

NOVEMBER 15, 2017 | NUMBER 826

## Liberating Telemedicine

### Options to Eliminate the State-Licensing Roadblock

BY SHIRLEY V. SVORNY

#### EXECUTIVE SUMMARY

One of the most promising areas of medical innovation is the expansion of telemedicine, where medical professionals treat patients across great distances using electronic communications. A significant barrier to telemedicine is the requirement that physicians obtain licenses from each state in which their current or potential patients are, or may be, located.

The best option is to eliminate government licensing of medical professionals altogether. Eliminating licensing would eliminate these barriers without compromising quality. State medical licensing boards often place the interests of physicians ahead of patient safety. Health insurers, medical malpractice liability insurers, hospitals, and others—many of whom are liable when a physician injures a patient, and all of whom seek to protect their reputations—would continue to protect patients by doing periodic, substantive reviews of physician skills and qualifications.

A second-best way to eliminate barriers to affordable, quality care would be for Congress to redefine the location of the interaction between patients and physicians

from that of the patient to that of the physician. Digital patients would be no different from patients who travel across state lines or national borders for care. A physician would need only one license, and would be responsible for only one set of licensing laws governing the practice of medicine—that of his or her home state.

A third option is for individual states to open their markets to physicians licensed in other states, or to join other states in reciprocal agreements to honor each other's licenses.

Finally, the federal government could offer national telemedicine licenses, an option that would require a new federal agency, additional costs, and—like existing state licensing boards—would be vulnerable to capture by physician groups that seek to erect barriers to telemedicine.

One supposed reform—the Interstate Medical Licensure Compact—does not increase license portability. Under the Compact, physicians who wish to treat patients in other states still must obtain separate licenses from each of those states. The Compact merely attempts to streamline the process of applying for multiple licenses. State medical boards designed the Compact to protect the status quo.

“Telemedicine enables patients to seek care from providers whom they would otherwise need to travel to see, including top specialists who may be located thousands of miles away, and it offers life-saving assistance in emergencies.”

*Fifty years in farming had given Tom Soukup a few brushes with his own mortality, but after a cow pinned him against a wall, death felt closer than ever. He lay on the muddy ground and began to pray, every gasp feeling like a stab to the chest.*

*Although the nearest clinic was only a 10-minute drive from Soukup's South Dakota ranch, the doctor on duty did not have much experience treating such injuries. He had rarely inserted chest tubes and wanted guidance from another physician without having to consult a medical reference book.*

*So the clinic in tiny Wagner connected by video to doctors in Sioux Falls, who talked him through the steps to stop the bleeding and drain the blood collecting inside the 72-year-old man back in March 2010.*

*It's a system that's gaining wider use across the rural U.S., where there are often few primary care doctors and even fewer emergency rooms. Although so-called telemedicine has been around for at least two decades, the practice fast is becoming a standard feature in many small communities, even as other public services such as police and fire protection decline.<sup>1</sup>*

*Argus Leader, Sioux Falls, June 8, 2014*

## INTRODUCTION

One of the most promising areas of medical innovation is the expansion of telemedicine, where medical professionals treat patients across great distances using electronic communications. Telemedicine enables patients to seek care from providers whom they would otherwise need to travel to see, including top specialists who may be located thousands of miles away, and it offers life-saving assistance in emergencies. Telemedicine can enhance the productivity of physicians and even patients, such as when workers avoid lost work time by substituting convenient, on-demand video interactions with a physician for a routine office visit. While telemedicine is growing in use and acceptance, state licensing laws keep it from reaching its full potential. This paper

examines policy options that would allow interstate telemedicine to flourish.<sup>2</sup>

The main barrier to telemedicine is the requirement that physicians obtain licenses from each and every state in which their current or potential patients are, or may be, located. The best option is to eliminate state licensure of medical professionals altogether. Eliminating licensing would eliminate these barriers without compromising quality. Even without government licensing, health insurers, medical malpractice liability insurers, hospitals, and others—many of whom are liable when a physician injures a patient, and all of whom seek to protect their reputations—would continue to protect patients by doing periodic, substantive reviews of physician skills and qualifications.<sup>3</sup> In contrast, state medical-licensing boards often place the interests of physicians ahead of patient safety. Alternatively, individual states could open their markets to physicians licensed in other states. In 2016 the Florida Senate scaled back a proposal that would have made Florida the first state to move on this front.<sup>4</sup>

Given the lack of progress at the state level, a second-best, and perhaps quicker, way to eliminate barriers to affordable, quality care would be for Congress to redefine the location of the interaction between patients and physicians from that of the patient to that of the physician. Digital patients would be no different from patients who travel across state lines or national borders for care. A physician would need only one license, and would be responsible for only one set of licensing laws governing the practice of medicine—that of his or her home state.

Finally, the federal government could offer national telemedicine licenses, an option that would require a new federal agency, additional costs, and—like existing state licensing boards—would be vulnerable to capture by physician groups that seek to erect barriers to telemedicine.

One supposed reform—the Interstate Medical Licensure Compact—offers little to move interstate telemedicine forward. The federal government funded the Interstate Medical

Licensure Compact with the goal of enhancing license portability—the ability to practice in multiple states based on one’s home-state license. Yet the Compact does not increase license portability. Under the Compact, physicians who wish to treat patients in other states still must obtain separate licenses from each of those states. The Compact only attempts to streamline the process of applying for multiple licenses. State medical boards designed the Interstate Medical Licensure Compact not to disrupt the status quo, but to protect it.

## TELEMEDICINE TODAY

Telemedicine can be as simple as a video or telephone consultation with a physician or nurse, or as sophisticated as using “robots”—roving computers with cameras, microphones, and speakers—in emergency departments and intensive-care units to offer patients remote access to specialists in cardiology, mental health, neonatology, neurology, pediatrics, and other areas of medicine.<sup>5</sup> Store-and-forward telemedicine—where providers send scanned images and information to distant experts for remote evaluation—is useful in radiology, pathology, dermatology, ophthalmology, and other specialties. Remote reading is available around the clock.<sup>6</sup>

The list of areas where telemedicine can improve outcomes is long and is expanding rapidly. It includes emergency stroke intervention,<sup>7</sup> military applications (where it can eliminate risky patient evacuations),<sup>8</sup> diabetic monitoring and care,<sup>9</sup> replacing on-call physicians,<sup>10</sup> delivering care to Parkinson’s patients,<sup>11</sup> mental health services,<sup>12</sup> and many other situations. Broader use of telemedicine is likely to improve outcomes for patients with rare diseases by allowing physicians who specialize in those diseases to treat a cohort of similar patients across the country or around the world.

The potential for telemedicine to reduce the cost of health care by monitoring individuals living with common chronic diseases is substantial, as chronic disease is expensive to treat and poor compliance with physician recommendations

is the norm.<sup>13</sup> Studies of the impact of the use of telemedicine to treat chronic conditions find lower mortality, reduced hospital admissions, lower costs, and increased patient satisfaction.<sup>14</sup>

Telemedicine can even assist school districts when it comes to the cost of school nurses. A program in South Dakota uses telemedicine to resolve the high cost of having a nurse at every school.<sup>15</sup>

Telemedicine has been a boon to rural communities. In emergent care, telemedicine provides immediate access to specialists, allowing patients in remote areas to receive prompt treatment. In nonemergent situations, it offers day-to-day and specialty care without long commutes.<sup>16</sup> Getting physicians to move to rural areas is a perennial problem. Telemedicine is giving rural residents broader and more convenient access to physicians. Where it was once common for residents of a rural Alaska town to fly to a nearby community to see a physician, now a cart equipped with a webcam and scopes eliminates the trip.<sup>17</sup>

## A Substitute for Traditional Office Visits

Telemedicine offers a convenient substitute for traditional office visits.<sup>18</sup> Video or phone appointments save time and money for consumers and providers. Based on its experience, Kaiser Permanente estimates that about a quarter of its current appointments could take place via telemedicine rather than in-person office visits. Kaiser’s tally of the benefits includes reduced commutes (saving time and reducing carbon emissions), reduced medical facility construction, expanded access to timely care, and increased workplace productivity.<sup>19</sup>

Capital is flowing into innovative telemedicine efforts.<sup>20</sup> Companies such as American Well supply Web and mobile platforms for video visits. American Well partners with health plans and pharmacies (including CVS, the largest U.S. chain) to facilitate access to on-demand video visits. American Well also offers administrative, security, and recordkeeping support services.

UnitedHealthcare, the largest U.S. private insurer, has contracted with Doctors on Demand, NowClinic, and American Well to

“The list of areas where telemedicine can improve outcomes is long and is expanding rapidly.”

“Telemedicine can make health care more convenient and affordable, even for consumers whose insurance companies do not cover virtual doctor visits.”

offer “on-demand online access to a physician via mobile phone, tablet or computer 24 hours a day,” and has added a “network of care providers offering video-based virtual visits.”<sup>21</sup> Wellpoint’s Anthem Blue Cross offers its LiveHealth Online services to its insureds.<sup>22</sup>

Telemedicine can make health care more convenient and affordable, even for consumers whose insurance companies do not cover virtual doctor visits. Large, direct-to-consumer service providers include American Well, MDLIVE, Doctor on Demand, and Teladoc.

Access to virtual doctor visits has the added benefit of improving labor productivity by eliminating commute and wait times and the related costs associated with missing work. Seventy percent of large employers surveyed by the National Business Group on Health in 2016 reported offering telehealth benefits. This is up from 48 percent in 2015. The National Business Group on Health expects telehealth benefits to be nearly universal by 2019.<sup>23</sup>

Towers Watson, a business management consulting firm, estimates that an average employer would profit from including telemedicine in employee benefits if more than 7 percent of those insured were to use it. With savings on emergency room, primary care, and urgent care visits, Towers Watson estimates that employers as a whole could save \$6 billion annually.<sup>24</sup>

Telemedicine offers health care professionals flexibility to choose the hours they wish to work. Providers can work from home via a home-based telemedicine station.<sup>25</sup> Physicians, pharmacists, advanced practice nurses, or other providers need not be located in the specific area they serve.

Telemedicine reduces waiting times for care. Users of teleneurology for strokes can bring a remote physician to examine a patient within 3 to 6 minutes.<sup>26</sup> According to Dr. Todd Samuels, a board-certified neurologist, he can “provide much more timely care as a teleneurologist than . . . as a bedside neurologist.”<sup>27</sup> Remote consultants can serve multiple facilities and distant communities 24 hours a day, 7 days a week. Teladoc reports a median physician response time of less than 10 minutes.<sup>28</sup>

## Quality Concerns

One concern is that teleprofessionals could fail to refer patients to a nearby physician when a virtual exam is not sufficient. Yet telemedicine providers face the same incentives not to miss diagnoses that in-person physicians do. The threat of liability is a powerful force for quality assurance. Telemedicine providers who fail to refer when appropriate or who make other mistakes will find themselves subject to liability claims and higher medical malpractice liability insurance premiums.

Medical malpractice liability insurers likewise face the same incentives to monitor and promote the quality of care by telemedicine providers as they do with other providers they insure. Malpractice insurers educate providers on how to reduce the risk of patient injury by practicing safer medicine.<sup>29</sup> They also reward providers who comply with quality programs by offering them lower insurance rates. Finally, it is not uncommon for carriers to write specific standards into medical professional liability insurance contracts with the providers they insure, and to insist on compliance in exchange for insurance coverage.<sup>30</sup>

Brand-name reputation offers further patient protection. Companies invest substantial resources in promoting their brands. Teladoc advertises that all of its doctors are board-certified in their medical specialties, that its physician credentialing process meets National Committee for Quality Assurance standards, and that the company has been on the receiving end of “zero malpractice claims.”<sup>31</sup> Many telemedicine providers further reassure patients by seeking accreditation from the American Telemedicine Association.<sup>32</sup> Telemedicine providers face enormous financial incentives to avoid tarnishing these reputations by providing substandard care.

## GOVERNMENT ENCOURAGEMENT OF TELEMEDICINE

The federal government encourages telemedicine in various ways.<sup>33</sup> The Federal Communications Commission’s (FCC)

Rural Health Care Program offers subsidies to assist rural health care professionals secure telecommunications and broadband services.<sup>34</sup> In 2014, the FCC established the Connect2HealthFCC Task Force to “consider ways to accelerate the adoption of health care technologies by leveraging broadband and other next-gen communications services.”<sup>35</sup> The Federal Telemedicine Working Group (FedTel) includes representatives from federal agencies that are involved in promoting telehealth.<sup>36</sup> The Patient Protection and Affordable Care Act (Obamacare) includes several provisions to promote telemedicine.<sup>37</sup>

The federal Health Resources and Services Administration issues grants whose stated purpose is to promote medical-license portability across states. These grants were designed to fund collaboration among state licensing boards to minimize the burden of “requirements that . . . [a physician] be licensed in each state where he or she may provide telemedicine services on a regular basis.”<sup>38</sup> As discussed below, grant recipients have not addressed the regulatory burden in a substantive way.

The federal government has slowly expanded Medicare reimbursement for telemedicine services, adding home care and monitoring for chronic conditions via telemedicine to the set of covered procedures.<sup>39</sup> At present, Medicare only pays for telemedicine provided in rural areas. One concern is that telemedicine would make it too easy for enrollees to access care, and thereby increase Medicare spending.<sup>40</sup>

At the state level, almost all states cover telemedicine through their Medicaid programs, although coverage varies across states and many states follow Medicare’s policy of limiting reimbursement to rural areas. A majority of the states require private insurance companies to cover telemedicine services.<sup>41</sup> When it comes to store-and-forward telemedicine (such as when an image is sent out for consultation), all states offer Medicaid reimbursement. When the service does not involve a direct interaction between a provider and patient (examples include

teleradiology, telepathology, ECG interpretation, tele-ultrasound, and echocardiography) the services are reimbursed as if they were offered directly.<sup>42</sup>

## **BARRIERS TO INTRASTATE TELEMEDICINE**

Ironically, at the same time the federal government subsidizes telemedicine, state governments inhibit the practice by imposing barriers to market entry. Insofar as telemedicine represents a competitive threat to existing providers, it is not surprising that physicians would turn to state legislatures and licensing boards to restrict the practice. Yet these restrictions harm patients by increasing medical prices and reducing access to care.

Even when a physician and patient are in the same state, government-imposed barriers prevent telemedicine from making medical care better and more affordable. Some states impose such burdensome rules on physician-patient encounters that the rules make telemedicine more difficult than in-person encounters.<sup>43</sup> These rules include informed consent requirements as well as requirements that a telepresenter—a health professional—be present with the patient.

One example of an intrastate barrier involved Teladoc, a company that provides over-the-phone consultations with licensed physicians for less than the cost of a traditional office visit.<sup>44</sup> In 2011, the Texas Medical Board (TMB)—a state regulatory body composed of members of the regulated industry (physicians)—notified Teladoc that its doctors must conduct an in-person physical exam before prescribing certain drugs through virtual encounters, and threatened disciplinary action against Teladoc physicians who did not comply. Teladoc challenged the legality of the rule in Texas courts. The TMB responded with an emergency rule limiting telemedicine, but a court injunction prevented it from taking effect. In May 2017, the Texas legislature resolved the impasse with legislation that made Texas one of the last states to acknowledge that

“Ironically, at the same time the federal government subsidizes telemedicine, state governments inhibit the practice by imposing barriers to market entry.”

“Restricting telemedicine imposes the most harm on low-income patients.”

a physician-patient relationship can be established without an in-person physical exam. The legislation also made it clear that the TMB may not impose a higher standard of care on telemedicine than is imposed on in-person care.<sup>45</sup>

At one point, in 2016, Teladoc tried a different tactic, filing an antitrust lawsuit in the U.S. District Court. Teladoc alleged the TMB's requirements were an effort to limit competition from telemedicine providers. The TMB claimed it enjoys state action immunity. State action immunity is a legal defense that has traditionally protected state medical boards from antitrust enforcement, even when actions to limit competition benefit board members. Yet the U.S. Supreme Court recently ruled that state licensing boards composed of market participants, and not subject to active supervision by the state, enjoy no such immunity. Citing that ruling, a federal district court rejected the TMB's motion to dismiss the antitrust complaint. Before the TMB withdrew its appeal of that district court ruling, the U.S. Federal Trade Commission, which has sided with Teladoc, told the appeals court, “There is no evidence that any disinterested state official reviewed the TMB rules at issue to determine whether they promote state regulatory policy rather than TMB doctors' private interests in excluding telehealth—and its lower prices—from the Texas market.”<sup>46</sup>

## **BARRIERS TO INTERSTATE TELEMEDICINE**

Interstate telemedicine, for both serious emergencies and simple office visits, would expand access to care, especially in smaller states. As it does in other industries, cross-state competition would improve medical services and reduce costs to consumers. Yet states impose even greater barriers to telemedicine when a physician and patient are in different states.

Each state requires any physician who provides services to a patient in that state to obtain a medical license from that state, regardless of where the physician is located.<sup>47</sup> Physicians who wish to practice beyond the borders of

their home state must therefore obtain and maintain medical licenses from every state in which their potential patients reside. Even then, physicians can't treat patients if the patient travels to a state where the physician does not have a license. These requirements impose substantial time and money costs that keep medical prices artificially high by preventing entry and competition in the market for physician services.

All states require physicians to meet the same basic standards for obtaining a license: a degree from an accredited medical school, residency training, a passing score on a standardized test, an acceptable malpractice history, and licensing fees. However, states complicate the process with varying requirements, such as additional testing or coursework.<sup>48</sup> Given the complexities of applying for licenses in multiple states simultaneously, many physicians turn to private companies that assist with the process, including the Physician Licensing Service, MedLicense.com, and the Florida Medical Licensing Service.

Once licensed, physicians who wish to practice beyond the borders of their home state must comply with clinical practice rules and regulations that differ across states.<sup>49</sup> This is another deterrent to entry. Because state medical licensing laws restrict cross-state practice, it is often easier for medical centers or academic institutions in the U.S. to expand internationally than to other states.<sup>50</sup>

Apart from generally suppressing telemedicine, state-specific (and monopolistic) licensing creates disparities. Large and densely populated states are home to more specialists. Patients in those states therefore have more opportunities to consult with specialists via telemedicine than patients in smaller, less densely populated states.

Restricting telemedicine imposes the most harm on low-income patients. Wealthy patients can get around the restrictions by paying the artificially high prices for medical care that persist in the absence of competition, or by traveling to the states or countries where the leading specialists practice. The

cost of barriers to market entry fall hardest on poor patients, the uninsured, and those who rely on state Medicaid programs, who do not have the means to travel to top specialists.<sup>51</sup>

## **OPTIONS TO REDUCE INTERSTATE BARRIERS TO TELEMEDICINE**

Proposals to reduce government-imposed barriers to telemedicine have circulated since the late 1990s.<sup>52</sup> There are various policy options at the state and federal levels.<sup>53</sup>

### **Eliminate Medical Licensing**

The best option for consumers is to eliminate state licensing of clinicians. The existing barriers to telemedicine are just one example of the problems created by medical licensing.<sup>54</sup> In the simplest case, states would eliminate state medical boards and licensing of medical professionals entirely.

Eliminating government licensing of clinicians would not compromise safety, because licensing does not promote safety. The lion's share of consumer protections that we can observe comes from private actors, not state licensing boards. Hospitals, health insurers, medical malpractice liability insurers, and others evaluate the physicians they allow to practice, reimburse, and indemnify. Unlike state licensing boards, these entities are liable if a patient suffers an injury due to their negligence or that of the physician.<sup>55</sup>

Indeed, state licensing boards are not benign actors. Their activities have a negative impact on health care access and costs. Existing barriers to telemedicine are but one example of how physicians use licensing rules to preserve their market share and keep prices artificially high by blocking competition and innovation. Another example is how the physician lobby uses state licensing boards' regulation of the scopes of practice of advanced practice nurses to inhibit the growth of retail clinics and other lower-cost ways of delivering care.<sup>56</sup>

If anything, licensing gives patients a false sense of security. State medical boards

are reluctant to pull licenses and thus allow, for example, physicians with drug and alcohol problems to continue to practice before completing programs designed to deal with their addictions. According to the nonprofit consumer advocacy group Public Citizen, state medical licensing boards are underdisciplining physicians, such as by failing to sanction many physicians with malpractice judgments against them.<sup>57</sup>

The elimination of the state licensing boards would not end physician discipline. Medical malpractice claims brought by patients would still move through the court system. The offices of most state attorneys general have specialty groups that prosecute criminal behavior by physicians, just as they prosecute other criminal activity.<sup>58</sup> Providers, such as hospitals, insurance networks, and group practices, would continue their efforts to deny privileges, block reimbursement, and dissociate with poor-performing physicians. Medical malpractice liability insurers would continue to work with their physician customers to improve the quality of care, and to encourage safer care by charging higher premiums to, or imposing practice limitations on, problem physicians.<sup>59</sup>

### **Allow Medical Professionals to Practice Telemedicine Nationwide on the Basis of Their Home-State License**

If eliminating state licensing of medical professionals is not currently feasible, a second-best option is to allow medical professionals to practice telemedicine in any state on the basis of their home-state license. This could come about if each state passes legislation, or if the federal government intervenes to define the location of the practice of medicine as that of the provider.

**UNILATERAL STATE ACTION.** Individual states could eliminate barriers to interstate medical practice by allowing physicians who are licensed in other states to offer telemedicine services in their state.<sup>60</sup> Medical professionals would be subject to the rules and regulations of their home state.

“The best option for consumers is to eliminate state licensing of clinicians.”

“Congress could enact a federal law that would treat patients who receive telemedicine services from out-of-state physicians like patients who travel across state lines for medical care.”

In 2016, the Florida House of Representatives approved a bill (HB 7087) allowing physicians licensed in other states to offer telemedicine services in Florida. The original language of the bill required out-of-state physicians to register in Florida and included prohibitions against opening an office in Florida or treating Florida residents in person without a Florida license. Had this provision become law, Florida would have been the first state to allow its residents full access to interstate telemedicine services. The Florida Senate eliminated the provision.<sup>61</sup>

**FEDERAL ACTION TO DEFINE THE LOCATION OF CARE.** Proponents of congressional action argue that some form of federal action is necessary, at least for telemedicine, because states have shown an unwillingness to resolve the barriers to interstate practice. Existing state laws, as well as the Interstate Medical Licensure Compact (discussed below), define the locus of care as that of the patient, and therefore require the physician to obtain a license from the state where the patient is located. A change in the definition of the locus of care to that of the physician would eliminate the need for physicians to obtain licenses from any state other than the state(s) where they already practice.

Congress could enact a federal law that, for the purposes of telemedicine services, defines the location of care as that of the physician. Such a change would treat patients who receive telemedicine services from out-of-state physicians like patients who travel across state lines for medical care.<sup>62</sup>

This simple action would sweep away the major barrier that licensing laws place in the way of interstate telemedicine. Physicians would still need to keep up with changes in licensing requirements in their own states, but would no longer bear the burden of tracking and complying with changes in licensing requirements across multiple states. The costly and time-consuming process of maintaining licenses in multiple states would no longer bar entry into the market for telemedicine services.

This proposal, which at its core simply allows patients to rely on out-of-state

quality certification, has precedent in current law. Since 2011, the Centers for Medicare and Medicaid Services (CMS) has allowed hospitals interacting with physicians located elsewhere via telemedicine to rely on the credentialing and privileging of the hospital at which the telemedicine doctor is located.<sup>63</sup>

The Veterans Administration, U.S. military, and Public Health Service already allow physicians to practice in any of their facilities on the basis of the physician's home-state license.<sup>64</sup> And there is support in Congress for a bill that would allow physicians to provide telemedicine services to Medicare recipients under the license of their home state.<sup>65</sup>

One concern about defining the location of care as that of the physician is that states might compete for licensing fees by lowering patient protections. States could face incentives to reduce licensing requirements or malpractice rules below what is necessary to protect patients. At the same time, however, interstate competition via telemedicine is likely to reduce the value of a license in a state known for weak protections.

Indeed, like out-of-state hospital credentialing and privileging, single-state licensing can make it easier to monitor and discipline physicians. A single-state licensing board in the home state of the physician can more easily compile complaints related to a physician's services and sanction errant physicians than multiple medical boards, each of which sees only pieces of the puzzle.

**MUTUAL RECOGNITION.** A third option to deal with licensing roadblocks to telemedicine is for states to set up mutual-recognition arrangements with other states. A few states allow physicians licensed in nearby states to practice without a separate license. The National Council of State Boards of Nursing's Nurse Licensure Compact and the newly introduced Advanced Practice Registered Nurse Compact are mutual-recognition agreements that allow nurses to practice in any of the participating states on the basis of their home-state license.<sup>66</sup>

Recognition agreements, such as the Nurse Licensure Compact, still require individual



practitioners to operate under the laws of the various states in which they practice. This becomes a serious problem for multistate teleproviders. Changing the locus of the practice of medicine avoids this problem, and requires only one legislature to act, rather than 50.

**FEDERAL LICENSING.** Since the late 1990s, telemedicine advocates have called for federal licensing.<sup>67</sup> Options include a parallel system that licenses physicians only for telemedicine (leaving state medical boards intact), or a system that displaces state-based licensing entirely.

Federal licensing would require the establishment of federal rules and federal agencies to enforce them. Even if the federal government were to license physicians to practice telemedicine only, it could add yet another layer of administration and costs. And just as physicians have used state licensing to limit competition, incumbents could use a national licensing apparatus to limit, rather than expand, access to health care.<sup>68</sup> Indeed, the creation of a new federal (tele)medical licensing agency would create a permanent, taxpayer-funded agency that advocates for ever more restrictive regulations and ever higher barriers to market entry.

### Feasibility

A federal law changing the locus of care to that of the physician may be the most politically feasible option for removing licensing-imposed barriers to telemedicine. Unlike repealing licensing, state laws recognizing out-of-state licenses, and mutual-recognition agreements, it would require only one (federal) law, rather than 50 separate state laws. Unlike federal licensing, it would require no new federal agencies or spending, and create no new barriers to telemedicine. It would also build on existing efforts in Medicare, the Veterans Administration, and elsewhere to recognize out-of-state licenses. It is also less likely to engender significant opposition than other approaches.

Licensing fees are a significant source of state revenue. There are about one million doctors in the United States, and each pays periodic licensing fees. Initial licensing fees

range from \$200 to \$1,000. Renewal fees run about \$200 a year. Physicians must pay these fees in each state in which they maintain a license. Any reform allowing physicians to practice in additional states without obtaining licenses from those states would result in a loss of licensing-fee revenues.<sup>69</sup> The gains in health care affordability would certainly dwarf those lost revenues. Nevertheless, states are unlikely to support any reforms that reduce state revenues (e.g., eliminating licensing, recognizing other out-of-state or international licenses), or to support federal licensing, which could ultimately displace state licensing entirely.

Physician groups will also tend to oppose pro-competitive reforms.<sup>70</sup> Anything that tears down barriers to competition presents a threat to physicians' existing revenue streams. Compared to state-level reforms, however, federal legislation changing the locus of care could engender less opposition from physicians. When a state allows competition from out-of-state physicians, in-state physicians see only the downside—greater competition. The market for their services does not expand. Even in a mutual-recognition agreement, the market for their services expands to just one, or maybe a few, states. Federal legislation changing the locus of care would present a much greater upside for physicians—the market for their services would expand to all 50 states. And unlike federal licensing, it would not require physicians to clear additional hurdles. These factors would minimize opposition to liberalization among incumbent physicians.

### Policy-Related Legal Issues

There are two legal issues raised by these policy proposals. The first has to do with the constitutionality of federal intervention. The second deals with the question of which courts would have jurisdiction and which state's rules would apply in disputes where patients and physicians live in different states.

**THE CONSTITUTIONALITY OF FEDERAL INTERVENTION.** Licensing and regulating the practice of medicine has traditionally been a power exercised by states. The Tenth Amendment

“A federal law changing the locus of care to that of the physician may be the most politically feasible option for removing licensing-imposed barriers to telemedicine.”

“The Interstate Medical Licensure Compact neither creates portable or interstate licensure nor eliminates barriers to telemedicine.”

to the U.S. Constitution provides, “The powers not delegated to the United States by the Constitution”—such as licensing—“nor prohibited by it to the States, are reserved to the States respectively, or to the people.”<sup>71</sup> Some may therefore conclude that the federal government has no authority to override state laws defining the locus of care for purposes of regulating medicine.

Nevertheless, the U.S. Constitution does delegate to Congress the power “to regulate Commerce . . . among the several States.”<sup>72</sup> This encompasses the power to tear down trade barriers between the states, which state restrictions on telemedicine have undoubtedly become. Existing state laws defining the locus of care as that of the patient—that is, the non-regulated entity—are clearly a barrier to trade with licensed physicians.<sup>73</sup> Surveying the legal case history, including recent cases related to the Affordable Care Act, Bill Marino, Roshen Prasad, and Amar Gupta argue that telemedicine licensure reform would overcome any constitutional challenges.<sup>74</sup>

**MEDICAL MALPRACTICE JURISDICTION.** Which state has jurisdiction in a malpractice case where an out-of-state telemedicine provider allegedly injures a patient? To date, courts have had little opportunity to address this issue with regard to telemedicine because few malpractice cases so far have involved telemedicine, and most of those have been about internet prescribing.<sup>75</sup>

Nevertheless, the “long-arm” revolution in tort law frequently allows patients to file malpractice claims in their own state against out-of-state providers, even if the patient traveled to another state to receive care from the provider.<sup>76</sup> The case for such jurisdiction is particularly strong with telemedicine, where any injury the patient suffers would undoubtedly occur in the patient’s home state.<sup>77</sup>

## THE INTERSTATE MEDICAL LICENSURE COMPACT

One supposed attempt at reform, the so-called Interstate Medical Licensure Compact, neither creates portable or interstate

licensure, nor eliminates barriers to telemedicine. Under the Compact, physicians must still obtain a license from every state in which their patients might find themselves needing medical care. The Compact only attempts to expedite the process of applying for multiple, nonportable licenses. Licenses are no more interstate or portable under the Compact than without it. To call it an Interstate Medical Licensure Compact is false advertising.<sup>78</sup>

In states that adopt the Compact, medical-specialty-board certified (or eligible) physicians with clean records can apply for licenses from other Compact states through their home state.<sup>79</sup> Once the home state has completed a criminal background check and verified a physician’s qualifications, the state sends an “attestation of eligibility” to the Interstate Medical Licensure Compact Commission.<sup>80</sup> The physician then sends the Commission the licensing fees required by each Compact state selected by the physician, and the Commission forwards these fees and information about the physician to other Compact member states. In addition, physicians pay \$700 to the Compact Commission, of which \$400 remains with Commission and \$300 is forwarded to the home state for its work in vetting the applicant. At that point, the Compact states issue the applicant expedited licenses (because the physician’s home state has already done most of the work). Although a number of states have joined the compact, issues related to the required Federal Bureau of Investigation background check are derailing efforts to move forward.<sup>81</sup>

The legislation passed by the Interstate Medical Licensure Compact’s member states includes two key components: “expedited” licensing and a physician database that would facilitate the sharing of information about physician discipline and ongoing investigations among member states.<sup>82</sup> However, comments by Dr. Jon Thomas, chair of the Interstate Medical Licensure Commission, challenge the assumption that the process of securing multiple licenses can be “expedited.” He explained

that Minnesota has modified its state's process so that, if there are no issues that trigger an evaluation (IMLC-eligible physicians would not trigger an evaluation), a license can be issued within a week.

The physician database, the part of the Compact which was, ostensibly, to address the difficulty of board oversight with multiple states licensing the same physicians, is nowhere near ready. The IMLC Commission started taking applications for licenses in April 2017 but, according to Dr. Thomas, the Commission does not have the funds and is "just starting to talk about" the database. Katherine Thomas, President of the Board of Directors of the National Council of State Boards of Nursing, noted that establishing a database "is a big challenge" and is expensive. And the Nurse database is mainly to "flag people who are under significant investigation for significant issues so if they move to another state to seek a geographic cure we have a way to know that."<sup>83</sup>

The National Practitioner Data Base (NPDB) already tracks physicians for that purpose, in an attempt to trace individuals who have been sanctioned by a state board, had their hospital privileges revoked, have a history of medical malpractice cases, etc. To add value, the IMLC database would have to capture information that has not yet led to reportable sanctions and member states would have to report promptly (a problem with the NPDB) and follow up promptly.<sup>84</sup>

By contrast, changing the locus of care to that of the physician would create a single location for complaints and information about physicians without creating a new reporting requirement for states.

The Compact has already received significant federal funding.<sup>85</sup> The Federation of State Medical Boards received funding for the Compact from the federal Health Resources and Services Administration's Licensure Portability Grant Program.<sup>86</sup> Paradoxically, the License Portability Grant Program's literature specifically decries the existing duplicative licensing process as an "unnecessary licensure barrier to cross-state

practice" that fails to address "workforce needs and improve access to health care services," yet the Compact keeps the duplicative licensing process intact.<sup>87</sup> Indeed, the Federation of State Medical Boards has received additional federal funds to "implement the administrative and technical infrastructure of the new Interstate Medical Licensure Compact" and to "support educational outreach to expand participation in the Compact by other states."<sup>88</sup>

Such federal subsidies raise other important issues. First, if federal subsidies allow the Compact to underprice private companies that assist physicians in securing multiple licenses, the result would be to replace the existing process with a more expensive, taxpayer-subsidized one. Second, if federal subsidies to the Compact Commission make that process for applying for multiple licenses more attractive than seeking private services, the requirement that physicians be certified by a medical-specialty board effectively confers a government-created competitive advantage on the American Board of Medical Specialties and its member boards.<sup>89</sup> To the extent the Compact grants medical-specialty boards an advantage that increases their power, the Compact would seem to contribute to the cartelization of medicine rather than disrupt it through innovations such as telemedicine.

In all, the Interstate Medical Licensure Compact does not disrupt the status quo so much as preserve it. It protects the interests of the state medical boards. Under the Compact, the Federation of State Medical Boards' member boards continue to hold monopolies over market entry in their respective states. The federation stands to gain financially as the Interstate Medical Licensure Compact makes use of the Federation's Uniform Application. The Compact also funnels applicants through the Federation Credential Verification System, although multiple private credential verification companies exist. The Compact makes it seem as if action has been taken, quieting critics who have called for federal licensure to promote interstate telemedicine.

**“Under the Compact, the Federation of State Medical Boards’ member boards continue to hold monopolies over market entry in their respective states.”**

“The most feasible option for expanding telemedicine is for Congress to define the location of the practice of telemedicine as that of the physician.”

## CONCLUSION

Aside from the ideal of eliminating government licensing of clinicians, or the second-best option of relying on states to open their borders to physicians licensed in other states, the most feasible option for expanding telemedicine is for Congress to define the location of the practice of telemedicine as that of the physician, treating digital patients like patients who physically make a trip across state or national borders to secure medical care.

Under such a law, a physician would need only one license to engage in the practice of telemedicine, and would be responsible for only one set of licensing rules—those of the state in which the physician practices. Existing telemedicine providers would be able to recruit physicians in greater numbers and to provide higher-quality and lower-cost services to far more patients. The ability of patients in emergent situations or with rare illnesses to obtain care from top specialists would expand dramatically. New entrants into a national market for telemedicine would drive down prices for both telemedicine and in-person medical services.

Such a law would remove existing barriers to telemedicine by allowing licensed physicians to offer telemedical services in all states. It would parallel the decision by the Centers for Medicare and Medicaid Services to allow hospitals interacting with physicians located elsewhere via telemedicine to rely on the credentialing and privileging of the hospital at which the telemedicine doctor is located, and efforts by the Veterans Administration, U.S. armed forces, and the Public Health Service to allow physicians to practice in any location on the basis of the physician’s home-state license. It would eliminate the costly efforts to secure licenses in multiple states to practice telemedicine. State medical boards would continue to issue licenses, but a state’s licensing laws would no longer constrain its residents from obtaining telemedicine services from providers in other states.

A single-state licensing system would create a single repository of complaints and

information about disciplinary actions against a physician in the state in which the physician is licensed.

The Interstate Medical Licensure Compact does not solve anything. It does not create license portability. Physicians must still secure a license in every state in which their patients live or wish to receive treatment. The Compact protects the status quo—specifically the power of the state medical boards and the revenues that flow to them from physicians who must seek multiple licenses to practice telemedicine.

## NOTES

1. Regina Garcia Cano, “Telemedicine Gains Increasing Relevance in S.D.,” *Argus Leader* (Sioux Falls), June 8, 2014, <http://www.argusleader.com/story/news/2014/06/08/telemedicine-gains-increasing-relevance-sd/10193077/>.

2. For a perspective on how to promote international telemedicine, see Simon Lester, “Expanding Trade in Medical Care through Telemedicine,” Cato Institute Policy Analysis no. 769, March 24, 2015, [https://object.cato.org/sites/cato.org/files/pubs/pdf/pa769\\_2.pdf](https://object.cato.org/sites/cato.org/files/pubs/pdf/pa769_2.pdf).

3. Shirley Svorny, “Medical Licensing: An Obstacle to Affordable, Quality Care,” Cato Institute Policy Analysis no. 621, September 17, 2008, <http://object.cato.org/sites/cato.org/files/pubs/pdf/pa-621.pdf>; and Shirley Svorny, “Could Mandatory Caps on Medical Malpractice Damages Harm Consumers?” Cato Institute Policy Analysis no. 685, October 20, 2011, <https://www.cato.org/publications/policy-analysis/could-mandatory-caps-medical-malpractice-damages-harm-consumers>.

4. News Service of Florida, “Telehealth Bill Bounces Back to House,” March 7, 2016, <http://health.wusf.usf.edu/post/telehealth-bill-bounces-back-house#stream/0>.

5. Julia Boorstin, “Paging Dr. Robot: Telemedicine a Game Changer, So-called Robot Doctors Are Allowing Patients in More Remote Areas to Get

Lifesaving Care,” NBC Nightly News, September 2, 2013, <http://www.nbcnews.com/video/nightly-news/52908303#52908303>; and Judy Woodruff, “Telemedicine Puts a Doctor Virtually at Your Bedside,” PBS NewsHour, July 13, 2015, <http://www.pbs.org/newshour/bb/telemedicine-puts-doctor-virtually-bedside/>.

6. DarkDaily.com, “Nighthawk’ Radiology Services Expand to Hospital Pharmacies: Could Pathology Laboratories Be Next?” July 16, 2015, <http://www.darkdaily.com/nighthawk-radiology-services-expand-to-hospital-pharmacies-could-pathology-laboratories-be-next-706#axzz4C9v3CDi6>.

7. Partners TeleStroke Center, “What Is TeleStroke?” <https://telestroke.massgeneral.org/telestroke.aspx>; and Michael Kulcsar, Siobhan Gilchrist, and Mary G. George, “Improving Stroke Outcomes in Rural Areas through Telestroke Programs: An Examination of Barriers, Facilitators, and State Policies,” *Telemedicine and e-Health* 20, no. 1 (January 2014): 3–10.

8. D. E. Calcagni, C. A. Clyburn, G. Tomkins, G. R. Gilbert, T. J. Cramer, R. K. Lea, S. G. Ehnes, and R. Zajtchuk, “Operation Joint Endeavor in Bosnia: Telemedicine Systems and Case Reports,” *Telemedicine Journal* 2, no. 3 (Fall 1996): 211–24, <http://www.ncbi.nlm.nih.gov/pubmed/10165544>.

9. Shantanu Nundy, Jonathan J. Dick, Chia-Hung Chou, Robert S. Nocon, Marshall H. Chin, and Monica E. Peek, “Mobile Phone Diabetes Project Led to Improved Glycemic Control and Net Savings for Chicago Plan Participants,” *Health Affairs* 33, no. 2 (February 2014): 265–72.

10. David C. Grabowski and James A. O’Malley, “Use of Telemedicine Can Reduce Hospitalizations of Nursing Home Residents and Generate Savings for Medicare,” *Health Affairs* 33, no. 2 (February 2014): 244–50.

11. National Parkinson Foundation, “Telemedicine and Virtual Care,” <https://web.archive.org/>

[web/20170311155437/http://www.parkinson.org/expert-care-research/telemedicine-virtual-care](http://www.parkinson.org/expert-care-research/telemedicine-virtual-care); and Nancy Shute, “The Parkinson’s Doctor Will Video Chat With You Now,” National Public Radio, June 2011, <http://www.npr.org/2011/06/27/137089619/the-parkinsons-doctor-will-video-chat-with-you-now>.

12. Donald M. Hilty, Daphne C. Ferrer, Michelle Burke Parish, Barb Johnston, Edward J. Callahan, and Peter M. Yellowlees, “The Effectiveness of Telemental Health: A 2013 Review,” *Telemedicine and E-Health* 19, no. 6 (June 2013): 444–54. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3662387/>.

13. Devon M. Herrick, “Convenient Care and Telemedicine,” NCPA Policy Report no. 305, November 2007, <http://www.ncpa.org/pdfs/st305.pdf>.

14. Richard Wootton, “Twenty Years of Telemedicine in Chronic Disease Management—An Evidence Synthesis,” *Journal of Telemedicine and Telecare* 18, no. 4 (2012): 211–20; Andrew Broderick and Valerie Steinmetz, *Centura Health at Home: Home Telehealth as the Standard of Care. Case Studies in Telehealth Adoption* (New York: The Commonwealth Fund, January 2013), [http://www.commonwealthfund.org/-/media/files/publications/case-study/2013/jan/1655\\_broderick\\_telehealth\\_adoption\\_centura\\_case\\_study.pdf](http://www.commonwealthfund.org/-/media/files/publications/case-study/2013/jan/1655_broderick_telehealth_adoption_centura_case_study.pdf); and Center for Connected Health Policy, “Remote Patient Monitoring,” <http://cchpc.org/remote-patient-monitoring>.

15. Neil Versel, “As School Nurses Disappear, Telemedicine Fills In the Gaps,” *MedCity News*, May 18, 2016, <http://medcitynews.com/2016/05/school-nurses-telemedicine/?rf=1>; Associated Press, “Avera to use Telemedicine in Sioux Falls Schools,” *Daily Republic* (Mitchell, SD), November 12, 2014, <http://www.mitchellrepublic.com/content/avera-use-telemedicine-sioux-falls-schools>.

16. Bonnie Darves, “Telemedicine: Changing the Landscape of Rural Physician Practice,” *New England Journal of Medicine* Career Center, May 17, 2013, <http://www.nejmcareercenter.org/article/telemedicine-changing-the-landscape->

- of-rural-physician-practice/; Rural Assistance Center, "Telehealth Use in Rural Healthcare," Federal Office of Rural Health Policy, Health Resources and Services Administration, U.S. Department of Health and Human Services, May 8, 2014, <https://www.raconline.org/topics/telehealth>; Boorstin, "Paging Dr. Robot"; Kulcsar et al., "Improving Stroke Outcomes in Rural Areas through Telestroke Programs."
17. James Brooks, "Program Expands Southeast Scope," *JuneauEmpire.com*, July 28, 2015, <http://juneauempire.com/local/2015-07-29/program-expands-southeast-scope>.
18. See, for example, American Well's website at <https://amwell.com/>. The American Well site lists the services it offers through a question-and-answer format: "What conditions are appropriate for an online [urgent care] doctor visit?" The answer: "cough, sinus infection, sore throat, back pain, bronchitis, vomiting, diarrhea, sprains/strains, fever, pinkeye, cold and flu, skin conditions, UTI, headache, influenza, rashes." Then, "What conditions do our [online] therapists treat?" The answer: "anger management, anxiety, ADHD / ADD, depression, divorce, eating disorders, LGBT counseling, bereavement, postpartum depression, OCD, trauma/PTSD, couples therapy, panic attacks, substance abuse, sleep disorders, stress and more." Finally, as part of its nutrition counseling services: "Here are some common concerns that can be addressed online: weight loss, digestive disorders, food allergies, gluten free diets, pregnancy diet, breastfeeding tips, pediatric nutrition, high cholesterol, sports nutrition, vegetarian/vegan diets, vitamins and supplements, high blood pressure, diabetes, gestational diabetes, paleo diet, meal planning."
19. Kaiser Permanente, "Operationalizing Telemedicine in Managed Care: Lessons from Kaiser Permanente, Half Day Course," 2015 Annual Meeting American Telemedicine Association, May 3, 2015, <http://studylib.net/doc/11559436/operationalizing-telemedicine-in-managed-care-lessons-fr>; and Darius Tahir, "Innovations: Kaiser Tests Video Visits to Cut Waits," *Modern Healthcare*, February 21, 2015, <http://www.modernhealthcare.com/article/20150221/MAGAZINE/302219977>.
20. Beth Pinsker, "Coming Soon to a Screen Near You: Doctors," Reuters, August 12, 2015, <http://www.reuters.com/article/us-usa-health-telemedicine-idUSKCN0QHrS820150812>.
21. UnitedHealthcare, "UnitedHealthcare Covers Virtual Care Physician Visits, Expanding Consumers' Access to Affordable Health Care Options," April 30, 2015, <https://www.stage-app.uhc.com/news-room/2015-news-release-archive/unitedhealthcare-covers-virtual-care-physician-visits>.
22. Anthony Brino, "More Insurers See Case for Telemedicine," *Healthcare Payer News*, August 7, 2014, [http://www.healthcarefinancenews.com/news/more-insurers-see-case-telemedicine#.VhbL\\_vlViko](http://www.healthcarefinancenews.com/news/more-insurers-see-case-telemedicine#.VhbL_vlViko). See LiveHealth Online, "Choose a State," <https://www.livehealthonline.com/availability>.
23. Jonah Comstock, "Survey: 9 in 10 Large Employers Will Offer Telehealth Next Year," *MobiHealthNews*, August 10, 2016, <http://www.mobihealthnews.com/content/survey-9-10-large-employers-will-offer-telehealth-next-year>.
24. Jonah Comstock, "Video Visits, Telemedicine Today Are Like Retail Clinics Were in the 1990s," *MobiHealthNews*, November 4, 2014, <http://mobihealthnews.com/37913/video-visits-telemedicine-today-are-like-retail-clinics-were-in-the-1990s/>.
25. Dan Verel, "Pipeline RX Takes Telemedicine to Hospital Pharmacies," *MedCity News*, December 8, 2014, <http://medcitynews.com/2014/12/pipeline-rx-takes-telemedicine-hospital-pharmacies/>.
26. Woodruff, "Telemedicine Puts a Doctor Virtually at Your Bedside."
27. American Telemedicine Association, Telemedicine Case Studies, "Patient Profile: Te-

- lenceurology Provides Swift, Lifesaving Treatment,” <https://thesource.americantelemed.org/resources/telemedicine-case-studies>.
28. See the Teladoc website at <https://www.teladoc.com/about-our-company/>.
29. Laura Landro, “Clues to Better Health-care from Old Malpractice Lawsuits,” *Wall Street Journal*, May 9, 2016, <http://www.wsj.com/articles/clues-to-better-health-care-from-old-malpractice-lawsuits-1462813546>.
30. Svorny, “Could Mandatory Caps on Medical Malpractice Damages Harm Consumers?”
31. Teladoc, “Teladoc Physician Credentialing,” January 2016, <http://communications.teladoc.com/resources/Key-Differences-Employers.pdf>; Teladoc Securities and Exchange Commission Form 10-K for the year ended December 21, 2016, <http://d18rnop25nwr6d.cloudfront.net/CIK-0001477449/96d1a2e4-f16c-4827-b470-eba3aerb3d24.pdf>
32. American Telemedicine Association, “Telemedicine Accreditation” <http://www.americantelemed.org/main/ata-accreditation> (viewed 8/30/2017).
33. EfficientGov, “USDA Awards \$20M for Telehealth Programs,” January 13, 2015, <https://efficientgov.com/blog/2015/01/13/usda-awards-20m-telehealth-programs/>.
34. Federal Communications Commission, “Rural Health Care Program,” <https://www.fcc.gov/encyclopedia/rural-health-care>.
35. Federal Communications Commission, “FCC Chairman Announces New CONNECT2HEALTHCC Taskforce,” March 4, 2014, <https://www.fcc.gov/document/fcc-chairman-announces-new-connect2health-task-force>.
36. Charles R. Doarn, et al, “Federal Efforts to Define and Advance Telehealth—A Work in Progress,” *Telemedicine Journal and E-Health*, Vol. 20, No. 5, pp. 409-418, May 1, 2014, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4011485/>.
37. Diane E. Hoffman and Virginia Rowthorn, “Legal Impediments to the Diffusion of Telemedicine,” *Journal of Health Care Law and Policy* 14, no. 1 (2011): 7–8, [http://digitalcommons.law.umaryland.edu/fac\\_pubs/1195/](http://digitalcommons.law.umaryland.edu/fac_pubs/1195/).
38. Health Resources and Services Administration, “Licensure, Licensure Portability,” <http://bhpr.hrsa.gov/grants/licensure/> (no longer available online). The grant program “Funds state professional licensing boards to work with licensing boards in other states to develop and implement policies that reduce barriers to telemedicine and other practices that *are limited by requirements that physicians be licensed in each state where he or she may provide telemedicine services on a regular basis.* [italics added] This is particularly a problem for physicians who are providing highly specialized services around the country for rare conditions (e.g., genetic counseling).”
39. U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, “Telehealth Services,” <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf>; Eric Wicklund, “CMS Boosts Telehealth in 2015 Physician Pay Schedule,” *mHealthNews*, November 3, 2014, <http://www.mobihealthnews.com/news/cms-boosts-telehealth-2015-physician-pay-schedule>; and Aditi Pai, “More Telehealth Makes the Cut for Medicare Coverage Next Year,” *MobiHealthNews*, November 4, 2014, <http://mobihealthnews.com/37893/more-telehealth-makes-the-cut-for-medicare-coverage-next-year/>.
40. Phil Galewitz, “Cost Fears Keep Medicare Telemedicine from Expanding,” *Daily Herald* (Chicago), June 28, 2015, <http://www.dailyherald.com/article/20150628/business/150629224/>. Most people would not find this an acceptable way to ration health care. See also, Rachel Z. Arndt, “Senate Bill Would Let Medicare Test Telehealth Expansion,” *Modern Healthcare*, April 3, 2017, <http://>

- [www.modernhealthcare.com/article/20170403/NEWS/170409995](http://www.modernhealthcare.com/article/20170403/NEWS/170409995).
41. Center for Connected Health Policy, "State Telehealth Laws and Reimbursement Policies: A Comprehensive Scan of the 50 States and District of Columbia," The National Telehealth Policy Resource Center, April 2017, <http://www.cchpca.org/sites/default/files/resources/50%20STATE%20PDF%20FILE%20APRIL%202017%20FINAL%20PASSWORD%20PROTECT.pdf>.
42. U.S. Department of Veteran Affairs, VA Telehealth Services, "Store-and-Forward Telehealth," <http://www.telehealth.va.gov/sft/>; American Telemedicine Association, "Store-and-Forward," November 7, 2013.
43. Latoya Thomas and Gary Capistrant, *State Telemedicine Gaps Analysis, Physician Practice Standards and Licensure* (Washington: American Telemedicine Association, 2015), <http://utn.org/resources/downloads/50-state-telemedicine-gaps-analysis-physician-practice-standards-licensure.pdf>.
44. Edgar Walters, "Teladoc Scores Victory in Clash With Medical Board," *Texas Tribune*, May 30, 2015, <http://www.texastribune.org/2015/05/30/teladoc-scores-early-victory-against-medical-board/>; Dionne Lomax and Kate Stewart, "Injunction Blocks Implementation of Texas Telemedicine Regulations," *National Law Review Health Law and Policy Matters* (blog), June 4, 2015, <http://www.natlawreview.com/article/injunction-blocks-implementation-texas-telemedicine-regulations>.
45. Eric Wicklund, "With New Texas Law, Telemedicine Passes an Important Milestone," *mHealth Intelligence*, May 31, 2017, <http://mhealthintelligence.com/news/with-new-texas-law-telemedicine-passes-an-important-milestone>.
46. Federal Trade Commission, "Brief for the United States and the Federal Trade Commission as Amici Curiae," in *Teladoc, Incorporated, et al., v. Texas Medical Board et al.*, September 14, 2016, [https://www.ftc.gov/system/files/documents/amicus\\_briefs/teladoc-incorporated-et-al-v-texas-medical-board-et-al/teladoc\\_doj-ftc\\_amicus\\_brief.pdf](https://www.ftc.gov/system/files/documents/amicus_briefs/teladoc-incorporated-et-al-v-texas-medical-board-et-al/teladoc_doj-ftc_amicus_brief.pdf).
47. Most states allow physician-to-physician consultation across state borders, but that exception has limitations and is not sufficient to allow the general practice of telemedicine. A few states have reciprocal agreements with neighboring states that allow doctors licensed in each state to practice in the other. See Thomas and Capistrant, *State Telemedicine Gaps Analysis*.
48. See, for example, Robert Kocher, "Doctors without State Borders: Practicing Across State Lines," *Health Affairs* (blog), February 18, 2014, <http://healthaffairs.org/blog/2014/02/18/doctors-without-state-borders-practicing-across-state-lines/>.
49. Thomas and Capistrant, *State Telemedicine Gaps Analysis*. In an interview with Kofi Jones, vice president of public relations and government affairs at American Well, Jones said that she has "30 binders in her office filled with state-by-state regulations and legislation." See Mattie Quinn, "Telemedicine Advances Faster than States Can Keep Up," *Governing*, February 2016, <http://www.governing.com/topics/health-human-services/gov-telemedicine-state-laws.html>.
50. Beth Kutscher, "The Long Reach of Medicine," *Modern Healthcare*, October 20, 2012, <http://www.modernhealthcare.com/article/20121020/MAGAZINE/310209954>.
51. Sara Rosenbaum, "Perspective: Medicaid Payments and Access to Care," *New England Journal of Medicine* 371, no. 25 (December 18, 2014): 2345-47, <http://www.nejm.org/doi/pdf/10.1056/NEJMp1412488>.
52. See, for example, Raymond W. Pong and John C. Hogenbirk, "Licensing Physicians for Telehealth Practice: Issues and Policy Options," *Health Law Review* 8, No. 1 (1999): 3-14, <https://>



[www.researchgate.net/publication/235929514\\_Licensing\\_Physicians\\_for\\_Telehealth\\_Practice\\_Issues\\_and\\_Policy\\_Options](http://www.researchgate.net/publication/235929514_Licensing_Physicians_for_Telehealth_Practice_Issues_and_Policy_Options).

53. Mary K. Wakefield, “Telehealth Licensure Report, Special Report to the Senate Appropriations Committee,” Health Resources and Services Administration, U.S. Department of Health and Human Services, 2010, <https://web.archive.org/web/20131204111506/https://www.hrsa.gov/healthit/telehealth/licenserept10.pdf>.

54. As I have argued elsewhere, consumers would be best served were states to eliminate medical boards and the licensing of medical professionals entirely. See, for example, Svorny, “Medical Licensing: An Obstacle to Affordable, Quality Care”; “End State Licensing of Physicians,” *The Hill*, August 7, 2015, <http://thehill.com/blogs/congress-blog/healthcare/250457-end-state-licensing-of-physicians>; and “Should We Reconsider Licensing Physicians?” *Contemporary Policy Issues* 10, no. 1 (1992): 31–38.

55. Many entities use credential verification organizations (CVOs), such as McKesson, which lists the services it provides on its website. See McKesson, “Medical Credentials Verification Organization (CVO),” <http://www.mckesson.com/population-health-management/solutions/credentials-verification-organization-cvo/>. The (private) National Center for Quality Assurance accredits CVOs. See National Center for Quality Assurance, “Credential Verification Organization Certification,” August 31, 2015, <http://www.ncqa.org/programs/certification/credentials-verification-organization-cvo>.

56. Joanne Spetz, Stephen T. Parente, Robert J. Town, and Dawn Bazarko, “Scope-of-Practice Laws for Nurse Practitioners Limit Cost Savings That Can Be Achieved in Retail Clinics,” *Health Affairs*, 32, no. 11 (November 2013): 1977–84, <https://web.archive.org/web/20150317002053/http://content.healthaffairs.org/content/32/11/1977.abstract>.

57. Public Citizen’s website includes links to

studies since 1999. See Public Citizen, “State Medical Board Disciplinary Actions,” <https://web.archive.org/web/20170112084930/http://www.citizen.org/statemedicalboardsdisciplinaryactions>. See also, Sidney M. Wolfe, Cynthia Williams, and Alex Zaslow, “Public Citizen’s Health Research Group Ranking of the Rate of State Medical Boards’ Serious Disciplinary Actions, 2009–2011,” May 17, 2012, <http://www.citizen.org/documents/2034.pdf>; Public Citizen, “New Public Citizen Study Questions Ability of State Medical Boards to Protect Patients from Dangerous Doctors,” March 15, 2011, <http://www.citizen.org/pressroom/pressroomredirect.cfm?ID=3294>; Alan Levine, Robert Oshel, and Sidney Wolfe, “State Medical Boards Fail to Discipline Doctors with Hospital Actions against Them,” March 2011, <http://www.citizen.org/documents/1937.pdf> (in this case, the actual physician discipline came from hospitals); and Rachel Rabkin Peachman, “What You Don’t Know About Your Doctor Could Hurt You,” *Consumer Reports*, April 20, 2016, <http://www.consumerreports.org/cro/health/doctors-and-hospitals/what-you-dont-know-about-your-doctor-could-hurt-you/index.htm>.

58. In 2013, troubled by the failure of the Medical Board of California to discipline physicians, California legislators proposed shifting the Board’s disciplinary function to the Office of the Attorney General. See *California Healthline Daily Edition*, “Bill Would Strip Medical Board of Power to Investigate Physicians,” April 23, 2013, <https://californiahealthline.org/morning-breakout/bill-would-strip-medical-board-of-power-to-investigate-physicians/>.

59. Svorny, “Could Mandatory Caps on Medical Malpractice Damages Harm Consumers?”

60. Although it often said that the European Union has adopted this approach, it is not that simple. Automatic recognition of qualifications is not the same as being licensed to practice. See European Union, “Modernization of the Professional Qualifications Directive—Frequently Asked Questions,” October 9, 2013, [http://europa.eu/rapid/press-release\\_MEMO-13-867\\_en.htm](http://europa.eu/rapid/press-release_MEMO-13-867_en.htm);

and Bettina Engelmann, "Recognition Procedures for Foreign-trained Doctors in Germany," presentation at the International Workshop on Practices for Recognizing Qualifications of Migrant Health Professionals," Hamburg, February 2009, [http://ec.europa.eu/health/archive/ph\\_systems/docs/turantur\\_en.pdf](http://ec.europa.eu/health/archive/ph_systems/docs/turantur_en.pdf).

61. Lynne Jeter, "Florida Passes Telehealth Legislation," *Orlando Medical News*, April 11, 2016, <http://orlandomedicalnews.com/florida-passes-telehealth-legislation-cms-358>.

62. See, for example, Pong and Hogenbirk, "Licensing Physicians for Telehealth Practice: Issues and Policy Options"; Brian Darer, "Telemedicine: A State-Based Answer to Health Care in America," *Virginia Journal of Law and Technology* 3, no. 4 (Spring 1998), <https://litigation-essentials.lexisnexis.com/webcd/app?action=DocumentDisplay&crawlid=1&doctype=cite&docid=3+Va.+J.L.+%26+Tech.+4&srctype=smi&srcid=3B15&key=7396623107b977b9fa9e0afef4e0b3e6>; and Jane Orient, "Letter to U.S. Senate: Oppose Interstate Medical Licensing Compact," American Association of Physicians and Surgeons, January 26, 2015, <https://aapsonline.org/letter-to-u-s-senate-oppose-interstate-medical-licensing-compact/>. Gary Capistrant, Chief Policy Officer of the American Telemedicine Association, was quoted as saying: "What the ATA wants . . . is for the regulations of the state where the physician is located to govern his or her use of telehealth. Medicine is where the provider is. Where the patient is not where the practice of medicine occurs." See Ken Terry, "Interstate Licensing Bill for Telemedicine Gathers Support," Medscape.com, August 18, 2015, <http://www.medscape.com/viewarticle/849633>.

63. Department of Health and Human Services, Centers for Medicare and Medicaid Services, "Medicare and Medicaid Programs: Changes Affecting Hospital and Critical Access Hospital Conditions of Participation: Telemedicine Credentialing and Privileging," *Federal Register* 76, no. 87, pp. 25550–65, May 5, 2011, <http://www.gpo.gov/fdsys/pkg/FR-2011-05-05/html/2011-10875.htm>.

64. Telehealth Resource Centers, "Licen-

sure and Scope of Practice," <http://www.telehealthresourcecenter.org/toolbox-module/licensure-and-scope-practice>.

65. Terry, "Interstate Licensing Bill for Telemedicine Gathers Support."

66. National Council of State Boards of Nursing, "Licensure Compacts," <https://www.ncsbn.org/compacts.htm>.

67. See, for example, Elizabeth Joy Matak, "Telemedicine: Medical Treatment via Telecommunications Will Save Lives, but Can Congress Answer the Call? Federal Preemption of State Licensure Requirements under Congressional Commerce Clause Authority and Spending Power," *Vermont Law Review* 22, no. 1 (Fall 1997): 231–55.

68. Svorny, "Medical Licensing: An Obstacle to Affordable, Quality Care."

69. Jonathan D. Linkous, "Legal Impediments to Telemedicine State Licensure," statement at Roundtable on Legal Impediments to Telemedicine, Law and Health Care Program, University of Maryland School of Law, April 16, 2010, (available from author). Some boards are funded directly by physician fees. In other states, fee revenues go to the state general fund and annual board funding is set as part of the state budgetary process. See Shirley Svorny, "State Medical Boards: Institutional Structure and Board Policies," *Federation Bulletin* 84, no. 2 (1997): 27–32, [http://www.csun.edu/~vcecn007/publications/JMLD\\_StateMedicalBoards\\_1997.pdf](http://www.csun.edu/~vcecn007/publications/JMLD_StateMedicalBoards_1997.pdf).

70. Shirley Svorny, "Licensing Doctors: Do Economists Agree?" *Econ Journal Watch* 1, no. 2 (August 2004): 279–305, <http://www.csun.edu/~vcecn007/publications/SvornyDoEconomistsAugust2004.pdf>; and David Hyman and Shirley Svorny, "If Professions Are Just 'Cartels by another Name,' What Should We Do about It?" *University of Pennsylvania Law Review Online* 163, no. 1, (2014): 101–21, [http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1137&context=penn\\_law\\_review\\_online](http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1137&context=penn_law_review_online).

71. U.S. Constitution, Tenth Amendment.
72. U.S. Constitution, Article I, Section 8.
73. See Matak, “Telemedicine: Medical Treatment via Telecommunications Will Save Lives, but Can Congress Answer the Call?”; Lars Noah, “Ambivalent Commitments to Federalism in Controlling the Practice of Medicine,” *Kansas Law Review* 53, issue 1 (2004): 149–94; Sarah E. Born, “Telemedicine in Massachusetts: A Better Way to Regulate,” *New England Law Review* 42, issue 1 (2007):194–224; Amar Gupta and Deth Sao, “The Constitutionality of Current Legal Barriers to Telemedicine in the United States: Analysis and Future Directions of Its Relationship to National and International Health Care Reform,” *Health Matrix: Journal of Law-Medicine* 21, no. 2 (2011): 385–442.
74. “Congress can confidently pursue telemedicine licensure reform knowing that it will overcome any constitutional challenges and find secure support in the Commerce Clause, Necessary and Proper Clause, or Congress’ power to spend conditionally on the general welfare.” Bill Marino, Roshen Prasad, and Amar Gupta, “A Case for Federal Regulation of Telemedicine in the Wake of the Affordable Care Act,” *Columbia Science and Technology Law Review* 16 (May 17, 2015): 274–346.
75. Virginia Rowthorn, “Legal Impediments to the Diffusion of Telemedicine,” *Journal of Health Care Law and Policy* 14, No. 1 (2011): 1–53, [http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=2194&context=fac\\_pubs](http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=2194&context=fac_pubs).
76. See Walter Olson, *The Litigation Explosion* (New York: Truman Talley Books-Dutton, 1991), ch. 9, [http://www.pointoflaw.com/books/tle\\_chap9.pdf](http://www.pointoflaw.com/books/tle_chap9.pdf); and Vedder, Price, Kaufman & Kammholz, P.C., “Long-Arm Statues: A Fifty-State Survey,” 2003, <http://euro.ecom.cmu.edu/program/law/08-732/Jurisdiction/LongArmSurvey.pdf>.
77. See Charles M. Key, “Personal Jurisdiction and Choice of Law in Interstate Medical Practice Not Settled Issues,” *ABA Health eSource* 7, no. 10 (June 2011), [https://www.americanbar.org/content/newsletter/publications/aba\\_health\\_esource\\_home/aba\\_health\\_law\\_esource\\_1106\\_key.html](https://www.americanbar.org/content/newsletter/publications/aba_health_esource_home/aba_health_law_esource_1106_key.html), where he cites cases where injured patients have successfully sued out-of-state providers, but notes that this is a developing area of law.
78. The framers of the Compact chose two web addresses, [licenseportability.org](http://licenseportability.org) and [licenseportability.com](http://licenseportability.com), even though license portability is not a component of the Compact. Perhaps as a result of criticism, by 2017, the web pages, [licenseportability.org](http://licenseportability.org) and [licenseportability.com](http://licenseportability.com), were dropped in favor of [www.imlcc.org](http://www.imlcc.org), and all references to portability are gone. Original documents refer to portability. For example, although the webpage, [licenseportability.org](http://licenseportability.org), has been shuttered, the link to this document remains (as of July 9, 2017): [http://www.licenseportability.org/assets/pdf/Interstate-Medical-Licensure-Compact-\(FINAL\).pdf](http://www.licenseportability.org/assets/pdf/Interstate-Medical-Licensure-Compact-(FINAL).pdf). An earlier version of the website described the Compact as “an expedited licensure process for eligible physicians that *improves license portability* and increases patient access to care” [italics added.]. See Shirley Svorny, “Interstate Medical Licensure Compact Won’t Help,” *Clarion-Ledger* (Jackson, MS), February 27, 2016, <http://www.clarionledger.com/story/opinion/columnists/2016/02/26/svorny-interstate-medical-licensure-compact-wont-help/80998064/>; and Shirley Svorny, “Ted Cruz Should Make the Case for Telemedicine,” *Time*, February 9, 2016, <http://time.com/4210508/ted-cruz-telemedicine/>. On July 2, 2016, only one statement remained referencing *portability*: Frequently Asked Questions: “How will the Commission be funded? How much will it cost?” The answer: “The Compact Commission is enabled to seek grants and secure outside funding, through private grants, or federal appropriations in support of license portability.” This statement no longer appears on the IMLCC webpage, but it appears on the webpage of the Alaska State Legislature, [http://www.akleg.gov/basis/get\\_documents.asp?session=29&docid=29238](http://www.akleg.gov/basis/get_documents.asp?session=29&docid=29238), and elsewhere. See: Thomas Sullivan, “Interstate Medical Licensure Compact—Expands to 17 States,” *Policy and Medicine*, June 24, 2016, <http://www.policymed.com>.

com/2016/06/interstate-medical-licensure-compact-expands-to-17-states.html.

79. Physicians may be “board eligible” for five to seven years (depending on the specialty) after they complete training but before they achieve initial certification. See ABMS, “ABMS Board Eligibility Policy: Policy and FAQs,” September 30, 2014, <http://www.abms.org/board-certification/board-eligibility/>. Physicians who do not meet the Compact standards may still apply the traditional way to multiple boards. See Federation of State Medical Boards, “Model Language, Interstate Medical Licensure Compact,” [http://www.licenseportability.org/assets/pdf/Interstate-Medical-Licensure-Compact-\(FINAL\).pdf](http://www.licenseportability.org/assets/pdf/Interstate-Medical-Licensure-Compact-(FINAL).pdf).

80. A summary of the Interstate Medical Licensure Compact process appears on the American Academy of Pediatrics’ website. See American Academy of Pediatrics, “Advocacy Action Guide for AAP Chapters,” <https://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Interstate%20Medical%20Licensure%20Compact-Advocacy%20Action%20Guide%20for%20AAP%20Chapters.pdf>.

81. For current state status, see: Interstate Medical Licensure Compact, “The IMLC,” [www.imlcc.org](http://www.imlcc.org).

82. Currently the IMLCC webpage says: “. . . the Compact strengthens public protection by enhancing the ability of states to share investigative and disciplinary information.” See “Facts about the IMLCC,” Interstate Medical Licensure Compact, <http://www.imlcc.org/facts-about-the-implcc/>.

83. Jon Thomas and Katherine Thomas, Federal Trade Commission Economic Liberty Task Force Roundtable “Streamlining Licensing across State Lines: Initiatives to Enhance Occupational License Portability,” July 27, 2017.

84. U.S. Department of Health and Human Services, Health Resources and Services Administration, “NPDB Timeline,” <http://www.npdb.hrsa.gov/topNavigation/timeline.jsp>.

85. Previously, the Federation of State Medical Boards’ “Interstate Medical Licensure Compact FAQ” on the now defunct web page, <http://www.licenseportability.org/faq.html>, said “Under the terms of the proposed Compact, the Commission may assess processing fees [on physicians] for expedited licensure, ultimately off-setting any burden on the member states. Additionally, the Compact Commission is enabled to seek grants and secure outside funding, through private grants, or federal appropriations in support of license portability.”

86. The Federation of State Medical Boards received three grants from the Health Resources Service Administration; the first was in 2006. See: Federation of State Medical Licensing Boards, “Federation of State Medical Boards Receives Grant to Facilitate Medical Licensure Portability,” September 13, 2012, <https://www.fsmb.org/Media/Default/PDF/Publications/nr-lp-grant.pdf>.

87. U.S. Department of Health and Human Services, “Licensure Portability Grant Program,” HRSA-15-138, <https://www.hrsa.gov/ruralhealth/programopportunities/fundingopportunities/?id=91349861-3c0a-4776-b9d2-77dd77f46edo>.

88. In June 2016, the Federation of State Medical Boards announced a grant from the U.S. Health Resources and Services Administration to “help the Compact become operational and . . . [to] support educational outreach to expand participation in the Compact by other states.” The irony is that the announcement says, “The Compact is expected to expand access to health care, especially to those in rural and underserved areas of the country, and facilitate the use of telemedicine technologies in the delivery of health care.” Without license portability, and with only a potentially costly plan that may or may not expedite the initial licensure process, this expectation makes no sense. See Federation of State Medical Boards, “Federal Grant Awarded to Support State Medical Boards in Implementing Interstate Medical Licensure Compact,” June 17, 2016, [https://www.fsmb.org/Media/Default/PDF/Publications/Compact\\_HRSA\\_Grant\\_June2016.pdf](https://www.fsmb.org/Media/Default/PDF/Publications/Compact_HRSA_Grant_June2016.pdf).

89. This concern has been raised by the Association of American Physicians and Surgeons multiple times. The organization's main concern is that it will cement specialty-board Maintenance of Certification (MOC) programs they deem to be "of minimal or no value." According to the

AAPS, "there is near unanimity that MOC's only effect is to drain physicians' time and money." AAPS, "Letter to U.S. Senate: oppose Interstate Medical Licensing Compact," January 26, 2015, <https://aapsonline.org/letter-to-u-s-senate-oppose-interstate-medical-licensing-compact/>.

## RELATED PUBLICATIONS FROM THE CATO INSTITUTE

**Cost of Service Regulation in U.S. Health Care: Minimum Medical Loss Ratios**, by Steve Cicala, Ethan M. J. Lieber, and Victoria Marone, Research Briefs in Economic Policy no. 86 (October 4, 2017)

**Fresh Thinking on Occupational Licensing** by Ilya Shapiro, Cato@Liberty (August 3, 2017)

**Protecting Free Speech in Medicine** by Christina Sandefur, *Regulation* 40, no. 2 (Summer 2017)

**Should Government Subsidize and Regulate Electronic Health Records?** by Michael L. Marlow, *Regulation* 40, no. 2 (Summer 2017)

**Was the First Public Health Campaign Successful? The Tuberculosis Movement and Its Effect on Mortality** by D. Mark Anderson, Kerwin Kofi Charles, Claudio Las Heras Olivares, and Daniel I. Rees, Cato Institute Research Briefs in Economic Policy no. 76 (May 17, 2017)

**Health Care Regulation** by Michael F. Cannon, in *Cato Handbook for Policymakers*, 8th ed., chap. 35, Cato Institute (2017)

**The “Troubles” with Pharmacy Benefit Managers** by Thomas A. Hemphill, *Regulation* 40, no. 1 (Spring 2017)

**The FDA’s Dr. Nos** by John J. Cohn and Henry I. Miller, *Regulation* 39, no. 4 (Winter 2016/2017)

**Side Effects and Complications: The Economic Consequences of Health Care Reform** by Michael F. Cannon, *Cato Journal* 36, no. 3 (Fall 2016)

**Menu Mandates and Obesity: A Futile Effort** by Aaron Yelowitz, Cato Institute Policy Analysis no. 789 (April 13, 2016)

**Asymmetric Information and Medical Licensure** by Shirley Svorny, *Cato Unbound* (April 10, 2015)

**Beyond Medical Licensure** by Shirley Svorny, *Regulation* 38, no. 1 (Spring 2015)

**Expanding Trade in Medical Care through Telemedicine** by Simon Lester, Cato Institute Policy Analysis no. 769 (March 24, 2015)

**Do Doctors Practice Defensive Medicine? Revisited** by Myungho Paik, Bernard Black, and David A. Hyman, Cato Institute Research Briefs in Economic Policy no. 12 (October 15, 2014)

**Is State “Right to Try” Legislation Misguided Policy?** by Thomas A. Hemphill, *Regulation* 37, no. 3 (Fall 2014)

**Who Pays for Public Employee Health Costs?** by Jeffrey Clemens and David M. Cutler, *Cato Institute Research Briefs in Economic Policy* no. 6 (July 23, 2014)

***Replacing Obamacare: The Cato Institute on Health Care Reform*** edited by Michael F. Cannon and Michael D. Tanner, *Cato Institute* (July 25, 2012)

**The Independent Payment Advisory Board: PPACA’s Anti-Constitutional and Authoritarian Super-Legislature** by Michael F. Cannon, *Cato Institute Policy Analysis* no. 700 (June 4, 2012)

**Could Mandatory Caps on Medical Malpractice Damages Harm Consumers?** by Shirley Svorny, *Cato Institute Policy Analysis* no. 685 (October 20, 2011)

**Reforming Medical Malpractice Liability through Contract** by Michael F. Cannon, *Cato Institute Working Paper* no. 3 (November 12, 2010)

**Yes, Mr. President: A Free Market Can Fix Health Care** by Michael F. Cannon, *Cato Institute Policy Analysis* no. 650 (October 21, 2009)

**Fannie Med? Why a “Public Option” Is Hazardous to Your Health** by Michael F. Cannon, *Cato Institute Policy Analysis* no. 642 (July 27, 2009)

**A Better Way to Generate and Use Comparative-Effectiveness Research** by Michael F. Cannon, *Cato Institute Policy Analysis* no. 632 (February 6, 2009)

**Medical Licensing: An Obstacle to Affordable, Quality Care** by Shirley Svorny, *Cato Institute Policy Analysis* no. 621 (September 17, 2008)

## **RECENT STUDIES IN THE CATO INSTITUTE POLICY ANALYSIS SERIES**

- 825. **Border Patrol Termination Rates for Discipline and Performance** by Alex Nowrasteh (November 2, 2017)
- 824. **The Coming Transit Apocalypse** by Randal O’Toole (October 24, 2017)
- 823. **Zoning, Land-Use Planning, and Housing Affordability** by Vanessa Brown Calder (October 18, 2017)
- 822. **Unforced Error: The Risks of Confrontation with Iran** by Emma Ashford and John Glaser (October 9, 2017)

821. **Why the United States Should Welcome China's Economic Leadership** by Colin Grabow (October 3, 2017)
820. **A Balanced Threat Assessment of China's South China Sea Policy** by Benjamin Herscovitch (August 28, 2017)
819. **Doomed to Repeat It: The Long History of America's Protectionist Failures** by Scott Lincicome (August 22, 2017)
818. **Preserving the Iran Nuclear Deal: Perils and Prospects** by Ariane Tabatabai (August 15, 2017)
817. **Reforming the National Flood Insurance Program: Toward Private Flood Insurance** by Ike Brannon and Ari Blask (July 19, 2017)
816. **Withdrawing from Overseas Bases: Why a Forward-Deployed Military Posture Is Unnecessary, Outdated, and Dangerous** by John Glaser (July 18, 2017)
815. **Cybersecurity or Protectionism? Defusing the Most Volatile Issue in the U.S.–China Relationship** by Daniel Ikenson (July 13, 2017)
814. **Step Back: Lessons for U.S. Foreign Policy from the Failed War on Terror** by A. Trevor Thrall and Erik Goepner (June 26, 2017)
813. **Commercial Speech and the Values of Free Expression** by Martin H. Redish (June 19, 2017)
812. **Would More Government Infrastructure Spending Boost the U.S. Economy?** by Ryan Bourne (June 6, 2017)
811. **Four Decades and Counting: The Continued Failure of the War on Drugs** by Christopher J. Coyne and Abigail R. Hall (April 12, 2017)
810. **Not Just Treading Water: In Higher Education, Tuition Often Does More than Replace Lost Appropriations** by Neal McCluskey (February 15, 2017)
809. **Stingray: A New Frontier in Police Surveillance** by Adam Bates (January 25, 2017)
808. **Curse or Blessing? How Institutions Determine Success in Resource-Rich Economies** by Peter Kaznacheev (January 11, 2017)