



From Rural Student to Rural Provider: A Perspective Piece on Curbing Rural Health Professional Shortage in West Texas

Carina Goodart MS4, Adrian Billings MD PhD FAAFP

Abstract

Most of West Texas is considered to be a health professional shortage area (HPSA), including the Permian Basin and Big Bend regions, and this shortage is expected to worsen in the years to come. In an effort to address the future rural healthcare workforce in these West Texas rural communities and through a collaboration of multiple institutions in the Permian Basin and Big Bend regions, a rural-focused healthcare career camp was established for high school students of rural communities in these regions. In addition to recruiting rural high school students from these West Texas towns to participate as campers, college and graduate students of healthcare professions were also invited to participate as camp counselors, providing mentorship and exposure to the high schoolers of various healthcare career pathways. I (author CG), a current fourth year medical student, served at the camp as a camp counselor. In this perspective piece, I discuss the benefit I experienced participating in this camp and how I believe it has the potential to curb the health professional shortage in these regions in the future.

Keywords: rural, health professional shortage, healthcare, disparity

Introduction

Rural areas have less healthcare workforce than non-rural areas, and rural health disparities and outcomes are generally poorer compared to urban health outcomes.¹ Most of West Texas is considered to be a health professional shortage area (HPSA), including the Permian Basin and Big Bend regions.² Furthermore, the shortages in rural healthcare are expected to worsen in the years to come.³ Multiple solutions have been proposed and implemented to improve access to healthcare for rural residents in HPSAs, but one of the largest challenges remains recruiting healthcare providers to live in rural settings. Even though 1 in 5 Americans lives in a rural area, only an estimated 10% of physicians practice medicine

in these settings.¹ Multiple studies have shown that being from a rural area is a significant predictor of a future rural practice for medical students. Alarming in 2017, less than 5% of medical students were from rural communities and the number of medical students with rural backgrounds has been declining for the past 2 decades at medical schools in the United States.⁴ As such, medical students with rural backgrounds are an underrepresented population in US medical schools. With this in mind, the idea for the 2024 Rural Health Careers Camp was born.

Description

The 2024 Rural Health Careers Camp was created by a collaboration among the Division of Rural and Community Engagement

at Texas Tech University Health Sciences Center (TTUHSC) Permian Basin, Permian Basin Area Health Education Center (AHEC), Sul Ross State University (SRSU), the University of Texas Permian Basin (UTPB), Midland College, and Odessa College. The camp was hosted at rural SRSU in Alpine, Texas, from June 5, 2024 to June 7, 2024 in order for the camp to be geographically located in a rural area and closer in proximity to many rural, small high schools without access to health care training programs at the high school level. High school students of West Texas rural communities were invited to participate as campers with the goal of encouraging them to pursue healthcare careers and serve their hometowns in the future. The high schoolers were recruited directly from high schools of small towns in the Permian Basin and Big Bend region, areas known to be under resourced and underserved (Figure 1). Nineteen high school students participated in the free three-day residential overnight camp from ten different rural towns. The students had a predisposed interest in a healthcare career, but most of them had little to no prior exposure to the professions of doctors, physician assistants, nurses, physical therapists, social workers, and others because their towns had limited to no healthcare facilities.

- Sonora
- Sanderson
- Marathon
- Alpine
- Terlingua
- Presidio
- Andrews
- Fort Stockton
- Monahans
- Stanton

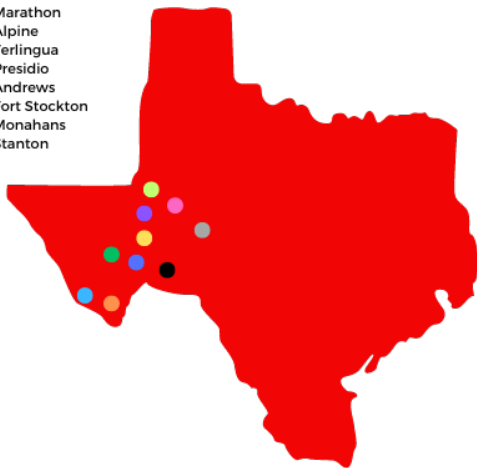


Figure 1. Rural high school students from ten West Texas towns participated in the 2024 Rural Health Careers Camp, including Sonora, Sanderson, Marathon, Alpine, Terlingua, Presidio, Andrews, Fort Stockton, Monahans, and Stanton.

During the camp, the campers attended sessions led by guest rural healthcare speakers and staff/faculty from various higher education institutions from west Texas. Throughout these sessions, the student campers learned about healthcare professions that required terminal degrees such as physicians and physical therapists, as well as those that did not like sonographers, medical assistants, nurses, and more. The student campers were exposed to a wide variety of healthcare occupations ranging from those requiring an associates degree to the terminal degree. Different pathways to obtaining these degrees were shared. Many campers stated that they did not know a particular career or job in the medical field existed previously. In addition to hearing from institution staff and faculty about their healthcare related programs, the students also heard from a panel of multidisciplinary rural-practicing providers, who shared their journey of obtaining education in a non-rural area and

Discussion

As part of my role, I mentored a group of five high schoolers. One student aspired to be an orthopedic surgeon, another a nurse, another an occupational therapist, and the other two were not sure which health profession they should pursue. The student who wanted to be an orthopedic surgeon had spent ample time Googling the pathway to becoming one, but she had never interacted with someone at the end of the journey, let alone in the middle of it. While I do not want to pursue an orthopedic surgery residency, I am one year away from graduating medical school and that provided exceptional value to this student. We talked for hours about my experience in high school, college, medical school, and the steps to come in my journey I still have yet to complete. I talked to her about the importance of shadowing, doing community service, and choosing the right extracurriculars to dedicate her time to all while maintaining good grades to be a competitive and well-rounded future applicant to medical school. This student might have been able to learn about these things from the internet, but there was something special about getting to talk directly to me about it.

Aside from mentoring my assigned group of campers, I also served as a guest speaker and shared my journey to medical school with the entirety of the attendees including all campers, camp counselors, and staff. I gained acceptance to medical school through a distinct Undergraduate to Medical School Initiative (UMSI) program at TTUHSC, securing me a future spot in the School of Medicine as a high school student and the ability to bypass taking the Medical College Admissions Test (MCAT) upon successful completion of my Bachelor's degree. This was especially helpful for the entirety of the campers to hear about because it is a pathway that some of them might be interested in applying to as soon as this coming fall. When I was in these students' shoes, I would have loved to spend three days getting to know a medical student and hearing about their experience. I am thankful that I got to fulfill that role for students at this camp.

To my astonishment, the campers were not the only ones who benefited from this camp nor were they the only ones who were encouraged to pursue a career in a rural area. By attending the same sessions as the campers, we as the camp counselors heard about the experiences of providers practicing in rural areas and the perks of doing so. I was surprised to hear from physicians who worked in Alpine, Texas, feeling fulfilled and content with their careers there, despite having less resources to care for their patients when compared to urban physicians. Additionally, as I became more acquainted with the campers, I gained more insight into the typical life of a rural resident. The more I heard, the more I thought to myself that maybe it would not be as hard to live and work in a rural area as I expected.

Conclusions

Six different higher education institutions collaborated to create an interprofessional, educational, mentoring and networking experience for rural high school students, who have less access to resources and

opportunities than their urban student counterparts. The 2024 Rural Health Careers Camp was intentionally designed for rural students interested in health care careers, giving these students information they may not have ever had otherwise. The camp opened the door for these students to connect with rural clinicians who were once in their shoes and who can offer support to them as they pursue similar paths. The camp stressed the importance of serving their own hometowns in the future as solutions to their hometown's rural health care access issues. It allowed them to communicate directly with representatives from healthcare programs at Midland College, Odessa College, SRSU, UTPB, and TTUHSC about what steps they need to take to gain entry into the programs of their choice. It enabled them to be mentored by college and graduate students who are just a few steps ahead of them in the journey. Moreover, it inspired individuals with no previous rural experience to consider practicing in one! Paradoxically, the camp counselors benefited from networking with rural healthcare providers and from observing small town life for three days up close, an experience not many other urban health profession students can say they have had. The camp staff are already planning to have the camp again next year with the hopes of recruiting even more rural West Texas high schoolers to participate. While seemingly distant in the future, it will be interesting to see how the health professional shortage in West Texas is impacted by the investment made at this camp and the ones to come.

References

1. Arredondo K, Touchett HN, Khan S, Vincenti M, Watts BV. Current Programs and Incentives to Overcome Rural Physician Shortages in the United States: A Narrative Review. *J Gen Intern Med.* 2023;38(Suppl 3):916-922. doi:10.1007/s11606-023-08122-6
2. Rural Health Information Hub. Health Professional Shortage Areas: Primary Care, by County, April 2024 – Texas. <https://www.ruralhealthinfo.org/charts/5?state=T> X. Accessed July 4, 2024.

3. Sandhu VK, Jose DM, Feldman CH. Underserved Communities: Enhancing Care with Graduate Medical Education. *Rheum Dis Clin North Am.* 2020;46(1):167-178. doi: 10.1016/j.rdc.2019.09.009

4. Shipman SA, Wendling A, Jones KC, Kovar-Grough I, Orloski JM, Philips J. The Decline In Rural Medical Students: A Growing Gap in Geopgraphic Diversity Threatens The Rural Physician Workforce. *Health Aff (Milwood).* 2019;38(12):2011-2018. Doi: 10.1377/hlthaff.2019.00924