200] Such a surcharge may be levied where the perceived risk is greater, i.e., the physician is providing services to a state without damage caps. Finally, five of the eighteen companies covering telemedicine said they had at least one lawsuit in the area.[201] All of them were radiology cases.[202] In a few of these cases the physician was reading films from an out-of-state patient and was not licensed to practice in the patient's state.

Because telemedicine is a relatively new field, it is still unclear whether the professional liability insurance industry will treat telemedicine differently from other medical practices. If telemedicine is treated differently, premium rates may be increased and additional types of insurance may be required. Parul Divya Parikh, Director of Research at PIAA, participated in the Roundtable and has studied the issue of telemedicine from the insurance perspective. She states that with any medical advancement, exposure to risk must be understood to prepare for potential pitfalls; the same is true for telemedicine.[203] Telemedicine presents unique challenges for MPL insurers in the following ways:

1) Litigation issues: telemedicine may introduce new dynamics into malpractice litigation such as new statutes, unique judge and jury characteristics, and environmental factors such as rural vs. urban concerns.

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195. *Id.*
196. *Id.*
197. *Id.*
198. *Id.*
199. *Id.*
200. *Id.*
201. *Id.*
202. *Id.*
203. Parul Divya Parikh, Medical Liability Case—Teleoncology (Apr. 16, 2010) (unpublished comments, University of Maryland Law Roundtable) (on file with authors) (suggesting what telemedicine risk management should include, e.g., accounting for the failure of technology, informing the patient of their own responsibility, and ensuring that a patient can visit the ER if necessary).

2) Quality of medicine: malpractice cases may raise questions of how telemedicine improves or lessens quality of care if the practitioner cannot see or touch the patient in person.

3) Quality of technology: malpractice cases may raise questions relating to the quality of the technology used in a telemedicine consult such as how the quality of the cameras/monitors used compares to viewing bruising/sores/conditions in person.

4) Training: malpractice cases may raise questions as to the training of all the providers participating in the consultations and the confidence practitioners have in using telemedicine techniques.[204]

Others at the Roundtable also weighed in on this question. Dr. McMenamin pointed out that "[c]arriers may have particular difficulty in assessing risk of suit in locales difficult from the insured's."[205] Given that most medical professional liability companies operate in only one or a few states, they may not know the legal environment in other states in which their insured may want to provide services. This may present a greater risk for them. Without knowing the local attorneys they will be unable to assess their competency to defend against claims. As a result, MPL insurers may suffer more losses or agree to higher settlements. Providing coverage in more states also means "increased uncertainty about the choice of law in complex interstate matters."[206]

PIAA is continuing to collect data on telemedicine practice and associated liability claims. Ms. Parikh confirmed that, to date, there have been very few cases of litigation relating to telemedicine and stated that she is not aware of insurers presently excluding coverage of telemedicine from their policies or charging higher rates because a practitioner uses telemedicine. Over time, however, as the use of telemedicine grows, the industry will respond if cases against telemedicine practitioners create an additional burden on insurers. In the meantime, she advises that telemedicine providers ensure that their insurance covers telemedicine services and that practitioners ensure that their professional liability insurance covers them in all the states in which they practice medicine – in person or via telemedicine.

Both medical malpractice and MPL insurance are likely to be affected by the state board of medicine views on site of practice and the licensure model adopted for telemedicine in a given state (or nationally). For example, in the Roundtable case study, if the Board of Medicine in

204. *Id.*

205. McMenamin, *supra* note 166, at 26.

206. Gilman, *supra* note 126, at 101.

Oklahoma were consulted, it "would likely take the position that by 'seeing' Kay in Oklahoma and by treating her there, Dr. Grand was practicing in Oklahoma."[207] Thus, Dr. Grand would need to be licensed in Oklahoma in order to avoid the illegal practice of medicine and to be "subjected to local jurisdiction and practice standards which safeguard against negligent conduct." John Blum raised the argument made by some that in order to avoid such results

> the law should be reinterpreted so that the electronic movement is not from physician to patient, but the reverse, from patient to physician. As such, the jurisdiction in which the [telemedicine] doctor resides and practices, where he/she is licensed, becomes the situs of control. Such an interpretation would mitigate the need for an additional license, retain the current status quo and assist providers in application of practice standards they are familiar with.[208]

Although this might make things more difficult for patients wishing to bring a malpractice claim, Blum suggests that this could be dealt with "via some type of [alternative dispute resolution] agreement."[209]

Medical professional liability insurers will also need to think through how they will respond to the adoption of different licensure models by various states. If a group of states agrees to accept the licensure decisions of each other (in a reciprocal agreement) will the insurer feel the need to be licensed in each of the states where the insured is "practicing?"

VIII. CONCLUSION

Telemedicine is moving ahead on many fronts – the technology is there, the willingness of practitioners to provide and patients to accept telemedicine is there, and even the funding is there. However, in some ways, the law is not there. The legal impediments that face telemedicine are not capricious – requirements for licensing, credentialing, and privileging were put in place, for the most part, to ensure that patients are provided appropriate care by properly trained physicians. The law is constantly evolving but, in the case of the rapidly growing area of telemedicine, may not be evolving fast enough to allow the field to grow. Given telemedicine's promise of providing cost-effective care to underserved populations, it may be time to give the law a little push in the right direction. The purpose of the Roundtable was to bring a diverse group of high level telemedicine

207. McMenamin, *supra* note 166, at 1.

208. Blum, *supra* note 120.

209. *Id.*

stakeholders together to meet, issue spot, and discuss the principles that should underlie legal reform aimed at encouraging telemedicine. The issues and principles identified in this paper are designed to further the dialog in the hope that the promise of telemedicine is not dimmed by rules that were designed before a doctor and patient could meet virtually.

Legal Obstacles to Telemedicine Roundtable List of Participants

Physician Licensure Stakeholders

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APPENDIX A: LICENSURE CASE STUDY, TELEPSYCHIATRY

A major academic medical center in a large western city (WAMC) has received significant grant funding (state and federal) to develop a Center for Telepsychiatry to provide telepsychiatry services to individuals in underserved rural communities throughout the western United States. Via videoconferencing equipment that will connect patients at remote local hospital sites to the Center, psychiatrists will provide psychiatric consultation, assessment, diagnosis, therapy, and treatment (including prescription of pharmaceuticals). The goal of the Center is to meet the vast unmet need for mental health services in rural communities.

WAMC's Director of Telemedicine is aware that medical personnel providing services to remotely-located patients must be licensed to practice medicine in the states in which the patient resides. Given the size of the program, the Director of Telemedicine is seeking ways to minimize the burden of requiring all WAMC providers to apply for full and unrestricted licensure in each state in which the Center will provide services. The Director of Telemedicine has arranged a meeting with the directors of the state medical boards as well as the state's U.S. Senators. He is aware that there are several models of health provider licensure that are being used or discussed in relation to telemedicine. They are outlined in an AMA white paper on the topic (available at this link: http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/young-physicians-section/advocacy-resources/physician-licensure-an-update-trends.shtml).

Given the multi-state scope of the WAMC's practice, the Director of Telemedicine tends to support a national licensure process for telemedicine practitioners. This approach, advocated by scholars such as Peter Jacobson, would require a single license for the practice of telemedicine.[210] Two approaches to national licensure are possible. The first approach would entail complete federalization of licensure for telemedicine, which would not only establish federal administration of telemedicine licensing, but would also preempt all state regulatory functions in the practice of telemedicine. The second is a hybrid approach in which granting telemedicine licenses would occur at the federal level, but the states would

210. Jacobson, Peter D. (with Selvin, E.), "Licensing Telemedicine: The Need for a National System," Telemedicine Journal and E-Health, Vol. 6, Pp. 429-439, 2000.

retain authority over the practice of medicine and the ability to enforce standards of practice.

Consider the above facts as a backdrop to the questions below:

What are the major issues of concern underlying physician licensure?

Will any of the models noted in the AMA white paper inhibit disciplinary actions against physicians? Consider the issue of who has jurisdiction to conduct investigation if an injury occurs – the state in which the patient is located? The state in which the physician is located? Where the treatment took place? How will subpoenas and discovery be handled?

Which model of licensure best ensures patient safety? What relevance do the different models of licensure have to standard of care determinations?

APPENDIX B: CREDENTIALING CASE STUDY, TELEPSYCHIATRY

A major academic medical center in large western city (WAMC) has received significant grant funding (state and federal) to develop a Center for Telepsychiatry to provide telepsychiatry services to individuals in underserved rural communities throughout the western United States. Via videoconferencing equipment that will connect patients at remote local hospital sites to the Center, psychiatrists will provide psychiatric consultation, assessment, diagnosis, therapy, and treatment (including prescription of pharmaceuticals). The goal of the Center is to meet the vast unmet need for mental health services in rural communities.

In addition to state licensure, another issue of concern for the Director of Telemedicine at WAMC is that of credentialing. The process of credentialing refers to the institutional policy and procedures that determine whether a health care professional has the qualifications to be employed or be granted privileges to practice at the institution. This information is used in employment decisions, in granting clinical privileges and in the establishment of a practitioner's scope of practice (the range of services an individual may perform).

This aspect of health professional regulation is not routinely conducted at the state or Federal level unless the professional is primarily employed by the Federal or state government. In some instances, however, state medical practice acts may specify requirements for credentialing.

Traditionally the institutions in which the health professional is providing the service have taken this responsibility. In addition, nationally accepted standards are provided by the Joint Commission. Under the concept of "credentialing and privileging by proxy," the Joint Commission accepts the credentialing and privileging decisions of another Joint Commission accredited facility as a means of vetting telehealth practitioners so that they can receive the appropriate clinical privileges necessary to deliver patient care, including sub-specialty care.

This Joint Commission policy conflicts with longstanding Medicare regulatory requirements and their accredited hospitals have always been at risk of citation by CMS as a result of Medicare complaint surveys conducted by the states for CMS in these hospitals. This has, in fact, happened in some cases.

As of July 15, 2010, the Joint Commission is required to enforce the longstanding CMS credentialing and privileging requirements found in the Medicare Hospital Conditions of Participation (CoPs) by virtue of their

deemed status approval. Currently the CMS position is that all Medicare practitioners must undergo credentialing and privileging by each originating site (the hospital where the patient is located). Privileging decisions are always specific to a particular hospital, since they must take into account not only the physician/practitioner's qualifications, but also the services offered by the hospital. CMS will be clarifying that hospitals may accept credentialing packages from other Medicare-participating hospitals to inform their privileging decisions. Since the gathering of credentials is the more labor-intensive and potentially duplicative component of the credentialing and privileging process, CMS believes this clarification is expected to reduce potential burdens on hospitals. CMS indicates that critical access hospitals (CAHs) are already governed by CoPs that are designed with the particular needs of small rural hospitals in mind and has stated that these CoPs allow these hospitals to have an agreement with an outside entity to credential physicians. Under prescribed circumstances, the outside entity could even be the distant site (the facility where the telemedicine practitioner is located). The CAH must still, however, render a privileging decision for each physician/practitioner who provides services to the CAH's patients.

The House health care reform bill contained a provision that would require CMS to issue guidance concerning the ability of hospitals and CAHs to accept a credentialing package from another Medicare-certified hospital or CAH with respect to a physician/practitioner providing telehealth services. Under this amendment, hospitals, and CAHs would still have been required to make privileging decisions. On the Senate side, Senator Udall introduced an amendment[211] to the Senate health care reform bill that would require CMS to develop regulations to implement both a process for telehealth practitioners to be credentialed and privileged by proxy, as well as a "hold harmless" criteria for those institutions using credentialing and privileging by proxy. The "hold harmless" criteria would remain in effect until CMS's regulations regarding remote credentialing and privileging were finalized. Neither the House nor Senate provisions appeared in the final Senate bill.

Given the size of the program, the Director of Telemedicine at WAMC is seeking ways to minimize the burden of requiring all WAMC providers to be credentialed in all the remote hospital sites in which they consult with patients. The Medical Director at WAMC wants to ensure that patients in

211. Senator Udall introduced S. 2741, the *Rural Telemedicine Enhancing Community Health* (TECH) Act of 2009. He also included the credentialing and privileging provisions in that bill as an amendment to the Senate health care reform amendment as SA 3136.

remote sites receive appropriate care and argues that the hospitals in which the patients are located may be in the best position consider a physician's qualifications, scope of services that will be provided and the type of patients seen at the rural location. The Director of Telemedicine at WAMC has arranged a meeting with the directors of the state medical boards as well as the state's U.S. Senators. What should he recommend?

Consider the above facts as a backdrop to the questions below:

What are the pros and cons of credentialing by proxy?

Under which model of credentialing is patient safety best protected – traditional or by proxy?

What consequences will result from CMS's decision to cite hospitals and CAHs that make credentialing and privileging decisions for telemedicine practitioners by proxy outside the approved CMS policy?

Are rural or critical access hospitals in a position to provide effective credentialing of telemedicine practitioners?

APPENDIX C: MALPRACTICE CASE STUDY, TELEONCOLOGY

Major Academic Medical Center (MAMC) in Grandville, Kansas offers teleoncology consultation services to patients in rural Oklahoma via a network of a dozen remote consultation sites. MAMC offers regularly scheduled teleoncology sessions and "as needed" consultations if necessary. Patients are referred to MAMC's remote sites via their local attending physicians. Consultations take place using videoconferencing equipment that connects the remote site to MAMC via a T1 network connection leased from the local telecom company. The videoconferencing equipment is connected to the emergency generators at both the remote site and MAMC (to protect against power failures at either end, but there is no alternative T1 connection available in the remote site in the event of the telecom line going down.

Prior to the initial teleoncology consultation, the attending physician transfers all pertinent information, including letters and hospital discharge summaries, and laboratory, radiography, and pathology reports to MAMC. These are reviewed by the consulting oncologist who will conduct the teleoncology session. A nurse employed by MAMC but located at the remote site and/or the attending physician attends the remote teleoncology sessions with the patient. The decision regarding who will be present with the patient at the session is made by the attending physician.

Upon the patient's arrival at the remote consultation site, the MAMC nurse introduces the patient to the system and asks the patient to sign a comprehensive informed consent agreement. The patient is then seated in a telemedicine examination room in front of a large television monitor. Above the monitor is a television camera that is remotely operated by the consulting physician. At the outset of the consultation, the consulting physician takes a medical history. If and when required, the consulting physician conducts a physical examination with the local nurse or attending physician serving as a proxy examiner. A specially adapted electronic stethoscope is used to transmit respiratory and cardiac sounds over the network. The camera can be positioned to evaluate the patient's gait and any signs of abnormal movements, such as tics or tremors. In addition, the camera lens can be focused from a distance to assess high quality detail of the patient's appearance, such as skin condition (i.e., petechiae). The camera can also be attached to basic bedside instruments, such as an otoscope or opthalmoscope, so that the consulting physician can evaluate the patient's ears, eyes, nose, and throat from the remote location.

Questions and concerns are elicited from both the patient and the local nurse or physician at this time. Appropriate diagnostic studies and therapeutic interventions are discussed with the remote consultant, but all prescriptions for medication and diagnostic tests are written by the local providers.

A patient, Kay, lives in rural Oklahoma. She was diagnosed by her attending physician, Dr. Local, with lung cancer and, upon Dr. Local's recommendation, has been participating in MAMC's remote teleoncology clinic in Kay's hometown. Kay's consulting oncologist at MAMC is Dr. Grand. After the initial consultation and review of the labs and radiologic studies that have been done to date, Dr. Grand prescribed a course of chemotherapy to Kay and has asked to see Kay at three-week intervals.

Three months into her chemotherapy, Kay calls Dr. Local to report that she is feeling more fatigued and sicker than she has felt since starting treatment. She has also lost a significant amount of weight. He tells her to schedule a special remote session to discuss her symptoms with Dr. Grand. Kay schedules a special session but misses it because of a family emergency. Neither Kay nor MAMC inform Dr. Local that Kay missed the special session, and Dr. Local does not follow up to check if she made the special appointment. At her next regularly scheduled teleoncology session, Kay is accompanied by a nurse from Dr. Local's office because the MAMC's nurse is on leave. This nurse has 10 years experience working with cancer patients but no training in teleoncology. Kay tells Dr. Grand about her symptoms. Dr. Grand asks the nurse who is accompanying Kay to examine the patient for signs of lymphadenopathy and to specifically to palpate the patient's abdomen for any signs of hepatomegaly (enlargement of the liver). During the examination, the internet connection is lost, and videoconferencing is no longer possible. Dr. Grand and the nurse complete the consultation via cell phone. No lymphadenopathy or hepatomegaly was reported. Dr Grand does not get to "see" the patient since the video feed is lost. At the end of the consultation, Dr. Grand makes some changes to Kay's chemotherapy regime and says he will discuss her progress at their next consultation in three weeks (noting that Kay should call the remote center or her attending physician if she experiences any distress in the meantime).

Two weeks after this consultation, Kay is found at home unconscious by her husband and is brought by ambulance to a local hospital and subsequently transferred to MAMC via helicopter. At MAMC, she is examined by Dr Grand. After the examining the patient himself for the first time and ordering the appropriate labs and studies, Dr Grand diagnoses the patient with lung cancer that has now metastasized to the liver.

Additionally, Kay is diagnosed with pneumonia and sepsis, resulting in multiple organ failure. Despite aggressive treatment in the ICU and being placed on a respirator, Kay dies a few days later.

Assuming something could and should have been done differently that would have saved Kay – this situation could lead to claims of malpractice.

Consider the above facts as a backdrop to the questions below:

Can Kay's estate sue Dr. Grand in Kay's home state? Whose law regarding standard of care applies?

With which of the providers has Kay formed a provider-patient relationship that might be the basis of a malpractice suit?

Who (including MAMC) is liable for an inaccurate diagnosis or inappropriate treatment? Is the standard of care the same for an in-person oncology consultation vs. a teleoncology consultation? Would it be helpful to establish telemedicine practice guidelines to help define/set the standard of care in a telemedicine consultation?

Are the requirements for informed consent different with telemedicine? What additional or different information, if any, should patients have for a telemedicine consult, and who should make that determination? Does a patient have to be informed that the provider might be out of state? If so, why?

Are a patient's responsibilities vis-à-vis their own treatment the same with in-person oncology treatment vs. teleoncology treatment for purposes of contributory negligence?

Does telemedicine present unique challenges for medical professional liability insurers?

If fear of liability inhibits arrangements such as the MAMC teleoncology clinic – what regulatory or legislative actions can be taken to handle this risk? Is this an area where a no-fault compensation fund might be appropriate?

If telemedicine becomes the standard of care in a rural area such as Kay's is a local physician negligent for not recommending it?

Who, if anyone, is responsible for the failure of the equipment or internet connection? Can any steps be taken to minimize risks and responsibilities for communications failures – such as prohibiting telemedicine consultations when a communication failure could lead to serious injury or death? What degree of internet availability should be required for telemedicine and who should make that determination? Does it depend on the type of telemedicine service being offered – i.e. a higher degree of availability for telesurgery vs. teleradiology?