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DEMAND SUPPLY: WHY LICENSING REFORM MATTERS TO IMPROVING AMERICAN HEALTH CARE

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INTRODUCTION

Since the passage of the Affordable Care Act, or "Obamacare," in 2010, much of the health care policy debate has focused on public and private health insurance— functionally, health maintenance plans with catastrophic coverage wrapped around them. This focus is in many ways understandable; because the United States is heavily reliant on a third-party payer system for health care delivery, the most visible symptoms of the country's health care problems are the premiums, copays, deductibles and coverage limitations that are packaged into that system.

Patients demand care; the American health care system, bedeviled by decades of bad public policy, imperfectly delivers it at high and steadily rising prices, so delivery often becomes the focus of our analysis and research.

And among academics in the health care field, the disparity in research between demand-side and supply-side health care matters is reasonably well known.[1] Broadly speaking, research typically focuses on the relationship between what, and how, patients are demanding services from the health care system, and how that demand affects cost over time.

But as Werling et al. observe:

> detailed demand side content is not sufficient for a more thorough analysis of healthcare macroeconomics, particularly analyses that concern supply side issues, such as production patterns and employment. Such additional detail has been requested for several reasons, such as to check the consistency of the demand-side estimates and to better judge how to adjust payment schedules.[2]

Half the Story

Research into health care demand is invaluable. It can capture, statistically, the plight of health care consumers

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buying health care goods and services, and provide a context through which policymakers can ask the hard questions about whether our health care market is failing customers, and if so, why.

For example, findings that

- insurance premiums doubled from 2000 to 2010[3];
- the cost of Medicaid doubled in the same period[4];
- employers today are steadily shifting costs to employees because the country's rising cost of care did not, in fact, abate after Obamacare's passage[5]; and
- the cost of insurance in the government marketplaces continues to rise at a double-digit clip[6]

inform the conversation we need to have about what's wrong in our health care system and what we can do to fix it.

But to understand our health care problems fully—to appreciate the American health care cost and access picture—we cannot constrain our focus to only patient matters, but must take a fresh look at the role the regulatory environment in which providers operate may play in our health care problems.

Indeed, health care demand is only half the story of America's health care woes.

The less-talked-about half is the country's *supply* of health care professionals: the people who actually treat the patients and see the human faces that have to suffer through the country's health care policy failures. As our population grows older and demand on health care services rise, having a flexible and dynamic supply of health care professionals, including doctors, nurses, and others, should become a much higher priority of our policymakers.

SUPPLY-SIDE HEALTH CARE REFORM

One of the greatest barriers to greater health care supply is the impact of licensing in its various forms. In July 2015, the Treasury Department, the White House's Council of Economic Advisers, and the Department of Labor released a report titled "Occupational Licensing: A Framework for Policymakers." While the report isn't perfect, the Framework is a reasonably balanced review of licensing as a general matter, what its costs and benefits are, and where we can go from here. As the White House's report notes, "licensing affects who takes what job. If licensing places too many restrictions on this allocation of workers, it can reduce the overall efficiency of the labor market."[7]

We should keep in mind that the Framework does not focus extensively on health care professions,[8] but rather on any profession in which a professional license is required.

Yet market mechanisms in response to regulatory barriers generally operate in a manner consistent with well-accepted economic theories regardless of the type of profession that is licensed. Indeed, the Framework is full of good lessons for health care reformers of all ideological stripes, even in the sections where health care isn't the explicit focus.

In fact, one study cited in the footnotes by the Framework is especially on point and informative to our discussion

about health care supply. In 1987, the Bureau of Economics published a report on the restrictions placed on dental auxiliaries (the support staff of dentists) by the states. Restrictions on these staff members ranged from the number of auxiliaries a dentist could hire to the sorts of procedures the staff could perform. As the authors wrote [9]:

> a potential benefit of relaxing restrictions on the use of dental auxiliaries is the extension of services to consumers who do not currently receive them. . . . High cost, in terms of both price and time, is a major reason why many Americans do not obtain routine medical care. To the extent that relaxing auxiliary use restrictions would increase efficiency and accessibility, and lower the cost of dental care, more U.S. consumers would obtain such care.[10]

In other words, lowering licensing and regulatory barriers could, according to the researchers, lower the cost of health care and increase the public's access to it. And indeed that conclusion was one of the researchers' eventual findings—not just for auxiliaries, but for dentists themselves.

> *States that recognize dental licenses from other states have average prices that are four percent lower than the mean price.* This result is consistent with our prediction that non-recognition impedes entry, and with the findings of previous studies [emphasis mine] (see Shepard, 1978, and Conrad and Sheldon, 1982).[11]

It isn't ambitious to suggest, assuming the same demand, that increasing the supply of a good or service would reduce its cost. It's a precept of economics that should lead state policymakers toward implementing licensing reforms of all sorts. What is remarkable, though, is that despite this widespread understanding of the relationship between supply and demand, state policymakers have been relatively slow to act in recent years to reform health care from the supply side even as the federal government has (unwisely) tinkered with health care from the demand side.

Supply-side health care reforms promoting patient access at lower costs can come in many forms. Let's quickly highlight a few.

Scope of Practice

Scope of practice (SOP) laws outline what a licensed professional can do under the terms of their licensure. In the health care field, doctors generally have the greatest latitude in delivering health care services, and as a general matter that makes sense; medical doctors are typically the highest-trained health care professional a patient can access.

That said, the supply of other well-trained professions, including physician assistants (PAs) and nurse practitioners (NPs), has grown significantly in recent years, approaching and by some accounts actually eclipsing the number of actively practicing family doctors.[12]

While doctors have a comparatively free hand to treat patients, PAs and NPs face a variety of restrictions which vary widely from state to state. Some states require PAs and NPs to work only in coordination with a physician; others allow for greater PA and NP autonomy.[13] Many states restrict whether and when PAs and NPs can write prescriptions to patients, even for relatively low-grade medical problems.[14]

If pursued methodically and responsibly, an appropriate relaxation of SOP regulations for effectively mid-level health care professionals promises to increase access to health care for patients and lower costs overall. Studies published over the last decade suggest that a higher supply of primary care doctors helps to lower the overall cost of care in a region,[15] allowing patients to more easily access primary care before their health might deteriorate and, at that point, require more expensive specialists.[16]

Those findings flow neatly into the issue of whether to expand the scope of practice of mid-level medical professionals. Empowering medical support staff in discrete and appropriate ways can benefit underserved and poorer populations greatly, and while primary care doctors will continue to be preferred to other care options,

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primary care rendered by other trained professionals should help to facilitate significant access and cost gains for patients.

Another factor of the cost question as it pertains to NP-provided services is the fact that NPs are generally paid less for services rendered for the government, for reasons unrelated to the quality of care they provide. According to a Health Policy Brief by public policy journal *Health Affairs*,

> Nurse practitioners are nearly always paid less than physicians for providing the same services. Medicare pays nurse practitioners practicing independently 85 percent of the physician rate for the same services. The Medicare Payment Advisory Commission, the federal agency that advises Congress on Medicare issues, found that there was no analytical foundation for this difference.[17]

The brief notes that NPs tend to order fewer diagnostic tests compared to physicians, which further drives down the cost of seeing an NP, but it's important to reiterate that the difference in payments by Medicare for NP services compared to those same services provided by doctors is not based on a difference in primary care quality.

Again, the precise contours of SOP limitations can and should be the subject of thorough debate at the national and state levels, with an eye toward interstate consistency. But in terms of both access and cost, SOP reforms are an important arrow in the quiver of supply-side health care reforms that can help patients find care in a market that is responsive to a spectrum of patient needs rather than fixated on a rigid hierarchical professional model that only flows upstream to physicians, even when it doesn't need to.

Certificate of Need

Certificate of need (CON) laws can be understood as a sort of "scope of practice for institutions." Developed in the 1960s and 1970s,[18] CON laws represent an attempt to rein in health care costs under the banner of coordinated regional health care, using centralized government planning.

The argument goes that left to their own devices, health care providers could run each other out of business by providing an array of duplicative, but expensive, services in a region—potentially leaving residents with few or no such services after the providers folded or downsized. The solution under this assumption, then, is to create monopolies and oligopolies to guarantee these services will be provided—services that will then be insulated from the risk of competition.

In practice, incumbent institutions seek to keep out competitors for CON-regulated services, not because more services would wreck the market but because more competition is bad for the incumbents' business model. CON-regulated services range from magnetic resonance imaging (MRI) services and positron emission tomography (PET) scanners to even the number of overnight beds a hospital can have.[19]

Restricting competition through the power of government would seem like a practice that, in the context of trying to drive down the cost of care and increase its availability, doesn't make a great deal of economic sense. It should come as little surprise, then, that the claimed access and cost advantages of CON regimes never panned out.

In July 2014, Thomas Stratmann and Jacob W. Russ of the Mercatus Center set about the task of determining whether, and how badly, patients were being hurt by CON regulations in the form of reduced services. Their findings were compelling; on average, patients in CON states saw fewer available acute hospital beds, fewer MRI machines, fewer computer tomography (CT) scanners, and fewer optical and virtual colonoscopy-capable hospitals, compared to the state average.[20]

Stratmann's and Russ's report was the latest in a long line of research to throw cold water on the animating idea of CON—that central control over the supply of certain hospital services increased access to care. To the contrary, Mercatus's research suggests the opposite is true. And the balance of the research on CON's impact on cost doesn't provide much solace to CON supporters, either, suggesting that CON has, at best, a neutral to negative effect on health care costs in states where CON exists.[21]

Nationwide, incumbent hospitals who benefit from CON tend to support the continuation of their states' respective programs. In the context of their business model, that

calculation makes sense; after all, CON laws guarantee many of these institutions limited or no substantive competition, meaning they can effectively set the price for CON-regulated activities in their region.

Yet despite the opposition of these incumbents, states are slowly but steadily beginning to dismantle their CON systems. The reason is simple: CON doesn't really do what it was intended to do. Rather than increasing access, the body of research shows—and the very nature of the program implies—that it reduces services. And rather than decrease cost, CON has, at best, no effect on it. To increase access and reduce cost, government should remove barriers to the supply of services currently regulated by CON, not erect or preserve them.

Other Supply-side Ideas

The list of supply-side reforms is certainly not limited only to SOP and CON changes. For instance, widening the door to qualified immigrant physicians, while not a comprehensive solution, could expand the pool of doctors available to underserved populations in the United States.[22] Protecting physicians from undue insurance regulation, particularly those in a direct primary care (DPC) setting, would also ensure that care remains available to patients in that practice setting.[23] In an insurance context, substantively removing barriers to interstate competition in health coverage would allow consumers a far greater range of insurance options and prices, breaking what is often an oligopoly for health insurers that have navigated state insurance regulations and dominate state insurance markets.[24]

And that list of supply-oriented reforms goes on, albeit along a spectrum of good and bad ideas.[25] Some have proposed government programs to incentivize newly graduated doctors to move to underserved communities in exchange for student loan forgiveness.[26] While supply-oriented in nature, such programs should be closely scrutinized to verify their effectiveness in achieving the long-term physician supply and patient care needs that policymakers are seeking to meet.[27]

> "...states are slowly but steadily beginning to dismantle their CON systems."

Perhaps the most promising supply-side reform of them all, however, is interstate medical licensing.

Interstate Medical Licensing

Interstate medical licensing is a simple and commonsense concept. Instead of professional licensing being artificially delineated along state boundaries and subject to cartelized control, interstate licensing would instead allow qualified professionals properly licensed in one jurisdiction to practice in any other jurisdiction. So, if you are a doctor licensed and in good standing to practice medicine in your home state, an interstate licensing system would require all other states to recognize your license.[28]

Interstate standardization and acceptance of medical licensing makes a great deal of practical sense, and chances are reasonably good that you already participate in a similar licensing regime.

Don't believe me? Pull out your wallet and look at your driver's license.[29] Your driver's license allows you to operate your car in any state—and in many other countries[30]—without re-licensing when you enter, thanks to the common and agreed-upon standards of licensing bodies across the United States.

But imagine if every time you wanted to take a road trip from your home state you had to apply, qualify for, and pay for a license in every state in which you intended to operate your car. Would you even bother getting on the road of another state? Some of us might, but many wouldn't—and we would all be the worse off for it.

Roadside businesses would have fewer customers; travelers would have fewer leisure options. Indeed, the potential absurdity of a fragmented state-based licensing system is clearest in the realm of our lives where it's least practiced. That absurdity is sometimes obscured, however, for professional licenses and activities that we have come to accept as requiring licenses without a great deal of contemporary reflection.

"Doctors practicing in Missouri, Illinois, New York, or any other state are trained and licensed basically the same way."

Detractors might note that most driver's licenses aren't professional licenses[31]—which is undoubtedly true—and that the stakes in medical licensing are so high that state-based regulators need to have intimate control over health care professionals, even if they're already licensed in another state. But the obvious interapplicability of licenses in the driving context readily extends to the medical field.

Let's say you drive to Chicago on holiday, park your car, and promptly twist your ankle walking up to the L-Train. Assuming you need medical assistance—and setting aside, for the moment, whether your insurance will pay for it—would you really think twice about the quality of care you would get from a doctor in Chicago who in all likelihood isn't licensed in your home state? Of course not. Doctors practicing in Missouri, Illinois, New York, or any other state are trained and licensed basically the same way.

We can't pack a licensed, home-state doctor when we travel. And we don't need to.

The flipside to the "traveling patient" example is important here. Would our concern about the quality of care be different if the practitioner was traveling rather than the patient? It seems doubtful.

In fact, the problem of interstate licensing barriers to itinerant licensed professionals is one that the federal government is already grappling with for members of the military and their families, who are often moved from state to state as part of their service. As the White House's licensing Framework notes,[32]

> Many jobs, like paramedics, truck drivers, nurses, and welders, require either a State occupational license or a national certification to be hired, and our current system of occupational regulation makes it very difficult for service members and veterans to obtain civilian licenses and certifications that directly translate to their military training. Oftentimes, service members and veterans are required to repeat education or training in order to receive these occupational credentials, even though much or all of their military training and experience overlaps with licensure or certification requirements….
>
> Furthermore, our patchwork system of State licensure creates additional challenges for military families, who are much more mobile than the general population and frequently have to acquire new licenses when they move across State lines. According to a joint analysis by the Department of Defense and the Department of the Treasury, about 35 percent of military spouses in the labor force work in professions that require State licenses or certification, and they are ten times more likely to have moved across State lines in the last year than their civilian counterparts.

The working solution to the problem has been to try and convince states to streamline their licensing and certification processes for military members and their families; according to the White House,[33] all 50 states had substantively done so as of 2015.[34]

Unfortunately, simply streamlining the process for relicensing is not the same thing as accepting a license from another state. States certainly have an interest in promoting the public health and safety of their citizens, and the rigorous training and licensing of medical doctors generally has helped to instill confidence in the profession for many patients. If this is true, however, that success makes interstate licensing for physicians all the more appropriate both for patients and for care providers.

In fact, the movement toward interstate medical licensing may have already begun.

Volunteer Health Care Services Act

In 1995, Tennessee quietly passed the Volunteer Health Care Services Act. Along with providing liability protections to out-of-state doctors akin to those provided under traditional Good Samaritan Laws,[35] the Act also allowed doctors from other states to come to Tennessee and provide free charity care to its residents without having to go through an onerous re-licensing process. With the

law's passage, Tennessee was suddenly able to leverage the services of doctors licensed in other states to meet the needs of some of its most vulnerable and underserved citizens.

The driving forces behind the Tennessee law were Stan Brock and Remote Area Medical (RAM), a nonprofit charitable organization that travels around the country and around the world providing free health care clinics.[36] RAM's doctors and medical professionals come from around the country, an issue that can play a determining factor in whether the organization is able to provide services in a particular state at all.

Burdensome and complicated licensing laws can prevent organizations like RAM from providing services, as residents of Joplin, Missouri, found out after the city was decimated by a massive tornado in 2011. In the aftermath of the tornado, RAM had sent a mobile eyeglass lab to make and distribute free glasses for residents still reeling from the disaster,[37]

> [b]ut it wasn't allowed to assist because Missouri law makes it extremely difficult for doctors, nurses and other health-care professionals to offer free services.
>
> "We did send the vehicle up there," said RAM founder Stan Brock. "Unfortunately, it was not allowed to do anything because we did not have a Missouri-licensed optometrist and opticians available to do the work."

Two years later, Missouri passed its own version of the Tennessee law called the Volunteer Health Services Act[38], and today over a dozen states have similar laws providing Good Samaritan protections and effective medical license reciprocity for charity care provided through groups like RAM.[39]

It's hard to overstate the importance of a law like this, not only for poor patients but as a demonstration of good policy. For one, it shows clearly that an interstate licensing system can work; indeed, RAM has helped hundreds of thousands of patients across the country and with its clinics with the help of thousands of qualified volunteers. Moreover, the laws' very existence acts as tacit confirmation that doctor licenses are, for all intents and purposes, the same from state to state.

Those important facts drive us to some very important questions. If out-of-state doctors are "good enough" for our most vulnerable citizens, aren't they good enough for all of our citizens? If out-of-state doctors can provide care to the poor for free, why can't they also provide care to others for a fee?

Telemedicine

The impact of interstate licensing for doctors wouldn't just be felt in the in-person setting of a RAM clinic. Other areas of the medical field, including telemedicine, would feel the impact of this paradigm shift in licensing, with the result being a greater supply of medical help to those who may not otherwise receive it.

"Telemedicine" is the provisioning of patient diagnoses and care using some form of telecommunications technology.[40] That broad definition includes many common technological tools, like e-mail and text messages, but it also includes comparatively exotic services like videoconferencing between a patient and a physician. A California doctor and a worried North Carolina patient could hypothetically be at opposite ends of the country on any given day, and yet thanks to today's video technology, the patient could find reassurance or a referral from a doctor from the privacy of her own home.

Expanding doctors' ability to make "virtual house calls" isn't just a matter of luxury, but for millions of Americans a matter of necessity. As the American Action Forum observed, much of the primary care doctor shortage problem isn't strictly about the number of primary care doctors in the United States, but how that supply is distributed around the country.[41] Specifically, many doctors have settled in large cities far from many rural residents, and this has left vast swaths of the United States with limited access to needed physicians.

While having doctors physically present is the optimal arrangement for many patients, expanding the supply

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of doctors who can conduct telemedicine in rural communities specifically and all communities generally should be among the highest priorities of policymakers. An article published in the *International Journal of Environmental Research and Public Health* summarizes the general contours of the problem quite well[42]:

> Historically, the challenge of medical licensure or "credentialing" for multi-state service provision by medical providers has been burdensome and has therefore restricted growth across state lines. Even when licensing is in place, it is often difficult to work within multiple different health organizations because of privileging procedures within the organizations. Furthermore, the legalities surrounding virtual medical services can sometimes be inconsistent, vague, and increase liability concerns. Quality standards and protocols also lack uniformity, which makes it difficult to develop a framework within which health organizations may operate. Medical malpractice and liability issues continue to be areas where the law is unclear in terms of telemedicine practices, leaving hospitals and doctors open to unknown legal obligations and responsibilities. With the majority of health care regulations being governed at the state level, these barriers continue to plague the use of telemedicine.

A combination of burdensome licensure requirements and legal ambiguities has made it difficult for telemedicine to expand as quickly as underserved patients might like. Unfortunately, until medical licensing is modernized for contemporary health care needs, opportunities to help patients using telemedical technologies will continue to be limited, and patients will suffer the harm of that delay.

Interstate Medical Licensure Compact

How can policymakers best balance the needs of patients and the appropriate prerogatives of state licensing bodies? Medical professions are already contending with these issues.

Nurses, for instance, have established a licensing reciprocity framework that acts in many ways like driver's licenses; a nurse with a license from a state that's a member of the Nurse Licensure Compact (NLC)[43] can practice in any other state that's also a member.[44] The compact allows nurses to more easily find employment anywhere their license is accepted[45]; for patients, it may help to ensure that areas in need of nurses won't have to go without them simply because of barriers created by unnecessary regulation and licensing.

That is not the approach that the Federation of State Medical Boards (FSMB), which regulates doctors, has taken. Instead of lowering barriers to entry, the FSMB has instead pushed the Interstate Medical Licensure Compact (IMLC), which focuses more on streamlining paperwork and fees for licenses than on opening the gates to more dynamic and flexible physician supply.

The FSMB's Compact may make the technical, state-by-state process of licensure easier than before, but it still requires licensure in each state in which a doctor plans to practice. Indeed, the FSMB's approach to licensing is generally consistent with the White House's approach to streamlining licensing for military members at the state level, which deemphasizes the establishment of, effectively, a single professional license or credential accepted across state lines, in favor of lower paperwork burdens. Accordingly, it's unsurprising that the FSMB recently received a federal grant to support further implementation of the Compact beyond the 17 states that have already accepted it.[46] The FSMB's framework parallels in significant part the Framework that the White House has pursued.

Criticism of the IMLC: From the standpoints of promoting dynamic physician supplies and establishing reliable and secure access for underserved patients, the IMLC decidedly fails on both counts. As Cato adjunct scholar Shirley Svorny has written, sustaining inconsistent licensing requirements on a state-by-state basis will act as an artificial barrier to more accessible care in the future, just as it has acted as an artificial barrier to care in the past.[47]

> Practicing under multiple state licenses is complicated and expensive. There are state-specific medical practice rules. In addition, rules for informed consent, legal requirements for a finding of malpractice, and requirements for continuing medical education differ across states. And there are license renewal requirements and fees. . . .

> The compact is being promoted, disingenuously, as addressing license portability and access to interstate telemedicine. The compact Web page touts the compact as "An expedited licensure process . . . that improves license portability and increases patient access to care." However, as noted above, it does nothing to address the major barrier to interstate telemedicine, the requirement that physicians be licensed in every state in which they practice medicine.

Svorny is precisely right that the Compact can hardly market "portability" as a selling point, because licensed doctors are effectively stopped at the border of each state they would enter to be subjected to new licensing rules particular to that new state.

"Portability" should look like a driver's license. With a driver's license, you can travel through any state unimpeded. With a nurse's license under the NLC, you can practice without undue burden in half the country—not as good as 50 states, but far better than just one state.

But under the Compact set out by the FSMB, the status quo licensing restrictions remain largely the same, harming physicians and patients alike. The Association of American Physicians and Surgeons (AAPS) has concerns similar to Svorny's, cautioning that the Compact will "[increase] the power of a private bureaucratic organization to intervene in, define, and control the practice of medicine."[48] The Compact would preserve the 50-State licensing regime physicians and patients currently live under,[49] with the wide variety of requirements to not just earn but also maintain a physician's license in each jurisdiction.[50]

If the policy interest at issue is the promotion of a dynamic supply of physicians, then the ultimate destination for reformers should be away from the sort of licensure fragmentation promoted by the FSMB's Compact and toward greater licensure liberalization. Svorny suggests that states stop licensing physicians altogether, pointing out that consumers already "are protected by an interdependent system of private oversight motivated by concerns over reputation and liability"—and a system that necessarily includes hospitals, insurers, and private certification groups.[51] Whether state officials have the appetite to end doctor licensing completely is, of course, a different question—one beyond the scope of this paper. Such a change is not a prerequisite for progress in this area.

Potential impact on doctor supply: Estimating the increase in the number of doctors available to practice in a given state is also, for the most part, beyond the scope of this paper.

Back-of-the-envelope calculations can yield wildly different totals depending on the model used, particularly since interstate licensing business models are in such uneven use and modern telemedicine is still emerging as a more common practice. Making specific predictions serves more to facilitate debates about models than debates about policy, and this researcher is disinclined to further the former end.

That said, it is not speculative to remind health care observers of the current inventory of physicians that are already available to Americans... yet not available to all Americans in their home states.

According to the Federation of State Medical Board's 2014 census of licensed physicians, there are over 900,000 licensed doctors in the United States.[52] Yet only about 16 percent of those are accessible to patients in California—the largest state in the country—thanks to state licensing rules common across the nation. Interstate licensing would increase the number of licensed doctors available to California-based patients more than six-fold, with far greater potential access gains for patients in smaller states that have fewer doctors.

To be clear, in an interstate licensing system we would not expect that every physician in the entire universe of American doctors would necessarily make themselves available to the entire universe of American patients. For reasons ranging from time and travel considerations to technological discomfort, doctors would make their own choices about the extent to which they would want to expand their current practices into this robust market of interstate licensed doctors and interstate patients.

But that doesn't change the fact that states, individually, have vastly smaller supplies of qualified physicians than what the supply of the entire country would suggest. Interstate licensing opens doors for patient access that were closed before. In addition, it provides innovative doctors, often marooned by their license to one state, with an opportunity expand their practices nationwide to meet patient needs—whether in person or by way of telemedicine.

FSMB Data: Physicians with an Active License by State and the District of Columbia, 2014

State/Region	Licensed Physicians	Population Count[b]	Physicians per 100,000 Population
United States	916,264	318,857,056	287
Alabama	16,064	4,849,377	331
Alaska	3,786	736,732	514
Arizona	27,928	6,731,484	370
Arkansas	9,529	2,966,369	321
California	143,427	38,802,500	370
Colorado	19,897	5,355,866	371
Connecticut	16,678	3,596,677	464
Delaware	5,268	935,614	563
District of Columbia	10,623	658,893	1,612
Florida	71,024	19,893,297	357
Georgia	34,163	10,097,343	338
Hawaii	9,136	1,419,561	644
Idaho	5,687	1,634,464	348
Illinois	43,885	12,880,580	340
Indiana	27,206	6,596,855	412
Iowa	11,224	3,107,126	361
Kansas	9,002	2,904,021	310
Kentucky	17,645	4,413,457	400
Louisiana	16,346	4,679,676	352
Maine	6,364	1,330,089	489
Maryland	28,976	5,976,407	485
Massachusetts	33,965	6,745,408	504
Michigan	45,703	9,909,877	461
Minnesota	21,855	5,457,173	400
Mississippi	9,951	2,994,079	332
Missouri	25,926	6,063,589	428
Montana	4,765	1,023,579	466
Nebraska	8,598	1,881,503	457
Nevada	8,111	2,839,033	286
New Hampshire	6,346	1,326,813	489
New Jersey	35,842	8,938,175	401
New Mexico	8,691	2,085,572	417
New York	91,744	19,746,227	465
North Carolina	33,266	9,943,964	335
North Dakota	3,769	739,482	510
Ohio	44,981	11,594,163	388
Oklahoma	12,491	3,878,051	322
Oregon	14,092	3,970,239	355
Pennsylvania	55,443	12,787,209	434
Rhode Island	4,105	1,055,173	389
South Carolina	17,442	4,832,482	361
South Dakota	3,607	853,175	423
Tennessee	21,151	6,549,352	323
Texas	72,601	26,956,958	269
Utah	9,891	2,942,902	336
Vermont	3,171	626,562	506
Virginia	36,041	8,326,289	433
Washington	26,517	7,061,530	376
West Virginia	7,493	1,850,326	405
Wisconsin	25,744	5,757,564	448
Wyoming	3,360	584,153	575
State and D.C. Totals[c]	1,227,500	318,857,056	385

Source: Young, Aaron; Humayun J. Chaudhry; Xiaomei Pei; Katie Halbesleben; Donald H. Polk; and Michael Dugan, MBA. "A Census of Actively Licensed Physicians in the United States, 2014." Available at: https://www.fsmb.org/Media/Default/PDF/Census/2014census.pdf.

[a]State counts are based on physician data recorded by the FSMB using state medical board license files from 2014 and reflect the number of physicians with a full and unrestricted license. Resident physician licenses were excluded when such licenses could be identified.

[b]U.S. Census Bureau, Population Division, July 2014.

[c]Physician counts do not add up to 916,264 because some physicians maintain active licenses in more than one U.S. jurisdiction.

"Interstate licensing provides innovative doctors often marooned by their license to one state, with an opportunity expand their practices nationwide to meet patient needs"

Known unknowns: If states pursue interstate licensing reforms, the precise form and nature of the adjustments to the health care market will be subject to a variety of factors that only time will reveal.

Malpractice insurance policies, often based on the legal regime of a single state, will in many cases have to evolve to accommodate doctors who regularly treat patients across multiple state lines. Many of these insurance carriers already have footprints in multiple states, but what is unclear is how they might optimally blend and price compliant policies for these interstate doctors.

State medical boards, even after the passage of interstate licensing reforms, may nonetheless try to frustrate the intent of these laws in ways that have not yet been contemplated.

Then there are the doctors themselves who will have their own decisions to make. As in any competitive market, physicians may begin to market themselves by highlighting differences—here, possibly based on their state of their licensure, as a way to gain a reputational advantage. A Missouri-licensed doctor may be preferable to some patients, particularly Missourians; alternatively, a license from another state, like Massachusetts, may offer advantages to patients, perceived or otherwise, that a Missouri-based license may not. How these incentives might affect licensing decisions by prospective and current doctors, and their subsequent geographic distribution, is thus also unknown. Moreover, some physicians' practices will change and reorient to take advantage of the opportunities presented by this reform of the law; how they will change, and how many will change, remain open questions.

RECOMMENDATIONS

Policymakers have a host of supply-side licensure reforms available for implementation. Scope of practice, certificate of need, and other supply-side changes recounted in this paper provide a concrete and substantive basis for augmenting the supply of health care in this country, and deserve the serious consideration of state and federal policymakers.

Topping the list of supply-side recommendations, however, is the promotion of an interstate physician licensing regime. The IMLC creates only the illusion of a licensure reciprocity system that would benefit doctors and patients alike.

While a compact that delivered doctor licensure reciprocity would be acceptable, states do not have to wait for such a plan to emerge and should be willing to accept, unilaterally, the licenses of qualified medical professionals from other states. Indeed, just as several states have passed Volunteer Health Care Services Acts for the needy, states can pass similar legislation that would allow licensed physicians in good standing to provide care to their own residents—no additional licensing required.

NOTES

1. Werling and colleagues observe that "most studies of the health care sector and its implications for the economy as a whole focus exclusively on the demand side. In the NHEA, health spending is broken into 10 personal health care categories (hospital, physician and clinical services, and so forth) as well as categories for the net cost of private health insurance, government administration, research, and investment (table 1). BEA provides a different but similar accounting for health care expenditures within the context of the national income and product accounts. Hartman, Kornfeld, and Catlin (2010) have provided a detailed description of both sets of accounts and their differences, finding similarities in the estimates for the broader categories of spending, such as ambulatory care, hospitals, and insurance." (p.2). Available at: https://www.bea.gov/scb/pdf/2014/04%20April/0414_supply_side_of_health_care.pdf.
2. Ibid.

3. Kaiser Family Foundation. "Employer Health Benefits 2014." Available at: http://kff.org/health-costs/report/2014-employer-health-benefits-survey/.

4. United States Department of Health & Human Services. "2011 Actuarial Report on the Financial Outlook for Medicaid." Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Financing-and-Reimbursement/Downloads/medicaid-actuarial-report-2011.pdf.

5. Kaiser Family Foundation. "Employer-Sponsored Health Premiums Rise 3 Percent in 2014." September 10, 2014. Available at: http://kff.org/health-costs/press-release/employer-sponsored-family-health-premiums-rise-3-percent-in-2014/.

6. Alonso-Zaldivar, Ricardo. "Report: New Evidence of Rising 'Obamacare' Premiums." The Big Story. 15 June 2016. Web: 16 June 2016. Available at: http://bigstory.ap.org/article/2e1d5fe5385d461f9db65e1faa47cc61/report-new-evidence-rising-obamacare-premiums.

7. The White House, Occupational Licensing: A Framework for Policymakers, July 2015, p 12. Available at: https://www.whitehouse.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf.

8. Frankly, the Framework should not have effectively stipulated that that health care licensing is *sui generis* to other licensing regimes; the stakes may be higher with health care fields, but functional practice and effect of health care licensing do not depart appreciably from the practices and effects of licensing in most other professional fields. Moreover, the White House should have been far more critical of the Interstate Medical Licensure Compact (IMLC), which runs directly against the generally forward-looking reform ideas of the White House's report. I discuss the IMLC at length later in this piece.

9. Liang, JN and Jonathan D Ogur. 1987. "Restrictions on Dental Auxiliaries: An Economic Policy Analysis." Bureau of Economics. Washington, DC: Federal Trade Commission. Available at: https://babel.hathitrust.org/cgi/pt?id=mdp.39015013802320;view=1up;seq=17.

10. Ibid, p. 1.

11. Ibid, p. 35.

12. Stange, Kevin M. How Does Provider Supply and Regulation Influence Health Care Market? Evidence from Nurse Practitioners and Physician Assistants." National Bureau of Economic Research, June 2013. pp 2–3. Available at: http://www.nber.org/papers/w19172.pdf.

13. Ibid., p. 7.

14. Stokowski, Laura A. "APRN Prescribing Law: A State-by-State Summary." Medscape. 3 June 2016. Web. 20 June 2016. Available at: http://www.medscape.com/viewarticle/440315.

15. Mark, DH, MS Gottlieb, BB Zellner, VK Chetty, and JE Midtling. "Medicare Costs in Urban Areas and the Supply of Primary Care Physicians." *Journal of Family Practice.* 1996;43(1):33–39. Abstract available at: http://www.ncbi.nlm.nih.gov/pubmed/8691178?dopt=Abstract.

16. Baicker, Katherine, and Amitabh Chandra. "Medicare Spending, The Physician Workforce, and Beneficiaries' Quality of Care." Health Affairs. 7 Apr. 2004. Web. 20 June 2016. Available at: http://content.healthaffairs.org/content/early/2004/04/07/hlthaff.w4.184.full.pdf+html.

17. Cassidy, Amanda. "Nurse Practitioners and Primary Care." Health Affairs. 2013. Available at: http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=92.

18. "Certificate of Need: State Health Laws and Programs." National Conference of State Legislatures, Jan. 2016. Available at: http://www.ncsl.org/research/health/con-certificate-of-need-state-laws.aspx.

19. Koopman, Christopher, Thomas Stratmann, and Mohamad Elbarasse. "Certificate-of-Need Laws: Implications for Missouri." Mercatus on Policy. Mercatus Center, 11 May 2015. Available at: http://mercatus.org/publication/certificate-need-laws-implications-missouri.

20. Stratmann, Thomas, and Jacob W. Russ. "Do Certificate-of-Need Laws Increase Indigent Care?" Mercatus on Policy. Mercatus Center, July 2014. Available at: http://mercatus.org/sites/default/files/Stratmann-Certificate-of-Need.pdf.

21. Inman, Neal. "Certificate of Need: Does It Actually Control Healthcare Costs?" Civitas Institute. 14 Sept. 2011. Web. 20 June 2016. Available at: https://www.nccivitas.org/2011/certificate-of-need-does-it-actually-control-healthcare-costs.

22. Patterson, Davis G., Gina Keppel, Susan M. Skillman, Connie Berry, Clay Daniel, and Mark P. Doescher. "Recruitment of Non-U.S. Citizen Physicians to Rural and Underserved Areas through Conrad State 30 J-1 Visa Waiver Programs." Rural Health Research Center, University of Washington School of Medicine. Apr. 2015. Available at: http://depts.washington.edu/uwrhrc/uploads/RHRC_FR148_Patterson.pdf.

23. Ishmael, Patrick. "Where Obamacare Leaves Questions, Direct Primary Care May Offer Answers." Show-Me Institute. Oct. 2015. Available at: <http://showmeinstitute.org/sites/default/files/20150928%20-%20Where%20Obamacare%20Leaves%20Questions%20-%20Ishmael.pdf>.

24. McLaughlin, Dan. "Why Selling Health Insurance Across State Lines Is a Good Thing." The Federalist. 28 May 2014. Web. 20 June 2016. Available at: http://thefederalist.com/2014/05/28/why-selling-health-insurance-across-state-lines-is-a-good-thing.

25. Ishmael, Patrick, and Jonathan Ingram. "Volunteer Care: Affordable Health Care without Growing Government." Foundation for Government Accountability. 27 Oct. 2015. Web. 20 June 2016. Available at: http://www.ncsl.org/documents/health/VolunteercareresearchTFCF15.pdf

26. Brock, H. Woody. "A Supply-Side Solution for Health Care." Barron's. 21 Jan. 2012. Web. 20 June 2016. Available at: http://www.barrons.com/articles/SB50001424053111904346504577532821531349372.

27. Mitchell, Josh. "U.S. Student-Loan Forgiveness Program Proves Costly." *The Wall Street Journal*. 20 Nov. 2015. Web. 20 June 2016. Available at: http://www.wsj.com/articles/u-s-student-loan-program-proves-costly-1448042862.

28. A practice might include not only doctors who are physically present in the state providing care, but also doctors who are offering care through telemedicine services, discussed later in this essay.

29. La Couture, Brittany. "The Traveling Doctor: Medical Licensure Across State Lines." American Action Forum. 10 June 2015. Web. 20 June 2016. Available at: https://www.americanactionforum.org/insight/the-traveling-doctor-medical-licensure-across-state-lines.

30. "Can I Use My Driver's License in a Foreign Country?" Nolo.com. 20 June 2016. Available at: http://www.nolo.com/legal-encyclopedia/drivers-license-faq-29063-3.html.

31. Commercial Driver's Licenses, or CDLs, are by most accounts professional licenses permitting drivers of heavy commercial vehicles to operate across state lines.

32. The White House. "Occupational Licensing: A Framework for Policymakers." July 2015, p 10. Available at: https://www.whitehouse.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf/.

33. I have to note that this is a White House claim only because the underlying evidence that all 50 states have passed the required legislation doesn't appear to bear itself out on the Department of Defense's website, as New York does not appear to have passed the suggested reforms to the DOD's satisfaction as of this writing. http://1.usa.gov/28ImIFx

34. Ibid.

35. "Good Samaritan Law." Wikipedia. Wikimedia Foundation. 20 June 2016. Available at: https://en.wikipedia.org/wiki/Good_Samaritan_law.

36. Ishmael, Patrick. "Missouri Should Lower Barriers for Out-of-State Charitable Medical Missions." Show-Me Institute. 28 Feb. 2012. Web. 20 June 2016. Available at: http://showmeinstitute.org/blog/misc-miscellaneous/missouri-should-lower-barriers-out-state-charitable-medical-missions.

37. "MO Still Forbids Free Health Care from Outside the State." Missouri Watchdog.org. 05 Aug. 2013. Web. 20 June 2016. Available at: http://watchdog.org/99280/mo-still-forbids-free-health-care-from-outside-the-state/.

38. Ishmael, Patrick. "From The Jaws of Defeat: Volunteer Health Services Act Veto Overridden." Show-Me Institute. 12 Sept. 2013. Web. 20 June 2016. Available at: http://showmeinstitute.org/blog/health-care/jaws-defeat-volunteer-health-services-act-veto-overridden.

39. "Volunteer Health Care Services Archives - Medicine Man." Medicine Man. N.p., 4 Dec. 2015. Web. 20 June 2016. Available at: http://www.medicinemanstanbrock.com/tag/volunteer-health-care-services/.

40. "What Is Telemedicine?" What Is Telemedicine. Web. 20 June 2016. Available at: http://www.americantelemed.org/about-telemedicine/what-is-telemedicine.

41. Ryan, Conor. "Doc Shortage or Maldistribution?" American Action Forum. 14 Aug. 2014. Web. 20 June 2016. <https://www.americanactionforum.org/weekly-checkup/doc-shortage-or-maldistribution/.

42. LeRouge, Cynthia, and Monica J. Garfield. "Crossing the Telemedicine Chasm: Have the U.S. Barriers to Widespread Adoption of Telemedicine Been Significantly Reduced?" International Journal of Environmental Research and Public Health. Dec. 2013. Web. 20 June 201—6. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3881125/.

43. "Nurse Licensure Compact." National Council of State Boards of Nursing website. 20 June 2016. Available at: https://www.ncsbn.org/nurse-licensure-compact.htm.

44. Ollove, Michael. "Make Doctor's Licenses Like Driver's Licenses? Medical Groups Say No." The Pew Charitable Trusts website. 11 Dec. 2015. Web. 20 June 2016. Available at: http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/12/11/make-doctors-licenses-like-drivers-licenses-medical-groups-say-no?utm_campaign=2015-12-11+Stateline+Daily+&utm_medium=email&utm_source=Eloqua.

45. Laird, Matthew, Adrian Moore, and Samuel Staley. "Occupational Licensing in Florida: Unnecessary Licenses Are Killing Jobs." Reason. Feb. 2016. Web. 20 June 2016. Available at: http://reason.org/files/occupational_licensing_florida.pdf>.

46. Conn, Joseph. "Interstate Doc Compact Gets $750,000 Grant Boost." Modern Healthcare. 17 Jan. 2016. Web. 20 June 2016. Available at: http://www.modernhealthcare.com/article/20160617/NEWS/160619912.

47. Svorny, Shirley. "Interstate Medical Licensure Compact Won't Help." Cato Institute. Feb. 2016. Web. 20 June 2016. Available at: http://www.cato.org/publications/commentary/interstate-medical-licensure-compact-wont-help.

48. Snavely, Jeremy. "The Interstate Medical Licensure Compact: Claims vs. Reality." Journal of American Physicians and Surgeons. 20(1). Spring 2015. Available at: http://www.jpands.org/vol20no1/snavely.pdf.

49. Telehealth & Multi-State Physician Licensure: Don't Get Caught in the Tangled Web of Inconsistent and Troublesome State Physician Licensure Laws." Health Care Compliance Association. Slide show. 12 April 2016. Available at: http://www.hcca-info.org/Portals/0/PDFs/Resources/Conference_Handouts/Compliance_Institute/2016/111print2.pdf.

50. Chart of Physician Licensing Requirements by State. Siskind Susser, PC. 2014. Available at: http://www.visalaw.com/wp-content/uploads/2014/10/physicianchart.pdf.

51. Svorny, Shirley. "End State Licensing of Physicians." The Hill. 07 Aug. 2015. Web. 20 June 2016. Available at: http://thehill.com/blogs/congress-blog/healthcare/250457-end-state-licensing-of-physicians.

52. Young, Aaron; Humayun J. Chaudhry; Xiaomei Pei; Katie Halbesleben; Donald H. Polk; and Michael Dugan. "A Census of Actively Licensed Physicians in the United States, 2014." Journal of Medical Regulation. 101(2):8–23. Available at: https://www.fsmb.org/Media/Default/PDF/Census/2014census.pdf.

NOTES

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