GRADUATE PHYSICIANS: Come Train, or Stay and Train, but Make Mississippi Your Home

Graduate medical education (GME), the formal, hospital-sponsored or hospital-based training program for individuals who have completed medical school and earned an MD or DO degree, is on the upswing in Mississippi. By increasing the number of medical residency opportunities, health care leaders hope that physicians will remain to practice in the communities in which they complete their training.

"Mississippi has been last in physicians per 100,000 for many years and we hope to improve that metric by creating more GME training opportunities in Mississippi," said Dr. John Mitchell, director of the Office of Mississippi Physician Workforce (OMPW). "The need for additional postgraduate medical training sites has been a need for several years. However, with the addition of William Carey University School of Medicine in 2010 and increasing class size of the University of Mississippi Medical Center, the need has been magnified," Mitchell said.

The increase in post graduate training opportunities is welcome news given the predicted physician shortage in the U.S and within the Magnolia state. According to a report by the National Institute of Health, Mississippi will require an additional 3,709 physicians by 2030 to meet the national benchmark. This is a significant increase of the state's current 5,857 actively practicing physicians. Per the Association of American Medical Colleges (AAMC), the number of actively practicing physicians in Mississippi has only increased by 638 in the past 10 years.

Mississippi sponsoring institutions - the governing bodies that assume financial and academic responsibility of ACGME-accredited residencies and fellowship training programs - have significantly expanded GME capacity. During the last decade, sponsoring institutions have established numerous first-year training positions at community-based hospital sites.

In 2012, there were four sponsoring institutions in Mississippi accredited by the Accreditation Council for Graduate Medical Education (ACGME). In 2022, that number is poised to more than triple with 13 operational sites and 2 more in development.

First-year residency training positions have also soared. In 2012, there were 14 first-year slots in the National Resident Matching Program Match outside of the University of Mississippi Medical Center. By 2022, that number will jump to 118. Programs will train physicians in family medicine, internal medicine, emergency medicine and psychiatry - all specialties recognized to be in short supply.

The need for more physicians in Mississippi is well documented by the AAMC. According to the 2020-2021 AAMC State Physician Workforce profile, Mississippi ranks 49th with 196.8 per 100,000 population active physicians. Mississippi also ranks 49th with 67.4 active primary care physicians per 100,000 population.

"Both these numbers are well below the United States' state medians but have improved from 50th in both categories since the development of the William Carey University College of Osteopathic Medicine and the increased medical school class size at the University of Mississippi Medical Center," said Mitchell. "That, coupled with the focused growth of GME training programs across the state, is making an impact."

Mississippi's Physician Workforce Needs a Youth Infusion

Mississippi, like much of America, has seen its baby boomer population increase significantly. Its physician population is following that trend at an alarming rate. Almost 36 percent of active physicians in the state are age 60 or older which gives Mississippi the distinction of having the 12th oldest physician

workforce in the U.S., up from 17th in 2012. "This only magnifies the need for an ongoing infusion of young dynamic physicians and the one metric that we don't want to be number one in," said Mitchell.

Mississippi's focus upon graduate medical education expansion across the state has centered generally around primary care or front line medical specialties. One such program is the creation of Gulfport's new Family Medicine Residency Program which opened its doors in 2021. Gretchen Holmes, PhD, DIO for Graduate Medical Education and Director of Clinical Research at Memorial Hospital at Gulfport, said that "this and other programs to come will help address the primary care physician shortages on the Mississippi Gulf Coast and help fulfill the increasing need for more high-quality physicians in the state."

"There are significant benefits to the community from having our residents working with underserved populations at multiple clinics to working with community-based organizations to promote the medical field. Additionally, anytime you add medical residents to a hospital they have fresh eyes and offer innovative solutions whether it is from a patient care standpoint or a quality or patient safety perspective," she said.

"Finally, we anticipate that some of our residents will stay on after they graduate residency which will help us grow our primary care providers on the Gulf Coast." The hospital is considering expanding its GME program by adding an internal medicine residency, a transitional year residency, and possibly fellowships in geriatrics and palliative care.

Mississippi medical schools are responding to projected data physician shortage by significantly increasing enrollment opportunities. According to a 2019-2020 AAMC report, both the University of Mississippi School of Medicine and William Carey University College of Osteopathic Medicine have increased admissions by 78 percent, which ranks sixth in percentage change nationally. By 2023, Mississippi medical school enrollment will approach 265 students annually between the two medical schools within the state.

Training and Retaining Mississippi Doctors

Although health care leaders welcome the growth spurt in medical school admissions, concerns remain that the number of GME positions in the state will be able to keep pace. Because medical school graduates must complete additional training in a residency program in order to practice medicine, medical school expansion, alone, will not ensure the state has enough doctors.

Increasing retention is critical, since investments in primary care and other specialty GME programs provide significant gains for residents, population health, and local economies. An AMA report shows that office-based physicians play a vital role in national and state economies by supporting jobs, purchasing goods, and generating tax revenue. Each Mississippi physician, on average, contributes a total of \$1.8 million in economic output. The total economic activity generated by physicians is \$8.2 billion.

AAMC data found that retention rates vary heavily by state. Mississippi is on the high end, retaining 77.7 percent of residents who remain in state to complete both medical school and residency training.

Dr. Sarah Grabmiller, Program Director for EC-HealthNet Family Medicine Residency Program in Meridian, sees a direct correlation between residency training and physician retention. "Since 2014, the program has graduated 28 residents - 15 of which have remained in Mississippi to practice medicine with six of them in our health system. Others remained in the Southeast area, and 21 of the 28 graduates now practice in rural locations."

"While Mississippi ranks 47-50 in most overall health rankings, with obesity, diabetes and other illnesses and diseases associated with sedentary lifestyles and diets, family medicine and primary care could help mitigate these conditions with increased access and education. This was the main goal when EC-HealthNet comprised the consortium of hospitals in East Central Mississippi and West Alabama," she said.

Mississippi Physician Workforce Expansion

Expanding residency training capacity will directly increase the number of doctors practicing in Mississippi – a primary goal of the Office of Mississippi Physician Workforce (OMPW). Established by the Mississippi State Legislature in 2012, OMPW identifies physician workforce needs and help find solutions for the shortage of practicing physicians and their distribution.

Working with potential sponsoring institutions across the state, OMPW leads feasibility studies for GME training programs by analyzing key factors such as community need, faculty and teaching resources, and patient volume to ensure that potential programs meet ACGME residency requirements.

The approach has proven successful. As of 2022, OMPW-assisted GME training sites at community based hospitals include family medicine, internal medicine, emergency medicine and psychiatry.

In July, 2021, the Mississippi State Hospital (MSH) launched its four-year psychiatry residency program – a pivotal step for a state that has just one psychiatrist for every 100,000 people. Ideally, there should be one psychiatrist for every 10,000 residents. The program will host six psychiatrist residents per year and is designed to ease Mississippi's chronic shortage of mental health specialists.

Attracting the Next Generation of Physicians to Rural Medicine

Physician shortages pose a real risk to patients – especially for those in underserved areas. The need for additional physicians is particularly critical in rural Mississippi, the site of the Mississippi Delta Family Medicine Residency Program, a community-based residency sponsored by the Mississippi Medical Education and Research Consortium (MSMERC).

The three-year program is the first to locate in the Mississippi Delta – one of the most underserved, poorest, and rural areas in the U.S. The residency is on track to graduate its first complement of seven family physicians by 2023.

Second year resident, Anthony Carter, MD, a graduate of the University of Mississippi School of Medicine, says he chose a rural residency program because "These are the places doctors are needed most. The patients, here, generally do not get adequate primary care; instead, they are seen in the emergency department when they are at their sickest," he said. "Our program bridges that gap and provides health maintenance and preventive care. I believe we are already having a significant impact on the community, and my hope is that we continue to grow and become the primary care resource for the region."

"GME expansion with programs like these and their locations will not only increase the number of residents in the state, overall, it will increase the number of doctors in rural areas of the state," said Mitchell. "This will reduce workforce shortages and increase access to care for all Mississippians. There are now GME training sites all over the state, so for anyone searching for a spot to further their medical education, please give Mississippi a strong look. And, if you do come from out of state or remain in state to obtain your GME training, we hope you consider making your career here. Mississippi needs you and will welcome you to the Mississippi family."

Visit the OMPW website at www.ompw.org for more information about Mississippi's physician workforce and GME residency opportunities.