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## How Academic Medicine Serves Rural Communities Across the Country

Rural communities, which are home to an estimated 62 million Americans,<sup>1</sup> face a unique set of challenges that often lead to poorer overall health outcomes.<sup>2</sup> Compared to urban areas, rural communities have fewer health care resources to treat higher incidences of diseases like diabetes and coronary heart disease,<sup>3</sup> barriers to transportation and access to care,<sup>4</sup> a greater number of low-income households,<sup>5</sup> and a higher prevalence of uninsured patients.<sup>6</sup>

For decades, health care providers and policymakers have remained concerned with rural health and health care, particularly with physician shortages, hospital closures, limited access to care, and the higher numbers of poorer, sicker individuals compared to urban areas, according to a forthcoming AAMC Research and Action Institute issue brief, *Rethinking Rural Health*.

Rural areas tend to struggle more with the recruitment and retention of physicians and other key health care workers. These workforce issues often result in gaps in care, particularly in specialties, forcing patients to travel farther distances to access care.

To address these challenges, AAMC-member institutions are finding creative solutions to help ensure that there are sufficient qualified physicians serving rural communities and that all patients have access to affordable, high-quality care when they need it. These solutions include:

- Partnering with rural teaching hospitals in developing Rural Track Programs (RTPs) to increase the number of physicians training in rural areas and improve rural health outcomes.
- Bringing mobile clinics to remote areas to serve more patients in need.
- Supporting student loan forgiveness programs to lessen students' financial burden while increasing the likelihood they practice in rural areas.

### Educating and Training Physicians in Rural Settings

Rural Track Programs are partnerships between urban teaching hospitals and rural participating sites where medical residents spend more than 50% of their training. Any residency program accredited by the Accreditation Council for Graduate Medical Education (ACGME) can take advantage of RTPs.

RTPs combine all of the missions of academic medicine, promoting valuable and unique residency training opportunities that integrate quality patient care, education, research, and community partnerships — all with the aim of increasing health equity and reducing disparities. RTPs capitalize on the strengths and capabilities of academic medical centers to help increase residency training positions at rural sites. Currently, many hospitals affiliated with RTPs nationwide are AAMC-member teaching hospitals and health systems, showcasing academic medicine's broad commitment to increasing training in rural settings.<sup>7</sup>

With projections estimating a shortage of up to 124,000 physicians by 2034 — a shortage that rural and historically underserved areas may experience more acutely<sup>8</sup> — now is the time for Congress to increase the number of available Medicare-supported medical residency positions so that teaching hospitals and health systems serving rural communities can continue to find innovative ways to increase access to care for patients.

The AAMC advocates for increasing the number of federally supported graduate medical education (GME) residency positions in rural and underserved areas to invest in physician training so that more people have access to health care when and where they need it.

### Serving Patients in Rural Areas

Teaching hospitals make up fewer than 30% of all hospitals but treat four of every five Medicare transfer patients.<sup>10</sup> This underscores academic medicine's unique role in caring for older, sicker patients — particularly critical given that other facilities may not be able to accommodate those patients due to the complex nature of their health conditions.

Patients who live in rural areas are more likely to visit teaching hospitals when they are the sickest and most in need of care. While AAMC-member teaching hospitals treat only 13% of rural Medicare patients, among those patients they perform<sup>11</sup>:

**82%** of inpatient transplant services.

**55%** of inpatient burn services.

**84%** of CAR-T therapy.

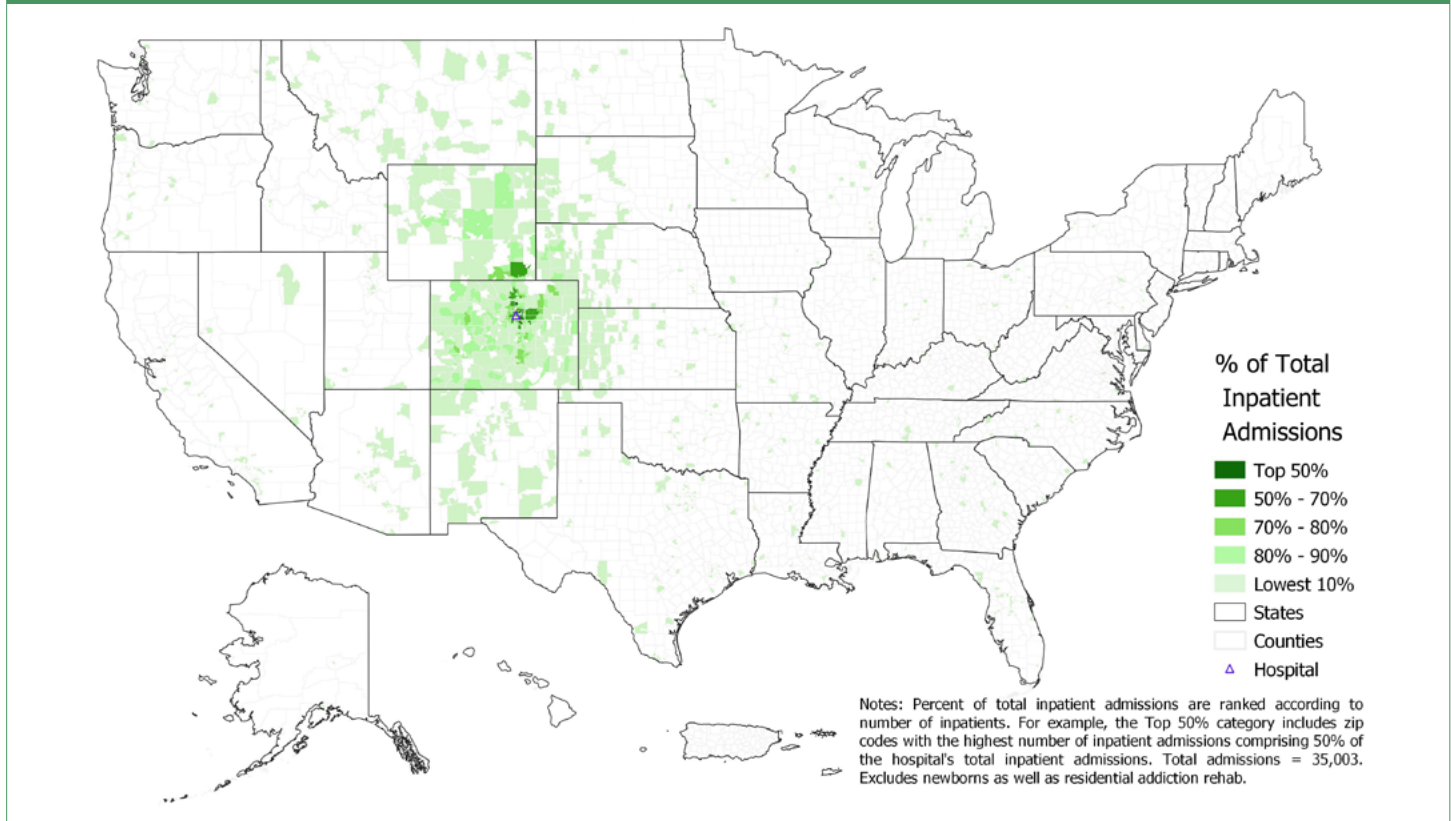
Rural-serving teaching hospitals and health systems have a profound reach, treating patients who come from multi-state regions to receive high-quality, cutting-edge care they are not able to get locally.

This catchment map for UHealth University of Colorado Hospital demonstrates the vast geography of patients admitted to AAMC-member teaching hospitals and health systems.

Physicians who grew up in rural geographic areas are more likely to practice in rural areas than their peers who grew up in urban or suburban areas or on military or government installations, even after controlling for a myriad of other factors,<sup>9</sup> underscoring the importance of recruiting and retaining rural students for medical school and medical residency.

Fifty-two AAMC-member medical schools have a combined 128 regional medical campuses (RMCs) across the United States. RMCs help medical schools carry out their missions to reach more patients. More than 30% of medical schools have at least one RMC, many of which allow medical schools to branch out into more remote geographical areas that may not have other means to serve patients in need.

**FIGURE 1.** UHealth University of Colorado Hospital inpatient admissions by zip code of patient residence (July 1, 2020-June 30, 2021).



Source: UHealth University of Colorado Hospital.

## AAMC-Member Institutions in Action

### **Bolstering the health care workforce through community engagement**

Half the population in North Dakota lives in non-metro areas, with 26% living in the rural frontier regions of the state. This is why the University of North Dakota (UND) School of Medicine and Health Sciences tailors programs to benefit rural residents. Its longstanding Rural Opportunities in Medical Education program offers students the chance to train in rural areas and work one-on-one with rural providers, embedding them in the community on the ground level.

Likewise, the school partners with the state of North Dakota on the RuralMed tuition forgiveness program, which sends physicians who graduated from UND to rural North Dakota communities after their residency in exchange for student loan forgiveness.

Finally, its Healthcare Workforce Initiative, a multi-phased approach designed to reduce disease burden, increase the health care workforce, and retain health professional graduates to practice in North Dakota, has successfully added a variety of rural-focused residencies and fellowships and increased medical student class size.

– **University of North Dakota School of Medicine and Health Sciences**

### **Collaborating with community partners to meet patients where they are**

The northern California region sees a diverse makeup of patients from rural communities across the state, from the central coast to the Oregon and Nevada borders. The UC Davis School of Medicine embraces its geography, recruiting students from rural communities in California and partnering with many community entities — from Indian health centers to prison systems to organizations working to alleviate food insecurity — that accept and support students in their learning journeys, encouraging them to meet patients where they are both geographically and in their health care journey.

Its partnerships with rural GME programs and health centers offer students highly specialized experiences, including spending 20 weeks of their third-year clerkships clinically immersed in rural communities. This provides medical students the opportunity to engage more deeply at the local level, exposing them to hands-on, integrated experiences they can apply to their professional careers.

– **UC Davis School of Medicine**

### **Using research to inform policymaking and improve health care systems**

Nearly three years ago, Dartmouth-Hitchcock Medical Center began focusing on rural health and embracing its identity as an institution distinguished for its efforts to improve health equity in rural populations. The Center for Advancing Rural Health Equity, launched in 2022, brings researchers, clinicians, students, and faculty together with rural communities to advance health for all. The Dartmouth Geisel School of Medicine Rural Health Scholars program helps medical students build the leadership and skills needed to provide care to rural, underserved populations.

A beacon of research, The Dartmouth Institute for Health Policy and Clinical Practice created its signature database, the Dartmouth Atlas Project, to use research and data to examine health problems and solutions, including those involving health disparities in rural areas. Using Medicare and Medicaid data to provide information and analysis about national, regional, and local markets, the Dartmouth Atlas Project documents variations in how medical resources are distributed and used in the United States.

– **Dartmouth Hitchcock Medical Center, The Dartmouth Institute**

### **Connecting mental health care with rural family medicine**

Family medicine providers are at the heart of care for rural patients. Witnessing the scarcity of people seeking medical care because they were first and foremost struggling with mental health issues led leaders at Texas Tech University Health Sciences Center to put a primary care practice in its local mental health clinic. Academic leaders at the institution say this development has helped break the stigma that surrounds mental health issues and allowed patients to have a safe space to seek help right in their community.

The medical school has expanded its educational opportunities to send students and residents to community organizations to develop the skills needed to excel in mental health and related specialty fields to ensure the state's health care workforce is prepared to meet the growing needs of its population.

– **Texas Tech University Health Sciences Center**

## AAMC-Member Institutions in Action

### Widening the pathway for rural physicians

To ensure the state develops a strong health care workforce that resembles its patients and understands their needs, the University of Mississippi Medical Center (UMMC) currently admits only individuals who are Mississippi residents and are most likely to practice medicine within the state. Approximately 50% of Mississippians live in rural areas, many from communities lacking basic resources and access to care. UMMC partners with the state through the Mississippi Rural Physicians Scholarship Program (MSRPSP) to increase the number of physicians in rural areas. The MSRPSP identifies and recruits rural college students who aspire to practice medicine. This state-funded rural physicians scholarship program offers young Mississippians shadowing opportunities, resources to study for and take the MCAT® exam, and financial support.

In addition, the school works with the state through the Office of Mississippi Physician Workforce on physician workforce issues to educate, sustain, and properly distribute the health care workforce throughout the state to best meet the needs of patients.

– University of Mississippi Medical Center

### Serving the community by bringing care to patients

Mercer University School of Medicine (MUSM) in Georgia was one of the first two institutions in the country to offer students an accelerated training track in rural medicine. With 50% of its student population coming from rural areas, and an admissions requirement that students be Georgians, the school remains devoted to growing the physician workforce to improve the health of state residents, particularly in underserved rural areas. Through federal state funding, Mercer allows students who enter the accelerated track to pay no tuition after the first year and go directly into a residency in pediatrics, family medicine, or internal medicine. After residency, those students are required to live and work in a rural, underserved part of the state.

The school also offers full scholarships for rural practice through the Nathan Deal Scholar program and the Children's Healthcare of Atlanta Pediatric Scholars. All students at Mercer spend time in rural underserved communities. Mercer hopes to continue opening affiliate clinics in the most remote, impoverished parts of Georgia — areas that have trouble attracting clinicians to help the state's poorest, and often sickest, patients. Now at seven Mercer Medicine clinics, MUSM plans to open up to 30 clinics in the most underserved areas of the state.

– Mercer University School of Medicine

The AAMC (Association for American Medical Colleges) is a nonprofit association dedicated to improving the health of people everywhere through medical education, health care, medical research, and community collaborations. The AAMC represents all 157 U.S. medical schools and about 400 teaching hospitals and health systems, among other institutions and organizations.

### Notes

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11. Source: AAMC analysis of 100% Medicare inpatient Standard Analytic Files claims data, 2021. Rural is defined as residing in a county outside a Census-defined Core-Based Statistical Area.