#### THE NEW CENTER



**Policy Paper** 

## Closing the Doctor Gap

#### **NEW CENTER SOLUTION:**

# Health Care for All

#### **CLOSING THE DOCTOR GAP**

The U.S. faces a significant provider shortage. According to a 2019 report by the Health Resources and Services Administration, the U.S. lacks almost 15,000 primary care providers, over 10,000 dental workers, and almost 7,000 mental health specialists.<sup>1</sup>

While 2020 presidential contenders have already proposed several ideas for expanding health care access, they haven't discussed how the U.S. can ensure it has enough providers to deliver that care.

The U.S. lacks:

**15,000** primary care providers



**7,000** mental health specialists

This paper was developed with the research and writing contributions of The New Center policy analyst Laurin Schwab.



# The Problem

#### THE PROBLEM

## Current State of the Doctor Shortage



At least 46 million Americans live in areas affected by the current doctor shortage, and the situation will likely only worsen.<sup>3</sup> In 2018, the Association of American Medical Colleges published a report predicting a shortfall of up to 121,300 physicians in the U.S. by 2030.<sup>4</sup>

Far from an outlier, the update matches the group's evolving predictions from 2015, 2016, and 2017—but even so, could actually be an underestimate.<sup>5</sup> According to the organization, their figure builds on *current* health care use among U.S. residents, which

includes that of underinsured populations that use fewer health care services than their insured counterparts. If these populations used health care to the same extent as their insured peers (which could happen with equal access), the U.S. would require 95,100 more doctors.

## There could be a shortfall of over 200,000 doctors by 2030.<sup>6</sup>

#### THE PROBLEM

### Causes of the Doctor Shortage

The AAMC's report addresses both the supply and demand factors contributing to the doctor shortage.

#### **ON THE DEMAND SIDE**

On the demand side, the organization cites the aging U.S. population and the improved medical care that will stretch American longevity. The Census Bureau predicts that the U.S. population will grow by 10% from 2016 to 2030, but that the group aged 65+ will jump by 49%.<sup>7</sup>



2030 U.S. POPULATION BY AGE



#### **ON THE SUPPLY SIDE**

On the supply side, the AAMC points to two emerging trends: physicians working fewer hours and physicians retiring. At the Mayo Clinic, which employs over 4,500 physicians and scientists across three states, the number of physicians working less than full time jumped from 13.5% to 16% between 2008 and 2014.8 In addition to working fewer hours, physicians increasingly have their eyes on retirement or career shifts. In a 2018 non-randomized survey of American physicians from The Physicians Foundation, 17% of responding physicians said they planned to retire, up three percentage points from 2016. 46% indicated that they planned to change career paths with 12% planning to switch to non-clinical positions. Almost half said they wouldn't recommend medicine as a career to their children, and over one quarter said that if they had to do their careers over again, they wouldn't choose to be doctors. Electronic health records came in first as the greatest source of professional frustration.9

As the number of independent practices declines across the country, U.S. physicians increasingly trade personal autonomy for the billing and compliance support of hospitals.<sup>10</sup> But micromanagement, electronic health records, and the pressure to spend less time with more patients still intrude on the doctor-patient relationships that lend a physician's work its meaning.<sup>11</sup>

While the solutions presented in "Closing the Doctor Gap" do not address the mounting pressures of physicianhood, relieving these pressures would both allay the shortage and boost the quality of American health care. The New Center will focus on perhaps the most irksome issue physicians face—electronic health records—in a future publication.

#### INFORMATION

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- 78% of responding physicians sometimes, often, or always experienced feelings of burnout.
- 62% of responding physicians were pessimistic about the future of medicine.
- 55% of responding physicians described their morale as somewhat or very negative.
- 4 out of 5 responding physicians were either at full capacity or overextended.
- 46% of responding physicians indicated that relations between themselves and hospitals were somewhat or mostly negative.

#### THE PROBLEM

# The Implications





#### FOR PATIENTS

This shortage carries two significant implications for American health care: soaring appointment wait times for patients, and heightened stress for physicians already facing uncomfortably packed schedules. Both of these effects could be deadly. Studies demonstrate a troubling relationship between longer patient wait times and patient mortality. In a study on 2001 data from 89 different Veterans Affairs health centers, researchers found that patients who waited 31+ days for an appointment died more frequently than their peers.<sup>14</sup>

#### FOR PHYSICIANS

Patients, however, will not be the only ones affected, as U.S. physicians could face increased mortality of their own. A composite analysis of studies on physician suicide from 1960 to 2004 found that male physicians committed suicide 1.41 times as frequently as U.S. men while female physicians did so 2.27 times as frequently as U.S. women.<sup>15</sup>

Researchers suspect that physicians' unique professional pressures and high burnout rates could have contributed.<sup>16</sup> A greater shortage of health care professionals would not only exacerbate these problems, but also put patient lives at elevated risk.

#### **INFORMATION**



#### **Doctorhood and Suicide: a Causal Link?**

Depression rates are about the same among U.S. female physicians and the general female population, and female physicians attempt suicide *less* frequently than other American women.<sup>17</sup> They simply have much higher completion rates, likely from easy access to lethal drugs.<sup>18</sup> This would suggest that doctorhood could *buffer* against attempted suicide. Not to mention that doctors are a selfselecting population. It's impossible to ignore, however, the fact that occupational burnout was about 25 percentage points higher among U.S. physicians than the general working population in 2014; that over a third of state medical boards can sanction a physician based on a revealed psychiatric condition; and that a quarter of randomly surveyed physicians said they knew another physician whose professional standing had been compromised by being depressed.<sup>19</sup> A cocktail of unique occupational pressures, stigma against the seeking of mental health services, and access to drugs contributes to physicians' heightened risk.



## The Solutions

## Fixing the Shortage: An Overview

For the sake of both patients and physicians, the next president and Congress should prioritize the expansion of the supply of medical health professionals in the U.S. They should do so through a targeted, multi-pronged approach that includes:



## Medical School Curricula and Doctor Licensing

Reform the inefficiencies of medical school curricula

#### Care by Nurse Practitioners, Physician Assistants, and Certified Midwives

Expand the scope of practice of nurse practitioners, physician assistants, and midwives

### Grants for Medical Schools

Fund the construction of new medical schools and the expansion of old ones

#### 4. Foreign Doctors

Remove red tape for competent foreign doctors

#### J. Telemedicine

Build the infrastructure to clear the way for telemedicine



In 2018, there were 186 medical schools in the U.S.; 151 of them were allopathic while 35 were osteopathic.<sup>20</sup>

Traditionally, graduates of osteopathic programs focus more on preventive treatment and receive D.O. degrees, while allopathic graduates focus more on symptom treatment and receive M.D. degrees. Today, both programs provide similar training.<sup>21</sup>

The American Osteopathic Association (AOA) regulates osteopathic medical schools and the Liaison Committee on Medical Education (LCME) regulates allopathic ones.<sup>22</sup>

# Nedical School Curricula and Doctor Licensing



### REFORM THE INEFFICIENCIES OF MEDICAL SCHOOL CURRICULA

The Liaison Committee on Medical Education (LCME) requires at least 130 weeks of instruction for allopathic medical students before they can receive an M.D. But a 2012 study published in *JAMA: The Journal of the American Medical Association* found that the length of medical training could be shortened by up to 30% without reducing the quality of the physician.<sup>23</sup> Part of this 30% could come from the first two years of medical school, which feature basic science courses that students already passed in undergrad and that teach information they quickly forget—with no documented impact on their later quality as physicians.<sup>24</sup>

Medical schools should consider eliminating redundant parts of the basic sciences curriculum, and consider condensing the third and fourth years of medical school into one.<sup>25</sup> Both of these years are made up of rotations, and while some doctors think that the fourth year of medical school helps round out future doctors, others think it's redundant and simply racks up student debt by another whopping 33%.<sup>26</sup>

A shorter medical school could free up resources to expand the number of students, which could reduce the doctor shortage. And shortening the length of medical school by any amount will reduce student debt, which is known to contribute to students' choices to become specialists over primary care physicians—a major factor in the primary care gap.



#### TO BECOME A LICENSED PHYSICIAN IN THE U.S.

- Complete an undergraduate bachelor's degree (typically four years) with pre-med requirements
  - Pre-med requirements usually include one year of biology (with lab), one year of general chemistry (with lab), one year of organic chemistry (with lab), one semester of biochemistry, one year of physics (with lab), and one year of English.<sup>27</sup>
- Take the MCAT and apply to medical school
- Complete medical school (typically four years)
  - Years one and two involve classes in the basic sciences, while years three and four consist of clinical rotations in which students assist residents at clinics/hospitals<sup>28</sup>

- At the end of year two, pass Step 1 of the U.S. Medical Licensing Examination (USMLE). In year four, pass Step 2<sup>29</sup>
- Match to a residency program, which can be competitive, and complete the residency (three to seven years depending on the specialty)
- After the first year of residency, pass Step 3, the final part of the USMLE
- For some specialties, complete a fellowship (one to three years)<sup>30</sup>
- Apply for a license to practice in your U.S. state(s) of choice

Not including undergraduate education, becoming a licensed U.S. physician can take more than a decade.

### INTERNATIONAL COMPARISONS: TYPICAL PATHS TO BECOMING A PRIMARY CARE PHYSICIAN



In many foreign health care systems, would-be physicians jump straight from high school to medical school.

## 2. Care by Nurse Practitioners, Physician Assistants, and Certified Midwives



#### EXPAND THE SCOPE OF PRACTICE OF NURSE PRACTITIONERS, PHYSICIAN ASSISTANTS, AND MIDWIVES

With over 270,000 of them licensed in the U.S. in 2019, nurse practitioners or registered nurses who have gone on to complete master's degrees in nursing—constitute a valuable pillar of American health care.<sup>35</sup> In 2018, almost 90% of them possessed certifications in an area of primary care, and 72.6% of them delivered primary care.<sup>36</sup> Not all nurse practitioners (NPs), however, can practice independent of a physician—despite studies that show that nurse practitioners consistently maintain and sometimes even improve the quality of primary care.

Consistent with a growing research consensus, a 2000 study published in the *JAMA: The Journal of the American Medical Association* found equal levels of both patient satisfaction and health outcomes between patients who saw physicians and patients who saw independent nurse practitioners.<sup>37</sup> Despite this evidence, NP practice still remains limited. According to the American Association of Nurse Practitioners, NPs lacked full practice rights in 28 U.S. states in 2019.<sup>38</sup>

These limited scope-of-practice laws reduce the number of patients NPs can treat, discourage NPs from practicing in multiple areas, and limit both the quality and number of services they can provide. NPs who can't practice independently can be geographically tethered to a single physician, which limits the number of patients they can treat and forces them to jump through hoops in order to treat patients at different sites.

Research suggests that the expansion of the scope of practice of nurse practitioners would increase the nurse practitioner workforce, expand health care use among vulnerable groups (such as rural populations), and reduce the cost of care.<sup>39</sup>

Because 87.1% of nurse practitioners are certified in primary care, NPs could also help mitigate the U.S.'s budding primary care shortage.<sup>40</sup> The next president and Congress should encourage all U.S. state legislatures to allow nurse practitioners to practice fully and independently, a measure that would reduce health care costs, expand Americans' access to health care, and service vulnerable and underserved groups.

One way to do so would be to offer a small increase in federally matched Medicaid funds to states that switch from allowing only limited practice to allowing independent practice for nurse practitioners.

But in order to truly free nurse practitioners, Medicare and states' Medicaid programs must reform their reimbursement policies to pay them properly. In Arkansas, for example, Medicaid doesn't pay for flu or strep swabs performed by nurse practitioners. And because neither Indiana nor Arkansas allows NPs to practice independently, they can't be listed as primary care providers and therefore can't be reimbursed as such. Nurse practitioners agree, and in a 2013 report from the National Institute for Health Care Reform, said that payment policies impacted where and how they practiced the most.<sup>41</sup> The reforms should include paying nurse practitioners directly, paying nurse practitioners for all of the services that they are qualified to provide, and (for Medicaid) standardizing these payment policies across states.

#### **INFORMATION**



Every dollar spent on nurse practitioners saves several dollars that otherwise would have gone to expensive treatment by physicians.<sup>42</sup>



- Complete a bachelor's degree in nursing (four years) or an associate's degree in nursing (two years)
- Pass the NCLEX-RN to obtain an RN license<sup>43</sup>

2017 median annual wage: \$70,00044

#### TO BECOME A NURSE PRACTITIONER IN THE U.S.

- Complete a bachelor's degree in nursing (four years)
- Complete a master's degree in nursing (one to two years)<sup>45</sup>
- Pass a nationwide accredited NP certification test<sup>46</sup>

2017 median annual wage: \$110,000<sup>47</sup>



In 2017, the HRSA Bureau of Health Workforce published a map of U.S. states demonstrating the state-by-state shortage of health care professionals in primary care. Bright orange states have almost all of the primary care professionals they need, while lighter shaded states are lacking.

#### EXPANDING THE AUTHORITY OF PHYSICIAN ASSISTANTS

Unlike physicians, PAs must complete a two- to three-year accredited physician assistant program, and are required by state laws to work under a physician's supervision. In 2017, there were approximately 123,000 physician assistants in the U.S., and in 2010, 31% of them specialized in primary care.<sup>49</sup> Rules regarding physician assistant practice, however, still differ from state to state, and make care more complicated than it should be. In nine U.S. states, physician assistants (PAs) can't exercise full prescriptive authority despite research showing that when they do, the cost of care drops.<sup>50</sup> PAs also face care-limiting barriers when state legislatures fail to include certain services in the list of those they can provide. Until 2017, PAs in Virginia weren't classified as mental health providers, and thus couldn't take action to hospitalize patients and warn law enforcement if patients threatened to harm themselves or others.<sup>51</sup>

The next president and Congress should encourage state legislatures to grant full prescriptive authority to physician assistants, allow more flexibility between PAs and physicians to customize a system of care, and loosen physical distance requirements between PAs and supervising physicians where this is more efficient.<sup>52</sup> Like with nurse practitioners, they could do this by offering a small increase in federally matched Medicaid funds to states that cooperate.

#### TO BECOME A PHYSICIAN ASSISTANT IN THE U.S.

- Complete a bachelor's degree, including pre-med classes (four years)
- Acquire health care experience, like working as a paramedic (three years)
- Attend an accredited physician assistant program (typically three years)
- Pass the PANCE examination
- Obtain a license to practice in your state(s) of choice<sup>53</sup>

2018 median annual wage: \$108,61054

#### **LEVERAGING MIDWIVES**

Half of all U.S. counties lack an OB-GYN, and the American Congress of Obstetricians and Gynecologists predicted in 2017 that the U.S. will face a shortage of 8,000 OB-GYNs by 2020.<sup>55</sup> The shortage will particularly affect rural women, half of whom live more than 30 minutes away from a hospital with perinatal (or prebirth) services.<sup>56</sup>

According to the American College of Nurse Midwives, there were 11,194 certified nurse midwives in the U.S. in 2015, and midwives attended 9% of all U.S. births in 2014.57 Not all states, however, allow midwives to practice autonomously, and instead require them to practice under a supervision or collaboration agreement with physicians.58 These requirements persist even as a growing body of research demonstrates significant benefits to autonomous practice. A study published in 2016, for example, found that states with autonomous practice laws attracted a larger midwife workforce and had more than double the number of certified nurse practitioners per 1,000 births as states with nonautonomous practice.<sup>59</sup> Women in states that allow autonomous practice also had better health outcomes for their newborns: lower rates of preterm births, births of babies with low birth weights, and cesarean section deliveries-a costly and overused type of delivery that correlates with serious health risks.60 A 2018 study found an association between higher integration of midwives into health care systems and the same superior birth outcomes.<sup>61</sup> And a 2005 study on midwife-supervised home births saw similar rates of infant mortality as low-risk hospital births.62

In other countries, the use of midwives is more common. In Sweden, France, and Norway, for example, midwives oversee normal, low-risk births while obstetricians focus on the rarer highrisk ones.<sup>63</sup> While the U.S. used to use midwives more frequently, with midwives reporting 50% of all U.S. births in 1910, midwife use plummeted after critics and competitors spearheaded the regulation of the profession.<sup>64</sup>

In order to improve infant mortality outcomes, reduce unnecessarily frequent cesarean sections, and expand obstetric access to underserved areas, the next president should encourage all U.S. states to grant certified midwives more autonomy. This would take the shape of prescriptive authority, insurance reimbursement, hospital privileges, and decision-making autonomy, and could be accomplished by offering a small increase in federally matched Medicaid funds for states that switch to autonomous practice.



![](_page_14_Picture_7.jpeg)

#### TO BECOME A MIDWIFE IN THE U.S.

- Choose a program. Two of the most common types of midwives in the U.S. include:
  - Certified Midwives (CM)
  - Certified Nurse Midwives (CNM)
- To become a CM, complete a master's in midwifery and pass a nationally accredited certification test
- To become a CNM, become a registered nurse, go on to complete a master's in midwifery, and pass a nationally accredited certification test<sup>65</sup>

2018 median annual wage: \$103,77066

#### INFORMATION (i)

The physician shortage doesn't stem from a dearth of applicants, but rather a stunning scarcity of spots. In the 2018-2019 application cycle for allopathic U.S. medical schools, each applicant completed an average of 16 applications for a total of almost 850,000 applications nationwide. Allopathic U.S. medical schools only accepted 2.5% of these applications. Out of the nearly 53,000 individuals to apply, under 22,000 matriculatedan acceptance rate of about 41% assuming that none of the accepted students declined to attend.67

Likely because of this bottleneck, the number of Americans going abroad for medical school (and returning to the U.S. to practice) has soared in recent years. The number of U.S. international medical graduates (USIMGs) applying to the National Residency Matching Program leapt from 601 in 1991 to 3,769 in 2011—a more than 6-fold jump.<sup>68</sup>

### 3. Grants for Medical Schools

![](_page_15_Picture_5.jpeg)

#### FUND THE CONSTRUCTION OF NEW MEDICAL SCHOOLS AND THE EXPANSION OF OLD ONES

In light of reports in the 1960s predicting a doctor shortage, the U.S. government acted quickly to rectify the budding health crisis. In 1963, it began to award construction grants to medical schools, and in 1971, amended grant programs with capitation (or per-student) payments.<sup>69</sup> As a result of the efforts, the number of graduates from U.S. medical schools doubled from 1960 to 1980.

In 1979, however, the Graduate Medical Education National Advisory Committee published a report predicting a physician surplus of 70,000 by 1990, and the federal government pulled support.<sup>70</sup> Federal aid to medical education dwindled as the government reduced student loan programs, grant programs, and Medicare payments for graduate medical education.<sup>71</sup> While federal funding of U.S. medical schools had amounted to 50% of medical schools' revenues in 1965, it made up less than 19% by 2016.<sup>72</sup> And while the government's initial efforts had doubled the number of M.D. graduates from about 7,000 to 15,000 in just twenty years, its later actions killed the progress—as there were only about 19,000 M.D. graduates in 2017, almost forty years later.<sup>73</sup>

Federal funding for medical school education can and does effect profound and lasting changes on physician output. If the next president and Congress replicate some of the funding initiatives of the 1960s, such as awarding construction and NIH grants to medical schools, the U.S. can increase its supply of physicians to better meet the demand.

## <mark>4</mark>. Foreign Doctors

![](_page_16_Picture_2.jpeg)

#### REMOVE RED TAPE FOR COMPETENT FOREIGN DOCTORS

Foreign doctors make up a vital supplement to the limited number of American-trained physicians emerging from their residencies. Today, they make up one fourth of the general U.S. physician work force, and between 2000 and 2013, they made up more than 33% of doctors entering the field of family medicine, where shortages are especially acute.<sup>74</sup> These foreign physicians also provide a much-needed boon to the U.S.'s poorer and underserved populations. According to the American Immigration Council, 42.5% of physicians are foreign-trained in areas where per capita income falls below \$15,000 a year.<sup>75</sup>

Unfortunately for these communities, many foreign-trained physicians decide *not* to practice in the U.S., and with reason. Foreign-trained doctors face about a decade's worth of regulatory hurdles before they can practice on American soil, even when they hail from countries with advanced health care systems like France, the U.K., and Japan.

Before practicing in the U.S., all foreign-trained physicians (excepting Canadians) must navigate an obstacle course of requirements that include:

- Applying to a private nonprofit for the verification of their medical transcripts
- Proving they speak English
- Passing all three steps of the U.S. Medical Licensing Examination (USMLE)
- Volunteering in an American clinic to acquire American recommendation letters
- Receiving a permanent resident or work visa from the U.S. government
- Winning a spot in one of the U.S.'s competitive residency programs
- Completing a residency in the U.S.

In many cases, these steps only duplicate the extensive training that foreign-trained physicians have already received in the advanced health care systems of their home countries.<sup>76</sup> Aside from disincentivizing foreign-trained physicians from practicing in the U.S., these needless hurdles also consume limited resources (such as residency slots) that could be more wisely spent on other wouldbe doctors. Physicians who have already finished their training in countries with advanced health care systems, like the U.K., France, Germany, and Japan, should not be forced to waste time and resources completing redundant second residencies in the U.S., nor should they be required to volunteer at American clinics to acquire American recommendation letters. Canadian doctors in the U.S. don't have to; why should they?

Instead, immigrant doctors who trained in countries with advanced health care systems should be able to practice in the U.S. with zero to minimal barriers. For countries with spotty health care systems, in which the quality of medical training varies highly from school to school (like in India), foreign doctors should face hurdles conditional on where they trained.<sup>77</sup> Regulations should decrease in proportion to the level of quality of the medical institution they attended, rather than the Educational Commission for Foreign Medical Graduates (ECFMG) forcing all of them through the same standard process.

To this effect, the ECFMG should conduct research to rank the top foreign medical institutions by quality, with graduates from the highest-scoring programs able to practice U.S. medicine with zero barriers, graduates from the second-tier programs able to practice U.S. medicine only if they pass the USMLE, graduates from the third-tier programs able to practice only if they both pass the USMLE and complete a short residency, and so on.

![](_page_17_Picture_13.jpeg)

#### EXPANDING THE CONRAD 30 J-1 VISA WAIVER

Non-immigrants who wish to work or study temporarily in the U.S. can apply for the J-1 visa, which functions as an exchange program between the U.S. and foreign countries. A variety of different professionals and students participate, with many foreign physicians using the J-1 visa to train at U.S. medical institutions. In 2018, there were almost 3,000 foreign doctors out of 330,000 J-1 participants.<sup>78</sup> The J-1 visa, however, is non-immigrant—which means the government does not intend it to be used as a stepping stone to permanent residency. As a result, these J-1-holding doctors must return to their home countries for at least two years after their J-1 expires. This prevents them from "hopping" onto another visa to remain in the U.S.<sup>79</sup>

In 1994, former Senator Kent Conrad drafted legislation to help these foreign physicians stay in the U.S. The program became known as the Conrad 30 J-1 visa program, and waives the requirement that foreign physicians return to their home countries in exchange for their practice in areas with health care shortages. The program now allocates 30 slots to each state every year, with 1,500 spots in total. In 2017, Senators Amy Klobuchar (D-MN), Susan Collins (R-ME), and former Senator Heidi Heitkamp (D-ND) reintroduced bipartisan legislation to expand this program, but the bill never aired for a vote.<sup>80</sup> The next president and Congress should fortify the Conrad 30 J-1 program by:

- Making it permanent (Congress must still re-authorize it every few years)
- Increasing the number of slots
- Allocating slots based on need rather than giving a fixed number to each state
- Transferring unfilled slots to states with higher applicant demand
- Adding spots for academic medical centers
- Standardizing the definition of relevant underserved areas (definitions vary from Health Professional Shortage Area to Medically Underserved Area/Population)<sup>81</sup>
- Eliminating some rigid application requirements (for example, that the applicant must not switch employers)
- Increasing local involvement between the physicians and communities
- Providing long-term incentives like housing stipends<sup>82</sup>

### ADDRESS THE VISA AND GREEN CARD BACKLOG

In a health care system in which one quarter of physicians are foreign-trained, visa and green card delays pose a significant problem. Unfortunately, these holdups are commonplace in American immigration, which prioritizes family ties over employment or special skills.<sup>83</sup> In 2018, more than 4 million people were on the waiting list for American visas. A study from Cato found that Indian immigrants waiting to receive EB-2s, a type of employment-based visa for advanced degree holders, will have to wait 150+ years to receive them.<sup>84</sup> America's massive green card backlog not only turns away the very physicians who could offset the doctor shortage, but also disincentivizes foreign doctors already living in the U.S. from continuing to practice here.<sup>85</sup>

The next president and Congress should consider creating a new stream of both green cards and temporary visas specifically for foreign-trained doctors from advanced medical programs.

![](_page_18_Picture_17.jpeg)

### 5. Telemedicine

![](_page_19_Picture_2.jpeg)

While expanding the supply of physicians will assuage the shortage, it will not necessarily fix their unequal distribution across different parts of the U.S. Physicians tend to practice in urban sites over rural ones, with many rural areas lacking the same access as their urban counterparts.<sup>87</sup>

Telemedicine, which allows providers to consult remotely with patients via phone or webcast, provides a unique opportunity to address these access disparities. Although its use in the U.S. today is limited, creative innovations have bloomed in surprising places. Prisons across at least 30 U.S. states, for example, have employed telemedicine to avoid the hassle of transporting inmates from rural facilities to urban centers.<sup>88</sup> A community health center in Washington, D.C. uses telemedicine to provide virtual primary care to Medicaid patients who can't physically come to their clinics.<sup>89</sup> And four separate peer-reviewed studies have found that around-the-clock telemonitoring of ICU patients yields promising results.<sup>90</sup>

Unfortunately, a slew of regulatory barriers still shackles telemedicine's potential. In 2014, only 19 states had passed legislation to guarantee telemedicine reimbursement from third-party payers. Would-be telemedics must also overcome thorny issues with practicing across state lines and receiving reimbursements from Medicare and Medicaid.<sup>91</sup> Problems like these have stunted the growth of telemedicine, which can only thrive when lawmakers across state lines work together to develop the political, financial, and medical infrastructure to support it. In order to scale telehealth nationwide, the next president and Congress should direct the Department of Health and Human Services to work with medical professionals, state legislatures, and health insurance companies to standardize both the reimbursement and regulation of telemedicine across the U.S.<sup>92</sup>

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18.5% of physicians who responded to The Physician Foundation's survey were practicing some form of telemedicine in 2018.<sup>86</sup>

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