

Why Don't U.S. Medical Schools Produce More Doctors?

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KEY TAKEAWAYS

The primary reason for the huge increase in foreign-trained doctors is simply that too few U.S. medical schools are training too few students.

About a third of foreign-trained “medical residents” are U.S. citizens who had been turned away from domestic medical schools and have been forced to go overseas.

Blame for the physician shortage that facilitated the dramatic rise in foreign-trained doctors in the U.S. falls squarely with the AAMC and AMA.

What would happen if the U.S. military needed 1 million people in the Armed Forces but decided to cap domestic enlistment at 750,000 U.S. citizens and to recruit the rest abroad? Or what would happen if U.S. policy was designed to import 25 percent of its lawyers or teachers from elsewhere in the world, not because this country lacks people who are interested in and capable of pursuing those professions, but simply because the U.S. would rather hire foreigners for those jobs? That would be absurd—and it happens to be exactly how the system for training and hiring doctors in America operates today.

To become a board-certified and licensed doctor in the United States, one must complete medical school and then be placed in a residency program for at least one year of clinical training. In 1981, only 9 percent of

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medical residents came from foreign medical schools.¹ In 2024, 25 percent of medical residents came from abroad. That is, a quarter of the people becoming doctors in the U.S. obtained their medical education abroad.

Of course, there are many skilled and caring physicians working in the U.S. who attended medical school in other countries. They are not at fault for wanting to become doctors and serving patients in the United States. But a system for producing doctors that favors foreign-trained doctors while blocking qualified Americans is strange and problematic.

The primary reason for the huge increase in foreign-trained doctors is simply that there are too few U.S. medical schools² training too few students. There is no shortage of people *applying* to U.S. medical schools. In fact, it is getting significantly more difficult to get into medical schools. According to the Association of American Medical Colleges, there were 62,443 applicants to allopathic (doctor of medicine (MD)-granting) medical schools in 2021, of whom 23,711 were admitted.³ This acceptance rate of 38 percent is down from 46 percent in 2011 and 52 percent in 2002. If U.S. medical schools had the same acceptance rate in 2024 as they had in 2002, the current percentage of medical residents that would need to be filled by foreign medical students would be 9 percent—the same as it was in 1981.

The reason that the percentage of doctors imported from abroad has skyrocketed from 9 percent to 25 percent between 1981 and 2024 is that U.S. medical schools have simply failed to keep up with the increased demand for medical services by not expanding the number of doctors they train. It was a policy choice to import significantly more foreign-educated doctors rather than train more in the U.S. That policy choice was enforced by monopoly control over the accreditation of U.S. medical schools, which hindered new entrants and forced the U.S. health care system to look abroad for doctors.

This policy choice has oddly escaped critical attention. If U.S. auto companies decided to staff their factories by limiting the hiring of U.S. workers in favor of importing 25 percent of them from abroad, there would rightly be a political outcry. But because the problem has been obscured by inaccurate claims from leading medical organizations, policymakers have not focused on this issue or considered the need for policy solutions.

This *Backgrounder* documents the trends and policies that contributed to the sharp rise in foreign-trained doctors and offers policy solutions.

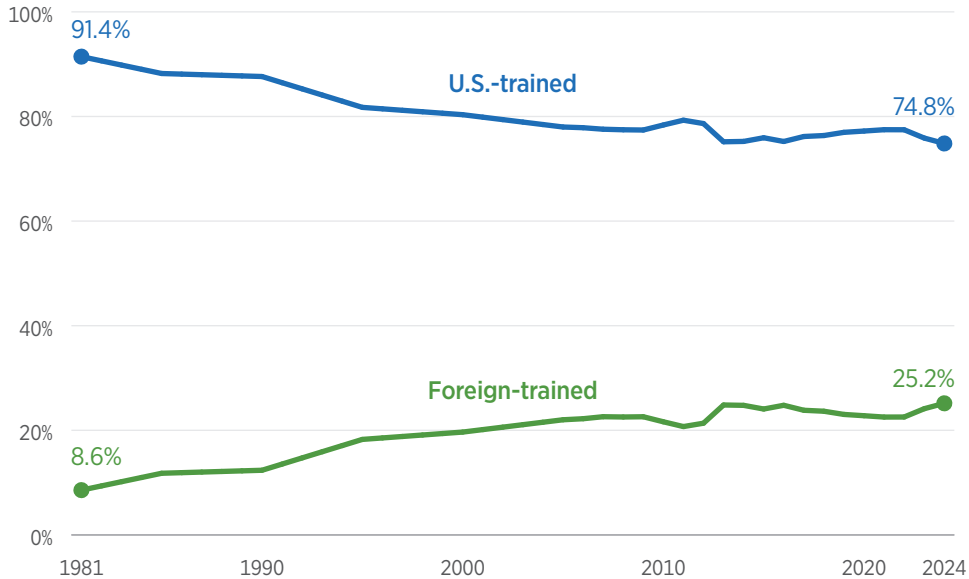
The Rise in Foreign-Trained Doctors

To be licensed and board-certified as a doctor in the United States, graduates of medical schools need at least one year of supervised clinical

CHART 1

Increase in Foreign-Trained Doctors

SHARE OF TOTAL MEDICAL SCHOOL STUDENTS MATCHED IN RESIDENCIES



NOTE: Some figures between 1981 and 2004 have been interpolated.

SOURCE: Author's analysis of data from National Resident Matching Program, "Match Data & Report Archives," <https://www.nrmp.org/match-data-analytics/archives/> (accessed May 3, 2024).

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experience, commonly known as a residency. A single organization, the National Resident Matching Program (NRMP), places ("matches") medical school graduates in these residencies and produces an annual report⁴ with detailed information on the number and type of residencies as well as the number and origin of applicants for those residencies.

In 1981, the earliest year for which archived reports provide full data on applicants from foreign medical schools, 14,144 people matched into the first year of their residency, described in the NRMP report as "post-graduate year one" (PGY-1).⁵ Of those 14,144 residents, 12,933 (91 percent) were trained in U.S. medical schools, while 1,211 (9 percent) were trained in foreign medical schools.

Of these 1,211 foreign-trained residents, 362 were U.S. citizens, while 849 were foreign nationals. The report does not disaggregate how many of those graduating from U.S. medical schools were U.S. citizens and how many were foreign nationals.

The percentage of those matched in U.S. residencies who were trained in foreign medical schools rose sharply from 9 percent in 1981 to 20 percent in 2000. By 2013, the foreign-trained share of those becoming doctors in the U.S. reached 25 percent, holding roughly that level through 2024.⁶ (See Chart 1.)

The explanation for the significant increase in foreign-trained residents is that U.S. medical schools simply did not keep up with the expansion in residencies or the demand for doctors. In 1981, 18,331 residency positions were offered in the U.S., rising to 38,494 in 2024, an increase of 110 percent. But the total number of fourth-year U.S. medical school students, or “seniors,” applying for residencies lagged behind that increase, rising by 101 percent from 13,857 in 1981 to 27,788 in 2024. When the number of spots for budding doctors grows faster than the number of residents that U.S. medical schools can produce, the gap is made up by residents from foreign medical schools.

Why Is the Number of U.S. Medical School Graduates Lagging?

In 1980, the U.S. medical establishment was convinced that the country had a glut of doctors. The Graduate Medical Education National Advisory Committee convened by the Secretary of Health and Human Services (HHS) issued a report in 1980 warning that there would be a “surplus of 70,000 physicians by 1990” if steps were not taken to bring supply and demand into balance.⁷

According to Robert Orr of the Niskanen Center, the committee’s main recommendations consisted of “a moratorium on the establishment of new medical schools” and “a reduction in medical school enrollment and freeze on future class-size expansions.”⁸ Orr continued:

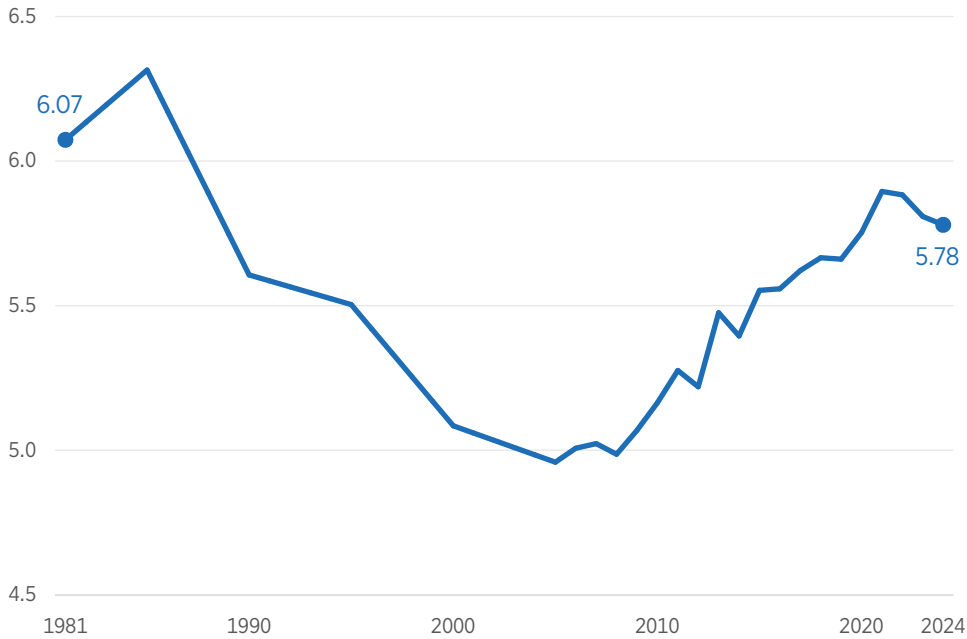
In response to the [HHS] report, medical schools established a voluntary moratorium on new schools, during which a total of three new M.D.-granting medical schools were established in the United States. Similarly, in line with the GMEN-AC’s recommendations, medical schools either froze or cut student enrollment.⁹

This near freeze was enforced by the Association of American Medical Colleges (AAMC) and the American Medical Association (AMA), the two sponsors of the Liaison Committee on Medical Education, which is the sole accreditor of allopathic medical schools recognized by the U.S. Department of Education. The decision not to expand the number of slots in U.S. allopathic medical schools remained in place until 2005, when the AAMC and AMA changed their minds from declaring an impending doctor glut to warning of a looming doctor shortage.¹⁰

CHART 2

MD-Granting Schools Failing to Keep Up with Demand

ALLOPATHIC MEDICAL SCHOOL SENIORS APPLYING FOR RESIDENCIES PER 100,000 U.S. POPULATION



NOTE: Some figures between 1981 and 2004 have been interpolated.

SOURCE: Author's analysis of data from National Resident Matching Program, "Match Data & Report Archives," <https://www.nrmp.org/match-data-analytics/archives/> (accessed May 3, 2024), and Macrotrends, "U.S. Population 1950–2024," <https://www.macrotrends.net/global-metrics/countries/USA/united-states/population> (accessed May 6, 2024).

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Even after 2005, when the AAMC and AMA recognized that they had been mistaken and pledged to increase the supply of doctors trained in allopathic medical schools, they slow-walked that expansion. Between 2005 and 2024, the number of students graduating from allopathic medical schools who applied for a residency only increased by 34 percent, while the number of residencies being offered rose by 79 percent during that same period. The net effect of freezing and then slow-walking the expansion of allopathic medical schools is that today, 5 percent fewer MDs are produced each year per 100,000 people in the U.S. than in 1981, declining from 6.07 new MDs per 100,000 in the population in 1981 to 5.78 in 2024. (See Chart 2.) Given that the proportion of the U.S. population who are older and in greater need of medical care has grown substantially, these numbers understate the failure of U.S. medical schools to keep up with growing demand.

While the AAMC and AMA tried to keep the supply of doctors down, osteopathic and foreign medical schools raced to fill the gap. In 1981, osteopathic medical schools, built on an alternative theory of medicine to MD-granting institutions, were not fully accepted and barely existed in the U.S., supplying only 152 doctors to apply for residencies. By 2024, the number of seniors from osteopathic medical schools applying for residencies mushroomed to more than 8,000—almost 30 percent of the total domestic supply of new doctors.

At the same time, the importation of foreign medical school students to fill residencies shot up. About a third of these foreign-trained residents are U.S. citizens who had been turned away from medical schools in this country and have been forced to go overseas. Many of these foreign-trained U.S. citizens have attended newly built, for-profit medical schools that opened in the Caribbean or Mexico precisely to attract the qualified and motivated Americans who wanted to become doctors but were not given that opportunity by U.S. allopathic medical schools that refused to expand with the growing population.

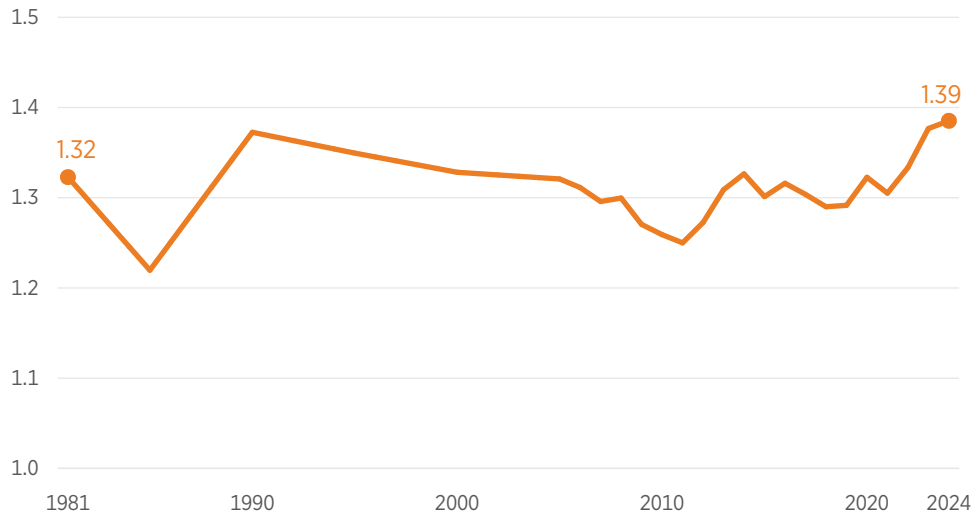
False Narratives

Blame for the physician shortage that facilitated the dramatic rise in foreign-trained doctors in the U.S. falls squarely with the AAMC and AMA. But the AAMC offers an alternative, and demonstrably false, explanation. It blames the lack of growth in residencies for the doctor shortage. According to the AAMC's summary of a survey it administered, "The enrollment expansion 'will not resolve the projected shortage' in physicians...because the number of residencies available for medical school graduates has not increased at the same rate as the increase in students in the United States."¹¹

This statement is simply false. The number of residencies offered has expanded faster than the domestic production of new doctors since 1981. This is especially true for newly trained allopathic doctors, whose medical schools are governed by the AAMC. In 1981, 1.32 residency positions were offered for every U.S. medical school senior applying for a residency. That ratio has fluctuated slightly over the years before rising to 1.39 residencies for every U.S. medical school applicant in 2024. (See Chart 3.) That is, 39 percent more residencies are now available than there are graduates of U.S. medical schools applying for them. The difference must be made up with foreign-trained doctors. And even then, 7 percent of residency positions remain unfilled. Opening the residency spigot wider will not increase the flow of U.S.-trained doctors unless domestic medical education expands.

CHART 3

Number of Residencies Offered Relative to U.S. Medical School Applicants



NOTE: Some figures between 1981 and 2004 have been interpolated.

SOURCE: Author's analysis of data from National Resident Matching Program, "Match Data & Report Archives," <https://www.nrmp.org/match-data-analytics/archives/> (accessed May 3, 2024).

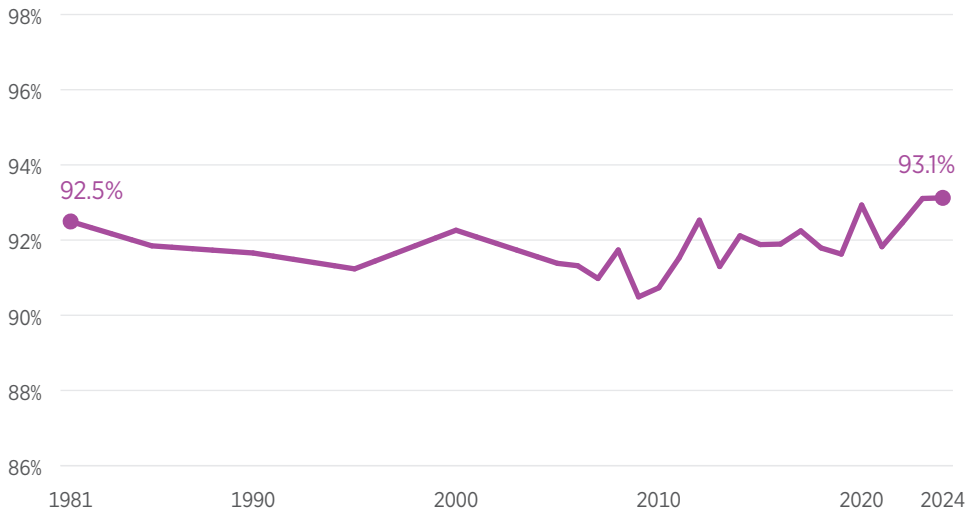
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The AAMC report¹² never examines the actual number of residencies to support its claim of a shortage. Instead, the report complains about insufficient growth in federal funding for residencies and relays fears from medical schools about their graduates not finding desired positions: "44% of MD-granting schools surveyed are concerned about their incoming students' ability to find a residency training position of their choice upon completion of medical school, and federal caps on Medicare-funded residency training positions remain effectively frozen at 1996 levels."¹³

Of course, neither of these claims is evidence of a residency shortage. Worrying whether medical school graduates will be able "to find a residency training position of their choice" is like a prep school worrying whether their graduates will gain admission to an Ivy League university. There are other options out there, even if they are not the preferred ones. In fact, the rate at which U.S. medical school students have been successfully placed in a residency has barely changed over the past 45 years. In 1981, 92 percent of U.S. medical school seniors applying for residencies were matched; in 2024, it was 93 percent. (See Chart 4.) The small number unable to find

CHART 4

Placement Rates for U.S. Medical Students in Residencies Have Remained Relatively Flat Since 1981



NOTE: Some figures between 1981 and 2004 have been interpolated.

SOURCE: Author's analysis of data from National Resident Matching Program, "Match Data & Report Archives," <https://www.nrmp.org/match-data-analytics/archives/> (accessed May 3, 2024).

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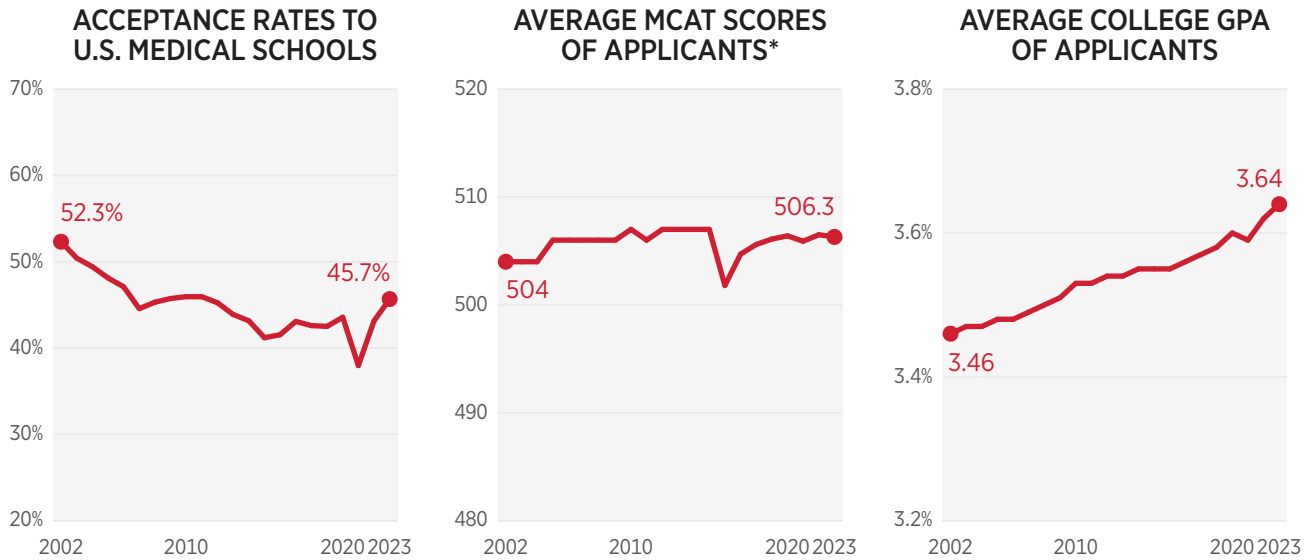
a residency either applied too narrowly (like applying only to the Ivies without a back-up school) or performed so poorly in medical school that pursuing an alternative career is the appropriate action.

In addition, it should come as no surprise that the interest group advocating on behalf of medical schools would like more federal funding for its industry. Medicare is not the sole funder of residencies, and it is clear that the number of positions has managed to grow faster than the number of medical school graduates even without faster increases in federal funding. Reminder: There are now 1.39 residencies for every U.S. medical school senior applying for one; there were 1.32 in 1981.

The fact that the data do not support the residency-shortage narrative has not stopped large numbers of influential people from repeating it. For example, Derek Thompson wrote a lengthy piece in *The Atlantic* titled, "Why America Has So Few Doctors," in which he asserts: "The arithmetic is simple: More funding means more residents; more residents allows medical schools to grow; more medical students today means more doctors in a decade."¹⁴ Thompson provides no numbers and they would not add up if

CHART 5

Qualifications of Medical School Applicants and Acceptance Rates



* Scores for 2002–2015 were converted to the new MCAT scale. See Shemmassian Academic Consulting, “Old MCAT to New MCAT: Score Conversion and MCAT Percentiles,” <https://www.shemmassianconsulting.com/blog/old-mcat-to-new-mcat#old-mcat-to-new-mcat-total-score-conversion-&-percentiles> (accessed May 6, 2024).

SOURCE: Author’s analysis of data from Association of American Medical Colleges, “Facts—2023 Facts: Applicants and Matriculants Data,” <https://www.aamc.org/data-reports/students-residents/data/2023-facts-applicants-and-matriculants-data> (accessed May 6, 2024).

he did. It is the domestic production of medical students that has been the constraint, not the federal funding of residencies.

Another false narrative for the shortage of U.S.-trained doctors is that being a physician is no longer as desirable, given declining pay and work conditions and increased malpractice liability risks, so fewer qualified Americans want to become doctors. Again, the data do not bear this out. The number of people applying to become doctors is increasing faster than the number accepted, while the quality of the applicants has risen, as measured by the Medical College Admission Test (MCAT) scores and college grade point averages (GPAs) of the applicants.

The AAMC provides data for MD-granting medical schools going back to 2002. That year had 33,624 applicants of whom 17,592 were admitted—an acceptance rate of 52 percent. That acceptance rate has steadily declined, hitting a low of 38 percent in 2021 before rising to 46 percent in 2023. The applicant pool appears as qualified as it ever was, with an average MCAT

score (converted into the current scale) of 504 in 2002 (with scores ranging from 472 to 528), increasing slightly to 506 in 2023. And the average college GPA of applicants rose from 3.46 in 2002 to 3.64 in 2023. (See Chart 5.)

While being a doctor may have become less attractive in some respects, it has not shrunk the pool of qualified applicants. There are more applicants today than in 2002, and they appear at least as qualified. There is no shortage of Americans interested in becoming doctors, nor is there a shortage of residencies. What the country has is a shortage of seats in U.S. medical schools.

Why the Rising Share of Foreign-Trained Doctors Is Problematic

There are several reasons why the fact that a quarter of all doctors in America were trained abroad is problematic. First, American citizens aspiring to become doctors should have priority. If nation-states still mean anything, countries should not prefer foreign entities over their own citizens. This is especially the case for the U.S. health care system, which is heavily subsidized by U.S. taxpayers and ought not to use those funds to expand opportunities for foreign-trained doctors to the exclusion of U.S. citizens. The production of domestic-trained doctors could have kept pace with the increase in residencies if only the number of slots at U.S. schools had increased at a similar rate. Choosing not to expand the number of slots in U.S. medical schools as fast as the creation of residencies because of artificial constraints placed on them by a monopoly accreditor was a choice to import foreign-trained doctors rather than give that opportunity to people in the U.S.

Second, the shortage of domestically trained doctors has been especially problematic for qualified Americans who have been forced to go abroad to attend medical school. Medical schools built primarily by for-profit companies for Americans in the Caribbean and Mexico rather than in the United States raises concerns about both efficiency and quality. Medical schools operating in the U.S. could draw on a large pool of well-trained American doctors to serve as faculty, they could use existing hospitals with state-of-the-art equipment for training, and would be located closer to where American medical students live and where they ultimately wish to practice. The only reason these schools were opened in the Caribbean and Mexico rather than in the U.S., despite these operational disadvantages, is that it was too difficult for them to receive approval from the monopoly accreditor sponsored by the AAMC and AMA. Moving medical schools abroad and importing foreign-trained doctors is not a desirable solution to an accreditation problem.

Recommendations for Congress

To reduce America's dependence on foreign-trained doctors and increase the domestically trained supply of physicians, policymakers should:

- **Facilitate the addition of at least one new accreditor of MD-granting medical schools as well as at least one new accreditor of DO-granting medical schools.** Congress must break up the accreditation cartel that has been limiting the creation and expansion of U.S. medical schools and which is the primary cause of America's shortage of domestically trained physicians. At the same time, Congress should restore control of higher education accreditation to the states. The Higher Education Reform and Opportunity (HERO) Act sponsored by Senator Mike Lee (R-UT) and Representative Chip Roy (R-TX) would devolve accreditation to the state level and enable states to allow any state-authorized entity to accredit colleges and universities, schools within colleges, courses of study, and classes. Not only would this devolution break the de facto federal monopoly on accreditation that limits innovation, it would provide genuine quality assurance in higher education.
- **Encourage the on-shoring of medical schools that were built in Mexico and the Caribbean primarily to serve U.S. medical students.** To make it easier for these schools to open branches in the United States, they should be offered immediate accreditation as U.S. medical schools if they relocate to the U.S. or open U.S. campuses. Because these off-shore medical schools tend to be structured as for-profit institutions, which has traditionally been prohibited among U.S. medical schools, getting these schools to relocate to the U.S. will require ensuring that they and their students are not disadvantaged because of the school's for-profit status. No government funding or other opportunity should be restricted because these schools are for-profit. In addition, it may be sensible to allow these schools to issue tax-advantaged municipal bonds to facilitate their relocation.

Conclusion

Of course, creating new medical schools, relocating those training Americans in the Caribbean and Mexico, and expanding the number of seats in existing U.S. medical schools will encounter constraints other than those

posed by accreditation. Finding appropriate clinical settings for training medical students in the United States is a serious challenge, especially in urban centers that already host medical schools. In addition, raising the funds to open, relocate, or expand these medical schools in the U.S. will also be difficult.

But unleashing the entrepreneurial spirit by breaking the accreditation cartel will help to produce creative solutions to these problems. Caribbean-based medical schools, with their for-profit structure and evasion of the U.S. accreditation cartel, have shown that it is possible to cover their costs with tuition that is comparable to that charged by U.S. schools. Those Caribbean-based and Mexico-based medical schools have also managed to expand the number of clinical training opportunities in the U.S. that their students need as part of their medical education.

Philanthropists may also see opportunities to solve these problems and create new medical schools in the U.S. Less-urban areas of the country may be especially prime locations for creating new medical schools without crowding out clinical training opportunities for existing medical schools that tend to be concentrated in large cities.

The fact that expanding medical training opportunities in the U.S. will require creative solutions is not an argument against trying to do so. To the contrary, it is the strongest argument for why Congress needs to break up the accreditation cartels and unleash the entrepreneurial energy of increased competition—it could solve problems that committees of experts cannot devise with their central planning.

Given that aging baby boomers are increasing demand for medical care, removing the accreditation cartel blocking the expansion of domestically trained doctors is critically important.¹⁵

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Endnotes

1. National Resident Matching Program, "Match Data & Report Archives," <https://www.nrmp.org/match-data-analytics/archives/> (accessed May 4, 2024).
2. Unless otherwise noted, the term "U.S. medical school" includes both those trained in allopathic schools that grant MD degrees and osteopathic schools that grant doctor of osteopathic medicine (DO) degrees.
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5. National Resident Matching Program, "NRMP Data," May 1984, <https://www.nrmp.org/wp-content/uploads/2021/07/resultsanddata1984.pdf> (accessed on May 3, 2024).
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9. Ibid.
10. Kevin D. Dayaratna and John O'Shea, "Addressing the Physician Shortage by Taking Advantage of an Untapped Medical Resource," Heritage Foundation *Backgrounders* No. 3221, May 30, 2017, <https://www.heritage.org/public-health/report/addressing-the-physician-shortage-taking-advantage-untapped-medical-resource>.
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13. Ibid.
14. Derek Thompson, "Why America Has So Few Doctors," *The Atlantic*, February 14, 2022, <https://www.theatlantic.com/ideas/archive/2022/02/why-does-the-us-make-it-so-hard-to-be-a-doctor/622065/> (accessed on May 3, 2024).
15. Dayaratna and O'Shea, "Addressing the Physician Shortage by Taking Advantage of an Untapped Medical Resource."