Potential licensing reforms in light of COVID-19

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ABSTRACT

In 2020, COVID-19 threatened to overwhelm healthcare capacity, forcing policymakers to enact temporary waivers of licensing restrictions. Research finds that occupational licensing reduces the supply of professionals in a regulated field, and reduces geographic mobility, contributing to the primary care professional shortage. Scope of practice laws reduce the flexibility of practitioners, exacerbating these shortages. Given the fact that policymakers and healthcare professionals recognized the shortcomings to our current licensing regime during the COVID-19 pandemic, we should consider alternatives that still ensure quality care for patients without restricting access and reducing flexibility. We rank six alternatives currently being considered to address the primary care shortage from most to least effective. While efforts to expand the supply of physicians or NPs and PAs would be the most effective reforms to expand access to primary care, others that better utilize our existing supply of healthcare professionals are worth considering.

1. Introduction

The medical profession has historically used occupational licensing laws as a method to regulate the provision of healthcare, limiting the ability to provide care to those qualified. In the United States, occupational licensing laws for healthcare professions are passed by individual states, giving the licensing board the authority to determine who can practice in a profession. Licensing laws are designed to protect patients by preventing low quality professionals from practicing and encouraging the development of human capital throughout their career [1]. To practice, applicants must provide the licensing board with evidence that they have met the required education and training, passed exams, met other qualifications, and paid licensing fees. For physicians, licensing laws standardized education and established state medical boards to oversee their practice to ensure quality care [2]. Over time, licensing was extended to other healthcare professions as they were developed.

Like other types of regulation, there are some drawbacks to medical licensing laws as currently designed. State level licensing regimes complicate the delivery of healthcare across state lines for professionals, whether they are seeking to move to a new state or practice telemedicine. To legally practice medicine, a healthcare professional must be licensed where the care is provided. When care is provided in person, this provision is not an issue. However, when practicing telemedicine, healthcare professionals must be licensed in the state that the patient is located, making it more difficult to provide care to out of state patients. State level licensing also limits the ability of healthcare teams with members located in multiple states, requiring each member to obtain multiple licenses. Licensing can also limit the ability of healthcare professionals to temporarily practice in another state in response to a sudden crisis, exacerbating regional shortages.

Further, the requirements that attempt to ensure quality also restrict entry into healthcare professions, exacerbating physician shortages. Licensing laws are associated with a reduction in the supply of workers by between 11.4 percent [3] and 27 percent [4]. These requirements reduce the number of professionals practicing in a field because of the additional time and cost of entry, making the path to licensure rigid and prohibitive for professionals changing careers. This has the effect of slowing the growth of healthcare professionals, making the supply of healthcare professionals less responsive to changes in demand.

State licensing laws also reduce interstate mobility because of the added cost of obtaining a license in a new state after a move. [5] Although licensing standards for healthcare professionals are much more standardized than other professions, licensing laws continue to pose a barrier in the United States. Healthcare professionals are less...
able to respond to regional or local changes in demand for healthcare without facing delays due to the application process.

The response to the coronavirus disease 2019 (COVID-19) pandemic highlighted the inefficiencies of our current regulatory system. State level licensing limited the flexibility of healthcare professionals and increased the risk of overwhelming healthcare capacity. However, these weaknesses existed before COVID-19, and without reform, they will persist after the pandemic. In this piece, we explore a range of solutions to improve our healthcare regulatory system and provide a ranking of their ability, from most- to least-effective, to address the lack of access to primary care faced by patients across the United States.

2. The physician shortage

The coronavirus disease 2019 (COVID-19) pandemic shed light on some of the weaknesses of legacy regulatory institutions. A sudden surge in demand by patients needing treatment for COVID-19 threatened to exceed health system capacity. Meanwhile, patients that were hesitant to receive care in-person for non-essential treatments had difficulties accessing care through telehealth. State level licensing caused frictions for telehealth, because healthcare providers are required to obtain a license in the state that the patient is located. The lack of mobility caused by state licensing also prevented healthcare providers from moving to hard hit areas early, further limiting the care that could be provided in these areas. Because of these two issues, many states quickly waived licensing requirements to allow more professionals to provide care [6].

Because of the strict requirements for becoming a physician, the U.S. has one of the lowest number of physicians per capita in the OECD [7]. Even before COVID-19, the United States faced a shortage of physicians. This shortage is projected to continue to grow through 2033, reaching between 54,000 to 139,000 [8]. The projected shortages have grown in recent years, as more physicians have retired than previously expected.

The effects of the physician shortages are evident throughout the U.S. healthcare system. The understaffing that results from the physician shortage leads to negative consequences for physicians and patients. Physicians may experience professional burnout, further driving shortages. Large portions of the U.S. are classified as healthcare shortage areas. Furthermore, healthcare shortages lead to increasing health care costs while reducing access to care for patients, especially low-income patients in urban and rural areas, which exacerbates existing health discrepancies. Passing on or delaying care, which is common in healthcare shortage areas, leads to worse patient outcomes.

3. Solutions

Recognizing the impact caused by the persistent physician shortage exacerbated by the current system of state level licensing, physicians are joining policymakers in exploring solutions [9,10]. COVID-19 highlighted the barriers created by state level licensing, and temporary reforms can serve as a template for more permanent reforms that improve access to care while maintaining quality for patients. Reforms vary with respect to their effectiveness and can be implemented alone, or in combination. In this section, we rank each reform from most- to least-effective to improve the supply of primary care professionals.

1. Changes to medical education

While some reforms to medical licensing may be controversial in the American medical community, they are nevertheless worth considering to mitigate the physician shortage. Other OECD countries have different educational requirements, which can serve as a model for reforming medical regulation in the U.S. A reconsideration of the current design of medical training is warranted. Unlike physicians in any other OECD countries, physicians in the US and Canada are required to obtain a bachelor’s degree in any subject before completing a four-year medical school. Medical students in Australia, Ireland, and South Korea have the choice to obtain a bachelor’s degree before completing a four-year medical school, or earn a six-year consolidated medical degree [7]. All of the other members of the OECD, including the UK, require a five or six-year consolidated medical degree [7].

The shorter degree path in other OECD countries saves the students years of education, the cost of tuition, and hassle of a second round of applications to medical schools. The typical medical school graduate in the US has over $200,000 in debt [11]. These high levels of debt discourage physicians from becoming general practitioners, which drives 67 percent of physicians to opt for more lucrative specialties [12,13]. The high cost of education also reduces the number of students willing to enter medical school. In a survey of students across disciplines who appeared to be qualified for medical school but chose not to attend, the most common reason given was the cost of the education [14].

The lack of access to general practitioners worsens outcomes for patients. The consolidated medical degree offered by other OECD countries reduces the time and expense of obtaining a medical degree. In the 1980s and 1990s, medical schools froze or reduced enrollment and only 3 new medical schools opened between 1980 and 2005 [15]. While these strict limitations have been removed, the growth in medical school enrollment has been slow. A majority of funding for residency training is provided by the federal government, primarily Medicare [16]. The federal government could increase the funding it provides for residencies, increasing the number of residencies available per year. This increase would allow more medical school graduates to receive the training necessary to obtain a medical license. The government could also choose to increase funding for general practitioners’ residency, or require a certain proportion of residencies in each hospital to be allocated to general practice, to encourage more medical students to opt for general practice over specialties.

Some reforms designed to encourage entry into medical schools have already been implemented. Since 2002, the Liaison Committee on Medical Education has approved 30 new accredited schools, increasing the total to 155. Despite the growth in medical schools, residency program slots have grown more slowly, just 1 percent per year until the 2015 reform, and at 4 percent since [17]. For nearly half of medical schools, the ability of students to find a placement in a residency program is a major concern [17]. More reforms are necessary to build on the past successes beginning to expand the supply of physicians.

COVID-19 forced changes to the residency matching process. While these reforms were designed for the difficulties caused by the pandemic, the American Medical Association had been exploring reforms to improve the matching process since 2018. An example of a temporary COVID-19 reform that could permanently improve the application process for medical students is the shorter window for the application period, which gives applicants more time to prepare [17]. However, none of the temporary reforms expanded the number of residencies, which is important for the long term functioning of the healthcare system.

2. Expand PA and NP independence

In addition to increasing the number of physicians, we can also make sure that existing healthcare professionals are able to work to their full potential. Physician Assistants (PAs) and Nurse Practitioners (NPs) are two highly skilled healthcare professions that are a valuable source of primary care that can partially alleviate physician shortages. These professionals can serve as a complement to physicians, providing some primary care and freeing physicians to focus on the more complex care only they are trained to provide. Unlike physicians, the
number of NPs and PAs continues to grow. However, regulatory requirements in many states prevent NPs and PAs from practicing to their full training and ability, and often require physician involvement in treatment. Expanding practice authority would better allow these skilled professionals to fully incorporate into primary care.

Currently only 24 states and DC grant NPs full practice authority, allowing them practice independently of physician oversight [18]. The other 26 states somehow restrict their practice, either requiring career long supervision by physicians, collaborative practice agreements with physicians, or limiting the settings they can practice in. This variation in practice authority varies due to political differences between state legislatures, not any underlying differences in training or ability [19].

PAs require physician supervision in 44 states and DC, are required to enter into written or collaborative practice agreements in Alaska, Illinois, and Michigan, and can work more independently from physicians in New Mexico, North Dakota, and Utah [20]. Under physician supervision, the physician regularly meets with the PA, reviews patient records, must be available in-person or through telecommunications at all times, and are limited in the number of PAs they can oversee. Collaborative or written practice agreements give PAs greater autonomy and less oversight by physicians in select practice areas specified by a written agreement between the physician and PA. Additionally, the authority to write prescriptions varies, with 44 states granting PAs full practice authority [20]. Six states limit the prescriptive authority to schedule III through V drugs, while PAs in Kentucky are unable to prescribe any legend drugs.

Given the long-term physician shortage, expanding the independent practice authority for PAs and NPs will better allow them to provide primary care consistent with their training independent of physicians. NPs can safely provide high quality care, past research has not found a relationship between NP scope of practice laws and the quality of primary care [21]. Research has also found that for Medicaid patients, states with full practice authority for NPs had 17 percent lower costs and 8 percent more total care days [22].

Access to primary care in rural and underserved areas will improve with greater practice independence [23]. While 20 percent of Americans live in rural areas, 10 percent of physicians are located in rural areas. The geographic mismatch between patients and physicians is projected to widen, as the shortage in rural areas is expected to grow to 20,000 by 2025 [24,25]. In states with collaborative practice agreements or supervision requirements, the potential for PAs and NPs to provide care in rural areas is more limited.

Many states enacted temporary reforms expanding scope of practice or practice independence for healthcare professionals like PAs and NPs. Nineteen states revised or eliminated collaborative practice agreements for NPs [26]. Eight states waived the supervision requirements for PAs during the coronavirus pandemic [27]. Making these temporary reforms permanent, or designing similar expansions of practice authority would continue to expand our healthcare capacity.

3. Federal regulation of telemedicine

Telemedicine is the remote delivery of healthcare that allows practitioners to provide care to patients located in another location. Telemedicine can overcome a shortage of primary care in a location by giving patients access to providers in other locations. Congress could use their power to regulate interstate commerce to define telemedicine to encourage the practice between states. Historically, healthcare was provided in one state where both the physicians and patient were located. However, the growth of telemedicine has allowed providers in one state to treat patients located in another. In addition to their regular state of practice, the healthcare provider is required to be licensed in the state that the patient is located. Some state boards want to oversee physicians located in their state, but practicing telemedicine for patients in other states. Some federal bills have sought to give responsibility to medical board of the physician’s home state, adding confusion [28]. The additional cost of obtaining multiple state licenses prevents physicians from offering telemedicine in other states.

Any interstate agreement to accept another state’s license must be negotiated by individual states, which would take a long time to complete. Congress could define telemedicine, deciding whether the provider should be licensed in their state or the patient’s state when providing telemedicine. Setting one national standard would simplify the regulatory environment of differing standards between states and reduce the cost of healthcare providers obtaining licensure in other states to provide telemedicine. In this case, Congressional leadership would be much less costly and quicker than the current state-by-state negotiation process. Piecemeal agreements and standards add to the confusion and make practicing telemedicine across states more difficult. Federal guidance would only require a definition of telemedicine and deciding on a standard for which state’s medical board has the authority to oversee the provision of care.

While telemedicine gives patients flexibility and expands access to care for patients, telemedicine does nothing to address the underlying shortage of physicians. Modernizing telemedicine regulations will encourage continued growth in the services, which would help patients. Despite the potential for growth resulting from simple reform, telemedicine is still a small portion of healthcare [29].

During the pandemic, the federal government did not supersede state level regulation of telemedicine. However, states made it easier for physicians in other states to treat patients without the need for obtaining an additional license, providing some evidence of the effect of standardizing and simplifying telemedicine regulations to encourage interstate treatment. States allowed physicians licensed in other states to practice telemedicine without obtaining a new license or required that they obtain a simple courtesy license, expanding access to care for patients [30]. The number of telehealth services provided by out of state providers increased substantially during the coronavirus pandemic [31]. In the year prior to March 2020, the number of private insurance claims for telehealth from out of state providers in the United States was 125,106. Over the rest of 2020, it averaged 515,607, four times higher [31]. While demand for telehealth was impacted by the spread of COVID-19, reducing regulatory barriers and confusion made it easier for physicians to provide telehealth to patients located in other states, and can serve as a model for future reform.

4. Expand the interstate medical licensing compact (IMLC)

Licensure compacts ease some of the burdens of state level licensure, such as reduced interstate mobility and the requirement to obtain a license in each state to practice of telemedicine. States in the IMLC could use the current structure of the compact and expand its scope to further integrate healthcare across states. The IMLC currently makes it easier for physicians to practice telemedicine and reduces, but does not eliminate, the hassle of moving to a new state. Despite standardizing the requirements between compact states, it does not recognize licenses from other compact states. Expanding the IMLC to offer full portability of licenses would help smooth regional shortages and respond to demand shocks. The Nurse Licensure Compact, which covers registered nurses and licensed practical nurses, does recognize out of state licenses in a way that makes it easier to obtain a license in a new state, and can serve as a model for the IMLC. Like federalizing telemedicine regulation, it would not resolve the causes of the physician shortage, but it would help mitigate its effects.

During the pandemic, every state in the US made it easier for physicians to work across state lines, facilitating the movement of physicians to areas where additional providers were needed [30]. For states in the IMLC, these waivers removed the few impediments to the portability of licenses between states. For states outside of the IMLC, it substantially decreased the administrative hurdles for physi-
cians to practice in these states. Expanding the scope of the IMLC, or permanently extending these temporary waivers, would integrate healthcare teams across states and allow the current physician workforce to smooth out regional changes in demand.

5. Special telemedicine license

Another possibility is a special license to practice telemedicine. A telemedicine specific license would be a simpler license limited to physicians currently licensed in another state who want to provide telemedicine elsewhere. This would be less costly and difficult as applying for a full license to practice medicine. Today, twelve states have some form of telemedicine specific license [10]. Nonetheless, this reform must be implemented state by state, which will take a considerable amount of time and may leave inconsistent standards between states. Furthermore, a physician would still need to obtain a license for each state they want to provide care in, which still complicates the process. Additionally, this creates an additional set of regulations which physicians must comply with, making practice more, not less complicated.

Some states required courtesy licenses for out of state physicians to treat patients through telemedicine during the pandemic. While this reduced the compliance burden for physicians, it still required more administrative work than the blanket recognition of out of state licenses discussed in the preceding section.

6. National licensure

A final possibility is abandoning the legacy institution of state level licensing and opting for a single national license. State based medical licensing dates back to the 1800s, when medical care was provided locally and interstate communication and enforcement of standards was impractical. Having one national credentialing agency would end the patchwork of state licensing laws, helping to remove barriers to interstate mobility for professionals. National licensure would also aid the delivery of telemedicine across state lines. Furthermore, physician licensing requirements are already largely standardized between states, easing the transition to a national standard compared to other professions. Despite the simplicity of the idea, implementation will be difficult. State legislatures and licensing boards have a strong desire to ensure control over the practice of medicine in their states, making the reform difficult politically. Additionally, without another national licensing institution to serve as a model, designing the structure for federal regulation of a profession would present considerable challenges. Additionally, national licensing standards would make licensing reform more difficult. Many states have enacted various forms of occupational licensing reform in the past decade, and they were only able to be implemented in one or a small number of states before more states were willing to adopt them. Designing and implementing such narrow regulatory reforms are difficult at the national level, because of the concentrated benefits of narrow interest groups and the dispersed costs to society [32]. Currently, only 25 states are full members of the Interstate Medical Licensing Compact, which expands physicians’ ability to practice across state lines [33]. If medical licensing were national, the IMLC would not have enough support to be passed by Congress, six years after it was first implemented by states.

Perhaps owing to its limited effectiveness and difficulties in implementation, policymakers did not enact any temporary reforms that moved closer to national licensure.

4. Conclusion

The COVID-19 pandemic led to a renewed focus on addressing issues in the supply of healthcare and reforming regulatory regimes that have had an adverse impact on the supply of primary care providers. Temporary reforms eased restrictions on primary care providers’ mobility and the provision of telemedicine. Yet these shortages existed before COVID-19 and will remain after. The fundamental challenge of primary care physician shortages will continue to grow and it is worth considering taking the more substantive measures outlined above to insure that patients in the US have access to the care that they need. Redesigning medical education and allowing PAs and NPs to practice independently consistent with their training will alleviate their shortage. Other reforms that encourage telemedicine or make migration between states easier will help underserved populations receive care. Regulatory regimes that ensure access to high quality convenient care through low administrative burdens that are flexible to meet patient needs will improve patient health.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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