## Empowering Providers to Promote Healthcare Innovation

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### **Executive Summary**

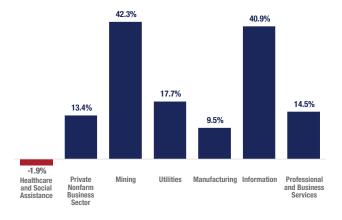
Declining productivity growth in the delivery of healthcare is not innate to the sector. It simply reflects the current policy environment. Incentivizing a more productive and cost-effective healthcare provider sector is possible but requires comprehensive policy reforms that eliminate the obstacles blocking progress. These reforms include:

- ➡ Implementing the insurance reforms discussed in Part 5 that, from a provider perspective, will incentivize the creation of innovative payment models. New payment models create opportunities to better align the incentives of providers and patients.
- Implementing regulatory reforms that include eliminating certificate of need laws, scope of practice laws, and interstate licensing obstacles. Reforming these laws would create a more competitive healthcare sector and empower providers to develop innovative methods of delivering higher-quality care at lower costs.
- Sustainably addressing the persistent tort liability costs. The problems created by frivolous and excessively costly litigation drives-up overall healthcare costs and decreases the quality of care. Eliminating this pall of the healthcare sector is essential as a result.

Productivity growth, or our ability to produce more goods and services with the same or fewer resources, is the *sine qua non* for improving living standards. Thanks to productivity growth, our prosperity today is vastly higher than that experienced by our grandparents' generation. And there is no reason why the healthcare industry should be different; yet it is.

According to the data maintained by the Bureau of Labor Statistics (BLS), overall productivity growth (i.e., total factor productivity) increased 13.4 percent between 2000 and 2020, see Figure 1. Industries such as mining and information technology have experienced exceptionally strong productivity gains over this period, exceeding 40 percent. In stark contrast, the healthcare sector was less productive in 2020 than it was in 2000 – overall productivity was 1.9 percent less.

# FIGURE 1 TOTAL FACTOR PRODUCTIVITY GROWTH, SELECT INDUSTRIES PERCENTAGE CHANGE BETWEEN 2000 AND 2020



Source: Author calculations based on data from the BLS

This decline in productivity occurred during a time when exciting treatment innovations were introduced; for instance, the introduction of new technologies that more efficaciously treat cancer. The National Institutes of Health (NIH) documented several innovations revolutionizing cancer treatment including<sup>1</sup>

 Crispr, which is a gene editing tool that can precisely delete, insert, or edit specific bits of DNA inside cells;

- Artificial Intelligence that allows
   physicians to run accurate treatment
   simulations to develop personalized
   treatment options to patients;
- Telehealth technologies that allow patients to access remote health monitoring, video monitoring, and even in-home chemotherapy treatment; and
- *Cryo-electron imaging technologies* that provide physicians with a better understanding of patients' specific cancer cells and how treatments are interacting with the cancer cells.

Many of these technologies have applications well beyond cancer as well. For instance, researchers are leveraging the Crispr platform to help doctors and scientists cure different forms of muscular dystrophy. Exemplifying the broad-based innovativeness of the U.S. healthcare sector, the *FREOPP World Index of Healthcare Innovation* ranked the U.S. as having the most innovative science and technology sector in the world.<sup>2</sup>

It is not just the numerous innovations that indicate the healthcare industry can be much more productive. Information technology gains have been revolutionizing the broader U.S. economy for decades, but these gains have not yet been broadly applied to the healthcare sector. The combination of exceptional advances in science and medicine coupled with the broad-based technological revolution indicate that healthcare has the potential to be significantly more productive. If empowered, entrepreneurial providers can usher in a more efficient system that treats devastating diseases more effectively while using fewer resources.

Unfortunately, the industry has consistently underperformed its potential due to the flaws that the Coverage Denied series has emphasized. The fixes suggested in Part 5 focused on addressing the flaws inherent in the current health insurance system. And beyond the consumer benefits emphasized in Part 5, these reforms will also empower providers to address the waste that pervades the healthcare system as well as the sector's lack of innovativeness.

### Eliminating Waste and Incentivizing Innovation

It is widely recognized that the U.S. healthcare system is rife with unnecessary expenditures and waste. Shrank et al. (2019) estimated that the "cost of waste in the US health care system ranged from \$760 billion to \$935 billion, accounting for approximately 25% of total health care spending". A 2022 review of the literature by *Health Affairs* found that just the clinical waste "caused by failures of care delivery, failures of care coordination, and overtreatment, account for 5.4–15.7 percent of all health spending in the US." Based on a 2017 survey of physicians,

20.6% of overall medical care was unnecessary, including 22.0% of prescription medications, 24.9% of tests, and 11.1% of procedures. The most common cited reasons for overtreatment were fear of malpractice (84.7%), patient pressure/request (59.0%), and difficulty accessing medical records (38.2%).<sup>5</sup>

While estimates vary regarding the precise size, the evidence clearly demonstrates that the healthcare system is exceptionally wasteful. Spending less resources to obtain the same output is, by definition, an increase in productivity. Eliminating waste is, consequently "the low-hanging fruit" for obtaining large potential productivity gains in the U.S. healthcare system.

Eliminating waste is not the only opportunity for increasing the healthcare sector's productivity. Like Henry Ford's advent of the assembly line in December 1913 that transformed automobile production, there are opportunities to change how healthcare is delivered that will help providers deliver better care at lower prices. The goal from reforms should be to ensure providers are incentivized to both squeeze out wasteful expenditures and search for new, transformative, methods of delivering care.

The current healthcare payment system, which is intertwined with the issue of our current health insurance system, has misaligned incentives such that waste is endemic and innovative means for delivering care are discouraged. Consequently, the payment

system has become an obstacle to increasing the sector's innovativeness. Not surprisingly, the provision of healthcare remains stagnant to the detriment of both cost and the quality of care. Importantly, the insurance reforms discussed in Part 5 can help usher in new payment models that will significantly improve the sector's productivity.

### Incentivizing Payment Model Competition

The fee-for-service (FFS) model remains the predominant payment system despite its many flaws. FFS compensates physicians and healthcare providers based on pre-set fees for specific services and the volume of those services performed.

Payments based on the volume of office visits, procedures, tests, and treatments ties provider revenues to the amount of healthcare services performed rather than the quality of healthcare outcomes achieved. Ultimately patients seek quality healthcare – care that helps patients maintain their good health or efficaciously treat any adverse health conditions that arise. While the quantity of care can be an integral part of providing higher quality care, the two concepts can diverge.

The FFS model incentivizes the divergence because providers maximize their revenues when they provide the highest quantity of services that create the same quality of healthcare. When coupled with the flaws of the current health insurance system and the issues created by excessive tort liability risks, the FFS model strongly incentivizes an excessive volume of services. Importantly, these excessive services are not connected to improving patient outcomes.

For example, ordering excessive tests will often protect providers from potential litigation risks, particularly frivolous litigation. Thanks to the fee-for-service model, ordering extra tests also enables providers to earn higher incomes. Healthcare administrators are therefore asked to choose between two options: (1) earning more money while protecting themselves from lawsuits and (2) earning less money while leaving themselves exposed to litigation risks. Such a choice is not difficult. The harmful

incentives inherent in the fee-for-service model, when coupled with the other flaws of our insurance system, are responsible for a large share of the well documented problem of wasteful healthcare expenditures.

Critics also claim that the disincentives of the FFS model create significant obstacles to holistic or value-based care. A great deal of high-value holistic care, such as preventive care or better disease management, is low-cost and eliminates the need for costly hospital stays. The incentives of the FFS system makes it more difficult for medical professionals to provide this type of care because it denies their institutions of revenues. Hunter, Kendall and Ahmadi (2022) also note that the FFS model has accountability problems that,

allows doctors, hospitals, insurance companies, and pharmaceutical companies to point the finger at one another when things go wrong. The result? Fee-for-service hurts patients and drives up costs. Due to fee-for-service, some patients get too much care, some do not get enough, and others get the wrong care.<sup>6</sup>

There are some advantages to the FFS model, of course; in particular, FFS ensures that the provider's time is adequately covered. The goal of reforms, consequently, should be to encourage payment model innovations that can compete with the current feefor-service model and empower patients to choose the model of care that best suits their needs.

From a policy perspective, implementing the reforms discussed in Part 5 would empower patients (e.g., the demand-side of the market) to seek out the healthcare services that provide the payment model they desire. On the supply-side, these reforms would also enable providers to provide services based on alternative payment systems to discover which provider service model(s) best meet patients' needs.

For example, a growing trend in the healthcare sector is to replace the current fee-for-service model with value-based payment models. Value-based care links provider reimbursements to the value of the services provided and encourages providers to focus

on efficiency and results rather than the volume of services provided. In theory, value-based care is easy to describe, but is difficult to implement in practice under the current third-party payer system. And the reason is simple – the current system does not allow patients to express which healthcare services they value and which ones they do not value.

The coverage of most commercial insurance is determined by patients' employers. The government establishes the criteria for Medicare, Medicaid, and the healthcare exchanges. The pathway for patients to reward the practices providing higher quality care is obstructed as the payers (e.g., insurers, employer self-funded plans, or government) pay a large share of the bills.

Due to these constraints, providers experimenting with value-based healthcare face obstacles such as<sup>7</sup>

- Resistance from physicians due to the difficulty of aligning the doctor's income with value-based care under the current system;
- Missing and inaccessible data that makes measuring the performance of value-based care difficult;
- Outdated computer systems and practice workflows (e.g., relying on paper records) that make value-based care difficult to achieve;
- Lack of interdisciplinary cooperation between general practitioners and specialists that fragments care and makes comprehensive care more difficult to achieve; and
- Financial risks from failure that are large relative to the potential return from success.

Empowering patients to control their healthcare spending would help address these obstacles. Practices that devise value-based care models and networks that better serve patients' needs can now be financially rewarded. Put differently, those practices that become more productive by providing timelier, more efficient,

healthcare services are directly rewarded with higher incomes. Letting patients control their resources would incentivize the hundreds of thousands of physicians, nurse practitioners, and physician assistants to design better industry practices for managing care. The disempowering of third-party payers would enable these providers to pursue these innovations. Over time, the result will be higher quality care at lower costs – rising productivity.

To the extent the delivery models switch to capitated and concierge medicine practices – a direct doctor-to-patient practice where patients pay a flat rate to receive comprehensive general practitioner care as well as coordination with specialists should such care be required – further progress toward eliminating waste can be gained. These delivery models are based on a flat fee; therefore, the practices lose money when there are wasteful procedures and expenditures. They also lose money if the quality of care provided is substandard as patients would avoid such low-quality practices.

Alternatively, the practices earn more income when they successfully integrate technology into the practice. Perhaps these practices provide integrated care, like the Kaiser health model, where providers from pharmacists to general practitioners and specialists all work as an integrated team. Perhaps the practices develop a new model to ensure better quality care. Likely, there are promising innovations that are currently unknown that could meaningfully improve care. The relevant point is the practices are both empowered and incentivized to find better ways to deliver higher quality care more cost-effectively (e.g., increase productivity).

Unshackling providers so they can leverage their knowledge to deliver better healthcare is the supply-side benefit enabled by the reforms described in part 5 of this series. It is the essential counterpart to empowering patients and can meaningfully improve the delivery of healthcare in this country. But these reforms are not enough. Fully empowering providers to deliver higher quality care for patients requires regulatory reforms that still constrain the amount of productivity enhancing innovations that are achievable.

### Eliminating Regulatory Restrictions on Providers

As a compliment to payment reforms, regulations on providers misalign incentives and cause excessive waste, higher costs, and a less productive health care system. Consequently, reforms that remove the regulatory burdens hampering the ability of providers to better serve patients are essential. Such reforms would make the provision of healthcare more competitive, leading to greater innovations, improved productivity, and lower costs. When coupled with reforms that empower patients, reforms that enable providers to provide new and better ways to deliver care is an essential part of a comprehensive healthcare reform plan that ensures the delivery of care is consistently improving and reflecting the needs and wants of patients.

There are many regulations that are creating unnecessary restrictions on how medical providers practice that thwart how providers can compete with one another. While not comprehensive, key reforms include eliminating certificate-of-need laws, reforming scope of practice laws, expanding licensing reciprocity across the states, and addressing tort liability risks.

Certificate-of-need (CON) laws require hospital administrators to obtain government certification before they can build new facilities, expand existing facilities, or purchase certain medical equipment. Currently, 35 states plus Washington, D.C. operate a CON program, which can vary significantly across jurisdictions.<sup>8</sup>

Ostensibly, CON laws control healthcare costs by eliminating duplicative services and optimizing the amount of investment across the whole medical community. For instance, proponents of CON laws claim that without controls, the healthcare sector will over-invest in healthcare resources and impose unnecessary costs on the system. In practice, CON laws impose excessive costs and do not achieve the goals of its proponents.

According to a joint 2004 report by the Department of Justice (DOJ) and Federal Trade Commission (FTC)

the Agencies believe that, on balance, CON programs are not successful in containing health care costs, and that they pose serious anticompetitive risks that usually outweigh their purported economic benefits. Market incumbents can too easily use CON procedures to forestall competitors from entering an incumbent's market...the vast majority of single-specialty hospitals – a new form of competition that may benefit consumers – have opened in states that do not have CON programs. Indeed, there is considerable evidence that CON programs can actually increase prices by fostering anticompetitive barriers to entry.<sup>9</sup>

The impacts highlighted by the DOJ and FTC are precisely what should have been expected. CON laws reduce the supply of healthcare facilities and create unnecessary costs and regulatory roadblocks for healthcare providers considering investing in new or expanded healthcare facilities and technologies. As Mitchell (2019) notes,

Providers can spend years and burn through tens or even hundreds of thousands of dollars to prove this need and thus obtain what is called a "certificate of need" (or CON). The CON process can be required for both small and large investments: from hospital beds and gamma knives to new hospitals and neo-natal intensive care units.<sup>10</sup>

Restrictions on capital reduce productivity, reduce the number of healthcare facilities, and increase healthcare costs. With respect to the number of facilities, a 2016 analysis by the Mercatus Center found that CON laws lead to

30 percent fewer total hospitals per capita in states with a CON program when compared to those that do not have a CON program.

Moreover, our findings are also not consistent with the claim that CON programs protect

access to health care in rural areas. In particular, as a tool for protecting rural health care, our findings suggest that these CON programs have failed. CON requirements are associated with fewer rural hospitals and rural ASCs [ambulatory surgical centers]. While CON programs may be viewed as a protective measure to ensure access in rural communities, the data show otherwise.<sup>11</sup>

In a review of two decades of peer reviewed studies of the impact from CON laws, Mitchell (2019) noted that

None find that CON reduces per-unit costs. Three of the four find that it is associated with higher per-unit costs. The most recent, for example, finds that five years after repeal of CON, charges are about 5.5% lower than they would otherwise be. The fourth study-which only focuses on per-diem Medicaid charges for nursing home and long-term care-found no statistically significant effect.

Twelve studies estimate the effects of CON on spending per patient or per citizen. Of these, seven find that CON is associated with higher spending, two find no statistically-significant effect, and two find that it is associated with higher spending in some areas and lower spending in others.

Only one study finds a connection between CON and lower spending, and it was tenuous at best: The author finds that CON is associated with fewer hospital beds, which are, in turn, associated with slightly slower growth in healthcare expenditures per capita. Importantly, however, the author finds no direct relationship between CON and such expenditures.

Taken as a whole, the literature suggests that CON is associated with both higher per-unit costs and greater total expenditures.<sup>12</sup>

CON regulations that restrict practices' ability to purchase the capital or build the necessary facilities as needed are clear obstacles to developing new care/payment models that insurance reform is supposed to stimulate. Consequently, supporting the ability of providers to better serve patients' needs requires the states that impose CON laws to repeal them.

A similar argument applies to scope of practice regulations, which are state laws that dictate the tasks that nurses, nurse practitioners, physician assistants, and pharmacists can perform. These laws exemplify Adam Smith's warning from 1776 that "people of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."

In support of Smith's caution, there is significant evidence that the current scope of practice regulations are excessively stringent imposing unnecessary costs on patients. Thanks to these laws, costs are higher, and wait times for service are longer than necessary.

For instance, a study in JAMA Network examined the primary care outcome differences between patients seen by nurse practitioners and physicians finding that "in an ambulatory care situation in which patients were randomly assigned to either nurse practitioners or physicians, and where nurse practitioners had the same authority, responsibilities, productivity and administrative requirements, and patient population as primary care physicians, patients' outcomes were comparable."<sup>13</sup>

Examining the impacts from scope of practice laws on physician assistants and nurse practitioners for Medicaid patients, Timmons (2016) concluded that

State policymakers (and taxpayers) interested in reducing the cost of care for citizens on Medicaid should consider relaxing restrictions on nurse practitioners and physician assistants. The body of research on this topic suggests that allowing nurse practitioners and physician assistants

broader scope of practice has little impact on the quality of care delivered, increases access to health care, and also potentially reduces the cost of providing health care to patients. Research shows that broadening the scope of practice for these professions is beneficial for consumers in the healthcare market.<sup>14</sup>

With respect to promoting innovative care models, scope of practice regulations prevent entrepreneurial health professionals from more efficiently dividing labor across the team of healthcare professionals that treat patients. Consequently, states should broaden their scope-of-practice laws to allow non-physician health care professionals to provide healthcare services to the extent of their education and training.

Policies that relax scope of practice laws are important complements to CON deregulation; instead of freeing entrepreneurial providers to invest in the necessary capital, relaxing scope of practice laws enables innovators to better allocate labor empowering them to potentially redesign how healthcare is delivered. The results will be the same: patients will benefit from higher quality, more cost-effective care.

Regulatory reforms should also alleviate the restrictions in practicing medicine across states that could hinder potentially innovative new methods for delivering care. Currently 37 states participate in the Interstate Medical Licensure Compact which

is an agreement among participating U.S. states to work together to significantly streamline the licensing process for physicians who want to practice in multiple states. It offers a voluntary, expedited pathway to licensure for physicians who qualify.

The mission of the Compact is to increase access to health care – particularly for patients in underserved or rural areas. The Compact makes it possible to extend the reach of physicians, improve access to medical specialists, and leverage the

use of new medical technologies, such as telemedicine. While making it easier for physicians to obtain licenses to practice in multiple states, the Compact also strengthens public protection by enhancing the ability of states to share investigative and disciplinary information.<sup>15</sup>

The compact recognizes that the state licensing requirements are a barrier to quality care and access, particularly for patients living in rural or underserved areas. The consequences of these barriers, as well as the potential benefits from reducing these obstacles, was demonstrated during the COVID-19 pandemic when many licensing requirements were waved to foster greater access to tele-medicine and other healthcare innovations.

Despite the positive momentum, greater deregulation is needed. The deregulatory efforts should include expanding the number of states reducing the licensing burden for physicians as well as extending these deregulatory benefits to other healthcare professionals such as physicians assistants.<sup>16</sup>

Then there is the tort system. As noted earlier, defensive medicine is needlessly driving up medical costs and creating an adversarial relationship between doctors and patients that is detrimental to effective care. While medical malpractice reform is imperative, it is just as imperative to implement reforms that strike the right balance – disincentivizing frivolous claims while still enabling patients who are injured to receive compensation.

One reform, such as capping malpractice damages, have been adopted in 29 states. According to Viscusi (2019) "caps on noneconomic damages reduce compensation amounts, and there is more moderate evidence that caps reduce both the frequency of paid claims and the growth of liability insurance premiums." Given the strong evidence, the states that are not currently capping noneconomic damages should consider doing so.

Capping damages is insufficient to addressing the tort liability problem, however, particularly with respect to reducing the excessive healthcare costs incurred due to defensive medicine practices. One reform evaluated in the AMA Journal of Ethics recommends alternative dispute resolutions, such as mediation or arbitration, for addressing medical malpractice cases. The evidence shows that these alternatives

can be quite effective in resolving disputes in a less adversarial and less costly manner than traditional litigation. A number of health care institutions have experimented with a unique twist on ADR by developing communication and resolution programs (CRPs), novel approaches to addressing medical error that have paid off in terms of the costs associated with malpractice litigation. These programs encourage open communication and transparency with patients and their families and facilitate restitution for injured parties when appropriate. They also support physicians in disclosure conversations with patients.<sup>18</sup>

Due to the encouraging data demonstrating that alternative dispute resolutions can lower overall costs without denying patients the ability to receive compensation for errors, wider application of these programs should be adopted.

#### **Conclusion**

The reforms discussed in Part 7 are complementary to one another. A more effective payment system, for instance, improves the benefits from effective medical malpractice reforms. And the benefits created by payment reforms are enhanced when there are also deregulatory efforts that enable healthcare providers to implement innovative delivery models. Consequently, comprehensive reforms will generate significantly more productivity gains than a piecemeal reform approach.

Taking a comprehensive approach also addresses the varied sources of the current disincentives thwarting improvements in the sectors productivity. A piecemeal approach does not. By allowing the disincentives to persist, the benefits generated by the partial reform efforts will be diminished relative to their full potential.

Consequently, incentivizing a more productive healthcare sector requires the insurance reforms discussed in Part 5 to jumpstart innovative payment models. It also requires regulatory reforms that eliminate certificate of need laws, scope of practice laws, and interstate licensing obstacles. Finally, the persistent problem of tort liability issues must be addressed.

Added to this list is an important disincentive, which is meaningfully impacting the industry's productivity, but was not addressed in this paper – the impact from government healthcare programs on the sector's incentives. Accounting for all the programs, government sponsored healthcare accounts for around one-half of total healthcare consumption spending in the country. And these expenditures do not incorporate the large number of mandates that direct how private healthcare spending can be spent.

Whether for the elderly or families with lower incomes, the purpose of most of these expenditures is to establish an effective safety net with respect to healthcare. These programs do a poor job of meeting this safety net goal and create barriers obstructing the efficiency of the private sector expenditures. Consequently, comprehensive reforms of these programs are required. The eight and final substantive analysis of the Coverage Denied series addresses these important issues.

#### **Endnotes**

- 1 "The Tech Revolutionizing Cancer Research and Care" National Cancer Institute, https://www.cancer.gov/news-events/nca50/stories/technologies-and-innovations, (accessed November 15, 2022).
- 2 Girvan G and Roy A "Key Findings from the 2021 FREOPP World Index of Healthcare Innovation" FREOPP, June 25, 2021, https://freopp.org/key-findings-from-the-freopp-world-index-of-healthcare-in-novation-cda78938c047.
- 3 Shrank WH, Rogstad TL, Parekh N "Waste in the US Health Care System: Estimated Costs and Potential for Savings" *JAMA*. 2019;322(15):1501–1509. doi:10.1001/jama.2019.13978.
- 4 "The Role Of Clinical Waste In Excess US Health Spending" Health Affairs Research Brief. June 9, 2022. 10.1377/hpb20220506.432025
- 5 Lyu H, Xu T, Brotman D, Mayer-Blackwell B, Cooper M, Daniel M, Wick EC, Saini V, Brownlee S, Makary MA "Overtreatment in the United States" PLoS One. 2017 Sep 6;12(9):e0181970. doi: 10.1371/journal.pone.0181970. PMID: 28877170; PMCID: PMC5587107.
- 6 Hunter K, Kendall D, and Ahmadi L "The Case Against Fee-for-Service health Care" Third Way, September 9, 2021, https://www.thirdway.org/report/the-case-against-fee-for-service-health-care.
- 7 See: Bartlett W "7 Barriers to Value-Based Care and How to Overcome Them" INTELICHART, May 5, 2021, https://www.intelichart.com/blog/barriers-to-value-based-care-and-how-to-overcome-them; Dorr L "The Top 5 Barriers to Value-Based Care" Managed Healthcare Executive, November 13, 2019, https://www.managedhealthcareexecutive.com/view/top-5-barriers-value-based-care; LaPointe J "Opportunities, Challenges of Value-Based Care Adoption" Revcycle Intelligence, July 12, 2022, https://revcycleintelligence.com/features/opportunities-challenges-of-value-based-care-adoption; Lockner AM "The Healthcare Industry's Shift from Fee-for-Service to Value-Based Reimbursement" Bloomberg Law, September 26, 2018, https://news.bloomberglaw.com/health-law-and-business/insight-the-healthcare-industrys-shift-from-fee-for-service-to-value-based-reimbursement.
- 8 "Certificate of Need (CON) State Laws" National Conference of State Legislatures, https://www.ncsl.org/research/health/con-certificate-of-need-state-laws.aspx (Accessed November 23, 2022).
- 9 "Improving Health Care: A Dose of Competition" Department of Justice and Federal Trade Commission, July 2004, https://www.ftc.gov/sites/default/files/documents/reports/improving-health-care-dose-competition-report-federal-trade-commission-and-department-justice/040723healthcarerpt.pdf.
- 10 Mitchell MD "Do Certificate-of-Need Laws Still Make Sense in 2019?" *Managed Healthcare Executive*, September 3, 2019, Vol. 29 No. 9, https://www.managedhealthcareexecutive.com/view/do-certificate-need-laws-still-make-sense-2019.
- 11 Stratmann T and Koopman C "Entry Regulation and Rural Health Care: Certificate-of-Need Laws, Ambulatory Surgical Centers, and Community Hospitals" Mercatus Working Paper, February 2016, https://www.mercatus.org/system/files/Stratmann-Rural-Health-Care-v1.pdf.
- 12 Mitchell MD "Do Certificate-of-Need Laws Still Make Sense in 2019?" *Managed Healthcare Executive*, September 3, 2019, Vol. 29 No. 9, https://www.managedhealthcareexecutive.com/view/do-certificate-need-laws-still-make-sense-2019.

- 13 Mundinger MO, Kane RL, Lenz ER, et al. Primary Care Outcomes in Patients Treated by Nurse Practitioners or Physicians: A Randomized Trial. *JAMA*. 2000;283(1):59–68. doi:10.1001/jama.283.1.59
- 14 Timmons EJ "Healthcare License Turf Wars: The Effects of Expanded Nurse Practitioner and Physician Assistant Scope of Practice on Medicaid Patient Access" Mercatus Working Paper, January 2016, https://www.mercatus.org/system/files/Timmons-Scope-of-Practice-v2.pdf.
- 15 "Interstate Medical Licensure Compact" https://www.imlcc.org/a-faster-pathway-to-physician-licensure/ (accessed November 29, 2022).
- 16 Miller EE "State-by-State Variations in PA Licensure: A Policy Analysis" *Journal of Medical Regulation*, December 2018; 104 (4): 14–22. doi: https://doi.org/10.30770/2572-1852-104.4.14
- 17 Viscusi WK "Medical Malpractice Reform: What Works and What Doesn't" *Denver Law Review*. 775 (2019) https://scholarship.law.vanderbilt.edu/faculty-publications/1104
- 18 Klass JS and Rose RV "Medical Malpractice Reform: Historical Approaches, Alternative Models, and Communication and Resolution Programs" *AMA Journal of Ethics Policy Forum*, March 2016, https://journalofethics.ama-assn.org/article/medical-malpractice-reform-historical-approaches-alternative-models-and-communication-and-resolution/2016-03.



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January 2023

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