



The Residency Crisis: Matching Medical School Graduates

Position Paper #22-01

Devon M. Herrick, Ph.D.

**Senior Resident Fellow and Board Member
Benjamin Rush Institute**

About the author: Devon Herrick, Ph.D (Economics) is a healthcare economist and former hospital accountant, who concentrates on issues such as consumer-driven health care, telemedicine, medical tourism, pharmaceutical economics, and emerging trends in retail medicine. Dr. Herrick has authored numerous studies with more than 100 papers published based on his research. He has also testified before Congress and numerous state legislatures. He served two terms as chair of the Health Economics Roundtable of the National Association for Business Economics (NABE), and was coauthor and primary researcher of the book, "Lives at Risk."

Contact:

**Benjamin Rush Institute
PO Box 610-001
DFW Airport Station, TX 75261-0001
www.benjaminrushinstitute.org**

The Match & a Shortage of Physicians

Once patients require care beyond what they can provide for themselves, they need a licensed physician who can practice medicine, prescribe drugs, authorize diagnostic tests, and perhaps admit them to hospitals. However, many areas of the country have a serious shortage of these doctors, limiting patients' access to care. More than one-third of Americans surveyed reported having a difficult time finding a doctor.¹ According to the Association of American Medical Colleges, the United States has a shortage of nearly 20,000 physicians today, and that number is expected to rise to at least 37,800 and possibly as high as 124,000 by the year 2034. This translates into a potential shortage of up to 48,000 primary care providers and 77,100 specialists in fewer than a dozen years.² The areas that will see the biggest shortages will be in rural areas and in states with too few of the residency slots required for physician training.

How Physicians are Trained

Physician training requires four years of undergraduate study at a university and four more years of study at a medical school. Before a medical school graduate can practice medicine, he or she must also complete a residency program that lasts from three to seven years, depending on the specialty. Unfortunately, residency programs are a significant bottleneck to physician training as demand for them has risen faster than the supply.

Every year in March, the National Resident Matching Program (Match) algorithm compares registered medical graduates' preferences and attempts to match candidates to the residency program that most closely corresponds with their choices. Not everyone gets the training program they want, nor are they selected to train in the geographic area they prefer. Indeed, every year thousands of medical school graduates do not match with a residency. This is often because their preferences were too narrow, there were better candidates competing for a coveted slot, or there are just too few residency slots to meet demand.

In the 2021 Match there were 35,194 first-year residency slots available, with second-year slots raising the total to 38,106 positions. Yet the number of medical students who registered for the Match was an all-time high of 48,700.³ While most U.S. medical school graduates ultimately match to a residency slot, about seven percent of MD and 11 percent of DO graduates do not.⁴

Medical students who go unmatched often have as much as \$300,000 in student debt with no way to advance their career or earn a living in their chosen profession. Those who fail to match the first round can try the supplemental offer and acceptance program (SOAP), which is similar to a second-round match. In 2021 there were only 1,773 unfilled slots in the SOAP match. The SOAP often requires residents to learn a different specialty or locate in a city not of their choosing. Failing that, medical school graduates must wait another year and try to match again. Failure to match to a residency program takes a significant toll on the mental health of medical graduates, not to mention the extra expense of being out of the workforce for another year.⁵ Some medical graduates, including many Americans who study abroad as well as some international medical

graduates (IMG), never match to a residency and are never able to practice medicine in the United States.

Problem: Artificial Cap on Residencies

Funding sources for graduate medical education (GME) residency programs include Medicare, Medicaid, the Veterans Health Administration, the Health Resources and Services Administration, and the military. States allocate additional funds and some private payers fund GME programs as well. Many teaching hospitals also train more medical graduates than the amount of compensation they receive from GME funding sources. However, the vast majority of medical residencies are funded by Medicare. Unfortunately, the number of residencies Medicare can fund was essentially capped 25 years ago. The Balanced Budget Act of 1997 (BBA) capped allopathic (M.D.) and osteopathic (D.O.) residencies to the number on the most recent hospital cost reports. Two years later an exception was made for rural teaching hospitals, but those residencies are still capped at 130 percent of 1997 levels.

The increase in unmatched medical school graduates is largely because medical school enrollment has increased since the BBA, but without increased Medicare funding, residency slots have not kept pace. Medical school enrollment is 52 percent higher than it was in 2002, for instance.⁶ There are an increasing number of medical school graduates who need residencies, including IMGs, making the available residency slots much more competitive.

Worse yet, when the number of residency slots was capped in 1997, GME programs in the Northeast had a disproportionately larger number of the existing slots, while programs in the South and Southwest had far fewer. Over time, this has resulted in a perverse allocation of residency slots that favors the programs that had a high number of slots in 1997, while disproportionately hurting smaller programs.

Solution: Increasing Residency Slots

In December 2020, Congress passed the Consolidated Appropriations Act, which allows the Centers for Medicare and Medicaid Services (CMS) to fund an additional 1,000 new residency slots. The new slots will increase by 200 per year over the next five years.⁷ CMS announced it will give priority to training programs in underserved areas, known as Health Professional Shortage Areas. The initial 200 residency slots will become effective in July 2023. This is a good start, but it will not adequately solve the problem. More needs to be done. The federal government should devote more funding to states with disproportionately low residences compared to their population. The federal government should also explore partnerships with states willing to share in the cost of adding more GME programs and residency slots. Additional GME funding should consider the population of states compared to the number of existing residencies funded by Medicare.

State Solutions

States allocate a portion of their Medicaid budgets to residency programs and fund some additional residency slots out of their general budgets. This level of state involvement is important because physicians tend to practice medicine in the state where they train. For instance, the Texas Higher Education Coordinating Board

estimates that about 80 percent of medical students who complete their medical education in Texas stay and practice in Texas.⁸ If states want to address local physician shortages, they should consider investing in more residency slots. States should also explore public-private partnerships to add residency shortages.

As a stop gap measure, five states currently license mid-level providers called assistant physicians, where medical school graduates who have not yet matched to a residency are allowed a limited scope of practice. Assistant physicians (not to be confused with physician assistants) are allowed to practice medicine under the supervision of a licensed physician. Assistant physicians can also bill for services similar to the way physicians' assistants and nurse practitioners do. States that currently license assistant physicians are Missouri, Virginia, New Hampshire, Utah, and Arkansas. Similar legislation has been debated in Georgia, Kansas, Oklahoma, and Washington State.⁹ Although this allows medical school graduates to begin earning an income and continue their medical training, it is not a permanent substitute for increasing available residency slots.

Conclusion

Every year, thousands of medical school graduates fail to match with a residency program because too few residency programs exist. Some will try again the following year, but many medical graduates give up and never practice medicine. There are a variety of ways to increase residency slots. States and the federal government have an opportunity to fix the residency caps, as well as the inequitable allocation of physician residents that resulted from capping residency slots. States and the federal government should explore every avenue to increase the number of available residency slots.

¹ "What Americans Say About the Nation's Medical Schools and Teaching Hospitals, Association of American Medical Colleges, 2019.

² "The Complexities of Physician Supply and Demand: Projections from 2019-2034," prepared by IHS Markit for the Association of American Medical Colleges, June 2021.

³ Kevin B. O'Reilly, "2021 Match hits record highs despite pandemic's disruptions," American Medical Association, March 23, 2021.

⁴ Kara Gavin, "The Mental Health Toll of Not Matching," MedPage Today, July 7, 2021.

⁵ Ibid.

⁶ Lindsay Kalter, "U.S. medical school enrollment rises 30%," AAMC News, July 25, 2019.

⁷ "CMS Funding 1,000 New Residency Slots for Hospitals Serving Rural & Underserved Communities," Press Release, Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services, December 17, 2021.

⁸ Sean Price, "GME Momentum: Preserving Texas' Steady Progress in Building Residency Positions," *Texas Medicine*, April 2021.

⁹ Association of Medical Doctor Assistant Physicians.