# PANHANDIJE HIBAHHII

A QUARTERLY PUBLICATION OF THE POTTER-RANDALL COUNTY MEDICAL SOCIETY

FALL 2025 | VOL 35 | NO.4



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\*\*Wait times may vary. Physicians are independent practitioners who are not employees or agents of Northwest Texas Healthcare System. The System shall not be liable for actions or treatments provided by physicians. For language assistance, disability accommodations and the nondiscrimination notice, visit our website. 252923864-2953022 8/25

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# **Executive Director's Message**

by Katt Massey, Executive Director, Potter-Randall County Medical Society

Out here in the Texas Panhandle—where the skies are wide, the wind is stubborn, and the people even more so—healthcare doesn't always come easy. But it does come with grit, determination, and a whole lot of Panhandle Spirit.

And at the center of it all is Amarillo.

As the medical hub of the region, Amarillo is where folks from every corner of the Panhandle turn when the stakes are high. It's where babies are delivered, specialists are found, and second opinions become lifelines. For many surrounding communities, Amarillo isn't just the closest option—it's the only option for miles.

But even Amarillo, with its hospitals and hardworking providers, can't carry the full weight of rural healthcare on its own. From Stratford to Silverton, towns are stretching themselves to provide care with limited resources, rotating providers, and, in some cases, no full-time physician at all. And yet, the clinics stay open. The nurses keep showing up. Communities continue to do more with less—not because it's easy, but because that's the Panhandle Spirit in action.

Still, grit alone isn't enough.

To truly care for our region, we need more than short-term solutions. We need real investment in recruiting and retaining physicians—not just in Amarillo, but in the small towns that depend on it. That means building strong rural training programs, offering real incentives to stay, and giving providers a reason to build not just careers, but lives here.

Because the Panhandle isn't just a patch of geography—it's a network of towns held together by long highways, strong values, and deep-rooted

community pride. And while Amarillo may be the hub, the strength of this region lies in all its spokes.

The healthcare challenges are real—but so is our resolve. With a little help and a lot of heart, we can make sure every person in the Panhandle—no matter their zip code—has access to the care they deserve.

That's the power of Panhandle Spirit. Now we just need a few more white coats to match it.



# PANHANDLEHEAUTH

#### A PUBLICATION OF THE POTTER-RANDALL COUNTY MEDICAL SOCIETY

Editorial Policy and Information for Authors

Purpose: Panhandle Health strives to promote the health and welfare of the residents of Amarillo and The Texas Panhandle through the publication of practical informative papers on topics of general interest to most physicians while maintaining editorial integrity and newsworthiness.

Spectrum: The Journal seeks a wide range of review articles and original observations addressing clinical and non-clinical, social and public health, aspects as they relate to the advancement of the state of health in the Texas Panhandle. Pertinent letters to the editor, new submissions, and obituaries are accepted pending editorial review. The Editorial Board accepts or rejects submissions based on merit, appropriateness, and space availability.

Submission Process: Material should be emailed to katt.massey@prcms.com or mailed to katt Massey,1721 Hagy Blvd. Amarillo, Texas 79106. A recent photograph of the author (optional) and a curriculum vitae or biographical summary are also to be submitted.

Conflict of Interest: Authors must disclose any conflict of interest that may exist in relation to their submissions.

Journal Articles: Manuscripts should be double-spaced with ample margins. Fext should be narrative with complete sentences and logical subheadings. The word count is generally 1200 to 1500 words. Review articles and origina contributions should be accompanied by and abstract of no more that 150 words.

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Our Next Issue Of Panhandle Health Features: Ringing in the new year! What's new in healthcare.

Π-



# **President's Message**

by Tetyana Vasylyeva, MD, PhD, FAAP Professor, Department of Pediatrics, TTUHSC Amarillo

ne of the primary aspects of PRCMS's mission and our work is to improve healthcare delivery to rural residents. Through our practice, we recognize that rural populations often face significant disparities in access to healthcare compared to urban communities. Rural areas frequently encounter shortages of healthcare providers, hospitals, and specialized services; these shortages lead to limited access to essential care, particularly for disease prevention and reducing preventable deaths.

Strengthening rural health systems can improve emergency response times and allow for more consistent preventive care, such as vaccinations, screenings, and prenatal care. Rural populations tend to have higher rates of chronic conditions such as diabetes, heart disease, and obesity. Enhanced healthcare access and education can aid in managing and preventing these illnesses. Rural communities often have a larger elderly population that requires more medical attention. Enhancing healthcare in these regions ensures that older adults receive the support they need locally.

Mental health services are often lacking in rural areas, resulting in higher rates of untreated mental illness and suicide. Therefore, addressing mental health needs is crucial for comprehensive rural healthcare improvement.

Enhancing the health of rural residents can positively impact the local economy. Healthier communities lead to increased productivity and lower healthcare costs, fostering economic stability and sustainability. A healthier rural population contributes to the strength and resilience of its communities. Our collective efforts in health improvement can strengthen social bonds and build more equitable and resilient societies.

Telehealth development presents a promising solution to some of these challenges. It enables local healthcare providers to deliver quality services at lower costs through e-visits and virtual consultations, which help overcome the barriers of distance and provider shortages in rural areas.

Expanding mobile clinics, which deliver preventive care, screenings, and basic medical services to remote areas, is another avenue for improving healthcare quality for rural patients. Opening satellite clinics, which are smaller branches of urban hospitals situated in rural towns, can also ensure consistent care. Improving public and patient transportation systems for medical appointments is another vital step in infrastructure development.

Additionally, we aim to strengthen the rural health workforce. PRCMS is focused on developing scholarships for students and residents interested in pursuing careers in the rural areas of the Texas Panhandle.

PRCMS collaborates closely with Harrington Regional Medical Center Campus in Amarillo, whose mission is to enhance the quality of life for residents in the top 26 counties of the Texas Panhandle.

Addressing rural health, we build accessible, sustainable, and community-centered systems, ensuring that people can live healthy and dignified lives regardless of where they reside.



About the Cover Art

This photo was taken at a ranch north of the Canadian river. The photographer felt it expressed the "vastness of rural" in the panhandle. As far as the eye can see.

Photo by Katt Massey



# Message from the Potter-Randall **County Medical Alliance**

by Alena Martin & Madeline Lennard, Co-Presidents



Cummer was fast and furious. We • hosted a pop-up happy hour as well as a family BBQ and potluck. Children's laughter echoed down Hughes Street as the kids played on a huge blow-up slip and slide. Families and friends enjoyed the shade and great conversation. Everyone, young and old, devoured a delicious offering of meats and sides. It's safe to say, no one left hungry.

Alliance members gathered in August to learn the ins and outs of American Mah Jongg led by Emily Hall of OK Let's Mahjong. More than a few ladies became hooked on this popular game. We all had a wonderful time and are in the process of organizing a few drop-in mahjong nights.

Be on the lookout for those dates soon.

We lucked out with a gorgeous September evening for our Fall Couples Social. Twenty-eight members enjoyed a four-course plated meal prepared by our co-Presidents. Additionally, we raised \$350 and collected a tableful of hygiene items to help stock Palo Duro High School's health room.

With shorter days and cooler temperatures comes the time for Alliance membership renewal. Renewal emails and letters will be in your mailboxes shortly. Utilize the QR code to renew your membership online with TMAA and be sure to register for auto-renewal. Please note, Alliance membership is separate and no longer included in TMA or medical society membership. If you need to check your membership status, we are glad to

Lastly, save the date for December 13th and join us at the NorthSide Toy Drive. Help us fit bicycle helmets and bring Christmas magic to area children in need. You do not want to miss the joy radiating in the Palo Duro High School gym that afternoon.



















# **Redrawing the Map: Building Rural Health Infrastructure in West Texas**

by Coleman Johnson, JD; Amber C. Parker, BA; Grace A. Fosu, MA, MS; Diana Vargas-Gutierrez, PhD; Julie Wright, MSN, RN; Sarah Looten, MPA From the F. Marie Hall Institute for Rural and Community Health, TTUHSC

#### A LINE MISDRAWN, A FUTURE **REIMAGINED**

In 1859, John H. Clark set out with compass and chronometer to mark the 103rd meridian, the border between Texas and New Mexico. But, by the time he completed his 310-mile survey, Clark's line lay significantly westward, bringing towns like Texline, Farwell, and Bronco, along with approximately 942 square miles, into Texas, a boundary error that Congress solidified in 1911 (1). What began as a slight shift became a defining feature of the region, a reminder that even small changes, once set in motion, can reshape landscapes and leave lasting effects.

Today, those ripple effects echo most poignantly in rural healthcare. In Texas, 71% (181) of the counties have a population of 50,000 or less (rural) and are home to approximately 16% of the state's residents (2). These rural counties often rank in the bottom quartiles for clinical care and life expectancy (3). In West Texas, access to care remains a significant challenge. Some rural counties have no primary care physicians at all, while others may have patient:physician ratios exceeding 6,000:1. By contrast, urban counties in Texas typically have fewer than 1,500 residents per primary care provider (4). Telehealth has helped bridge the gap: by 2023, more than 75% of Texas physicians used telemedicine for at least part of their practice, and Medicaid telehealth claims increased more than 500% from 2019 to 2021 (5).

Seeking to chart a new course, TTUHSC launched the Division of Rural Affairs (Rural Affairs) in January 2024, housing both the F. Marie Hall Institute for Rural and Community Health (FMHIRCH) and the Institute for Telehealth and Digital Innovation (ITDI) (6). This is not an accidental overlap but a deliberate alignment, combining community roots with digital innovation to re-draw healthcare access across rural West Texas.

### THE CLARK LINE AND BORDER

Although few Texans may remember it from seventh-grade Social Studies, the Clark Line marks one of the most inaccurate land surveys in U.S. history. It's the contested border between the Texas Panhandle and New Mexico.

When New Mexico was preparing for statehood in 1911, its leaders quietly included a provision in their enabling act to recognize the true 103rd meridian as the state line. But John Farwell, a key investor in the XIT Ranch and namesake of the town of Farwell, caught wind of the plan (7). Worried the ranch would lose valuable land, Farwell reached out to his Yale classmate, President William Howard Taft. In response, Taft issued a joint resolution affirming the Clark Line as the legal boundary.

Even after Taft's 1911 intervention. the dispute resurfaced. In 2003, Texas Land Commissioner Jerry Patterson challenged his New Mexico counterpart to a duel, antique pistols and all (8). Though the duel never happened, the episode reflected the lasting tension and historical irony surrounding the Clark Line.

But beyond political lines and historical quirks, the real impact of the Clark Line is felt by the people who live there. On both sides of this dusty boundary, rural communities struggle with limited



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healthcare access. Many residents travel hours to see a mental health provider or specialist, if they can find one at all.

This geography doesn't just shape the land. It shapes lives. For TTUHSC's Division of Rural Affairs, the Clark Line isn't just a curiosity; it's a call to action. No matter which geopolitical designation they may find themselves in, individuals in rural regions deserve healthcare that's local, accessible, and built for them.

# RURAL HEALTH LANDSCAPE & NEED IN WEST TEXAS

The challenging reality of health disparities is acutely felt in rural West Texas, where vast distances and limited resources create healthcare deserts. Texas plays a major role in the nation's agriculture and energy sectors, of which West Texas is a primary source, delivering 21% of Texas' beef cattle, 79% of its oil, and 56% of its cotton (9,10). As such, rural health in this region is not only a local issue, but a state and national concern. More than 80% of the Panhandle's counties are designated as rural, where access to mental health care, preventative services, and specialty treatment remains significantly limited (11).

When compared to state and national averages, the region's disproportionately high rates of chronic diseases underscore the deep connection between healthcare access and public health outcomes. In 2022, the prevalence of coronary heart disease in the region was estimated at 6.9%, exceeding the state's average of 4.4%, and the cancer rate was 495.8 per 100,000 people, compared to state and national rates of 450.5 and 464.4, respectively (12,13,14,15). Adult obesity was reported at 38.6%, which is above the state and national rates of 35.7% and 33.5% respectively, while the population diagnosed with diabetes was estimated at 13.2%, as compared to the national average of 10% (16).

These chronic disease burdens contribute to the region's higher overall mortality rate (995.3 per 100,000) when compared

to the state (751.1 per 100,000) and the U.S. (922.9 per 100,000), with most of the Panhandle having no or few health care providers to address their needs (17). The ratios of population to primary care physicians, mental health providers, and dentists (1707:1, 712:1, 2991:1) are noticeably higher than the state's ratios (1265:1, 590:1, 2025:1) (16,18).

These regional disparities are further compounded by demographic and socioeconomic challenges: a higher uninsured population (19.4%) and higher poverty rate (14%) (16,19). Moreover, about 18% of the Panhandle's population is aged 65 or older (16).

The FMHIRCH and the ITDI are working to address the critical health needs of rural West Texas through applied research, workforce training, and community outreach. The Panhandle's communities are essential to the nation's agriculture, energy, and fiber production. By expanding access to care, building local capacity, and delivering sustainable solutions, Rural Affairs aims to strengthen the health and resilience of those who help fuel our economy.

# INSTITUTIONAL INFRASTRUCTURE

The creation of Rural Affairs reflects a bold, forward-looking vision: to integrate people, technology, and place to reduce rural health disparities and expand access to care across West Texas and beyond.

In furtherance of TTUHSC's commitment to rural communities, the Office of Rural and Community Health was established in 1997. In 2006, F. Marie Hall endowed the office, transforming it into the FMHIRCH. Since then, it has played a vital role in promoting innovation in rural health across Texas. Over nearly two decades, FMHIRCH has led statewide pilot programs, supported multidisciplinary research, and forged strategic partnerships, garnering significant state and federal funding. With a strong focus on workforce development, FMHIRCH

trains future healthcare professionals and pioneers initiatives in telemedicine, emergency communications, and simulation-based training to meet rural health needs.

To meet the growing demand for virtual care, TTUHSC established ITDI in 2023 with support from the Texas Legislature. ITDI strengthens TTUHSC's digital infrastructure and clinical partnerships, ensuring that the university remains at the forefront of virtual health innovation.

Today, Rural Affairs brings these efforts under a coordinated platform. More than a reorganization, it represents a transformative model, advancing scalable, tech-enabled, community-based care that meets the evolving health needs of rural Texans.

# COMMUNITY DEVELOPMENT & PROGRAMS

FMHIRCH plays a vital role in strengthening rural communities through programs that build infrastructure, grow the healthcare workforce, and ensure that care is accessible at the community level. The West Texas Area Health Education Center (WTAHEC), led by FMHIRCH, spans six regions and engages students through programs like AHEC Scholars, Junior Scholars, community health worker training, and its H.O.T. Jobs publication. This rural pipeline equips the next generation of providers with the tools and experiences needed to serve where they are most needed.

ITDI complements this work by deploying technology-driven, community-based solutions that eliminate barriers to care. Through Campus Health Connect, ITDI is supporting a project to bring primary care into K-12 schools in the Permian Basin using telehealth. In Abilene, the Access to Breast Health for Texans program is providing thousands of women with free screenings using innovative technology in rural and underserved communities.

Mental health is another priority. In partnership with the TTUHSC Office of Strategic Initiatives, ITDI is supporting the launch of a telepsychiatry program in Texas Organization of Rural & Community Hospitals (TORCH)affiliated rural hospitals to expand behavioral health access. In Lubbock, digital tools developed with Texas Tech Physicians are advancing remote monitoring and improving care coordination. Additionally, a non-medical intervention study is underway in Crane to assess the community's healthcare needs and to develop digital tool strategies to address them.

Statewide, programs like the TexLa Telehealth Resource Center and the NextGen 911 Project support rural clinics and EMS providers in adopting modern, digital care models. Together, FMHIRCH and ITDI are building a stronger, more connected rural health ecosystem--one that centers innovation, access, and lasting community partnerships.

#### DRAWING THE FUTURE WITH **PURPOSE**

Like a boundary line drawn with purpose, TTUHSC's Division of Rural Affairs is forging a new path by embracing future possibilities. By combining the FMHIRCH's community roots with ITDI's digital promise, Rural Affairs is building networks of care that stretch across hundreds of miles. This is not merely an institutional realignment; it represents a generational investment. Rural Affairs is implementing initiatives focused on improving access for rural Texans to screenings, mental health services, and telehealth care, driven by purposeful collaboration rather than chance. The future of rural health is expansive and now within reach.

#### REFERENCES

1. HallHall. A Surveying Error Added 1,000 Square Miles to Texas. HallHall Resources. 2019 Nov 18. Available from: https:// hallhall.com/resources/a-surveying-error $added \hbox{-} 1000 \hbox{-} square \hbox{-} miles \hbox{-} to \hbox{-} texas/.$ 

- 2. Texas Demographic Center. Demographic characteristics and trends: Texas and selected counties. Presented to: Texas Rural Funders; 2024 Jun 18; Austin, TX. Available from: https://www. demographics.texas.gov/Resources/ TDC/Presentations/69d6550d-33df-416c-b49a-411eb95dc9fd/20240618\_ TexasRuralFunders.pdf.
- 3.. Reid S, Beck C, Basu A, Langabeer JR, Wang H. Health differences between rural and non-rural Texas counties: a 2023 county health rankings analysis. BMC Health Serv Res. 2024;24:12109. doi:10.1186/s12913-024-12109-2.
- 4 Texas Department of State Health Services. Health profession fact sheets: Texas Health Data dashboard. Texas Health Data. 2024 Nov. Available from: https://healthdata. dshs.texas.gov/dashboard/health-careworkforce/hprc/health-profession-factsheets.
- 5. Texas Medical Association. Expand access to care with telemedicine payment parity. Tex Med. 2024 Dec. Available from: https://www.texmed.org/Template. aspx?id=65146&utm.
- 6. "New Division Unites Our Work in Rural Health." TTUHSC Pulse. Summer 2024. Available from: https://pulse.ttuhsc.edu/ issue/summer-2024/new-division-unitesour-work-in-rural-health/.
- 7. Strong WF. How a bad survey and powerful connections added 1,000 square miles to Texas' lands. Texas Standard. 2018 Apr 4; Available from: https://www.texasstandard. org/stories/how-a-bad-survey-andpowerful-connections-added-1000square-miles-to-texas-lands/.
- 8. Patterson JE. Land Commissioners to settle dispute with an old-fashioned duel. Midland Reporter-Telegram. 2003 Mar 14. Available from: https://www.mrt.com/ news/article/Land-Commissioners-tosettle-dispute-with-an-7836490.php.

- 9. Oil & Gas Production Data Query [Internet]. [place unknown]: Railroad Commission of Texas. 1993 -. [cited 2025 Jul 21]. Available from: https:// www.rrc.texas.gov/resource-center/datavisualization/oil-gas-data-visualization/ oil-and-gas-production/.
- 10. Hundl W. 2024 Texas Agricultural Statistics [Internet]. Austin, Texas: U.S Department of Agriculture National Agriculture Statistics Services; October 2024 [cited 2025 Jul 15]. Available from: https://www. nass.usda.gov/Statistics\_by\_State/Texas/ Publications/Annual\_Statistical\_Bulletin/ tx-bulletin-2024-web-updated.pdf
- 11. Economic Research Service. 2023 Rural-Urban Continuum Codes [Internet]. Washington (DC): United States Department of Agriculture, Economic Research Service; [Updated 2024 Jan 22; cited 2025 Jul 16]. Available from: https:// www.ers.usda.gov/data-products/ruralurban-continuum-codes/.
- 12. National Cancer Institute. SEER Cancer Statistics Explorer [Internet]. Bethesda (MD): National Institutes of Health, National Cancer Institute; 1975-2022 [cited 2025 Jul 21]. Available from: https://seer.cancer.gov/statistics-network/ explorer/.
- 13. Texas Department of State Health Services. Texas Cancer Registry [Internet]. Austin (TX): Texas Department of State Health Services; 2018-2022 [cited 2025 Jul 17]. Available from: https://www.dshs.texas. gov/texas-cancer-registry.
- 14. Centers for Disease Control and Prevention. BRFSS Prevalence & Trends Data [Internet]. Atlanta (GA): Centers for Disease Control and Prevention; 2023 Oct 3 [Reviewed 2023 Jul 19; cited 2025 Jul 21]. Available from: https://www.cdc.gov/brfss/ brfssprevalence/index.html.
- 15. Centers for Disease Control and Prevention. PLACES: Local Data for Better Health, Place Data 2024 Release [Internet]. Atlanta (GA): Centers for Disease Control and Prevention; [Updated 2024 Aug 23;

- cited 2025 Jul 17]. Available from: https://www.cdc.gov/places/.
- 16. 2025 County Health Release National Data [Internet]. [place unknown]: County Health Rankings & Roadmaps; [cited 2025 Jul 15]. Available from: https:// www.countyhealthrankings.org/healthdata/methodology-and-sources/datadocumentation.
- 17. Centers for Disease Control and Prevention. National Center for Health Statistics Mortality Data on CDC WONDER [Internet]. Atlanta (GA): Centers for Disease Control and Prevention; 2018-2023 [Reviewed 2025 Jul 15; cited 2025 Jul 21]. Available from: https://wonder.cdc.gov/deaths-by-underlying-cause.html.
- 18. Texas Health Data Health Profession Supply [Internet]. [place unknown]: Texas Department of State Health Services; [updated 2024 Nov; cited 2025 Jul 15]. Available from: https://healthdata. dshs.texas.gov/dashboard/health-care-workforce/hprc/health-profession-supply.
- Health Resources and Services
   Administration. Data Downloads, Area
   Health Resource Files [Internet]. Rockville
   (MD): Health Resources and Services
   Administration; 2018- [cited 2025 Jul 21].
   Available from: https://data.hrsa.gov/data/download.

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# The Lifeline of Texas: Preserving and Strengthening Rural Hospitals Amid Mounting Challenges

by Jeff R. Turner Chief, Executive Officer, Moore County Hospital District

cross the vast landscape of Texas, rural hospitals serve as the lifeline for millions of Texans. These institutions provide essential healthcare services in communities that often lack access to specialty care, comprehensive clinics, or emergency facilities within a reasonable distance. Despite their essential role, rural hospitals in Texas face a daunting and growing list of challenges that threaten their survival and, by extension, the well-being of the communities they serve.

As the CEO for Moore County Hospital District in Dumas, Texas for the past seventeen years, I have seen firsthand the struggle rural hospitals face to keep the doors open and our services accessible, especially in the face of fluctuating revenues, regulatory complexities, workforce shortages, and rapidly shifting payer dynamics. Yet, I remain convinced that a strong rural healthcare infrastructure is not only achievable, but also essential to the health and prosperity of Texas.

#### WHAT IS A CRITICAL ACCESS **HOSPITAL?**

At the heart of many rural healthcare systems is the Critical Access Hospital (CAH) designation, a federal classification created in 1997 under the Balanced Budget Act. The CAH program was designed to reduce the financial vulnerability of rural hospitals and improve access to healthcare by keeping essential services in rural communities.

#### To qualify as a Critical Access Hospital, a facility must:

- Be in a rural area or an area treated as rural.
- Provide 24/7 emergency care services.
- Maintain no more than 25 inpatient beds.

- Maintain an average annual length of stay of 96 hours or less for acute care patients.
- Be located more than 35 miles from another hospital (or 15 miles in mountainous terrain or areas with only secondary roads).

In Texas, many rural hospitals rely on CAH status to remain operational. The reimbursement model—cost-based rather than fixed payments from traditional Medicare—helps offset disadvantages rural facilities face due to low patient volume. Still, this alone is no longer enough.

#### MAJOR CHALLENGES FACING **RURAL TEXAS HOSPITALS**

#### 1. Revenue Instability and the Rise of Medicare Advantage

Medicare Advantage (MA) plans are increasingly popular with Medicare beneficiaries, but they pose serious financial challenges to rural hospitals. Unlike traditional Medicare, which reimburses Critical Access Hospitals at 99% of allowable costs (it was 101% before the 2% federal sequestration cuts), MA plans negotiate their own rates, typically at levels below a hospital's actual costs. MA plans often introduce administrative burdens, narrow networks, and delayed or denied claims, creating further strain on a rural hospital's financial stability. Further, MA plans are treated as private insurers, despite covering Medicare beneficiaries. As a private insurer, MA plans and their costs are not settled at the end of the hospital's fiscal year, resulting in significant losses for the hospital relative to traditional Medicare.

From a patient's perspective, MA services advertised on television and by marketers in urban markets are frequently not available in rural areas. Likewise,

patients do not understand that MA plans limit helpful benefits, such as swing bed services, that are covered by traditional Medicare. When the patient realizes this reality, it is too late.

#### 2. Complexity of Non-Operating **Revenue Streams**

While many rural hospitals depend on patient services, an increasing portion of revenue now comes from non-operating sources, such as:

- Disproportionate Share Hospital (DSH) payments
- Uncompensated Care funds
- Hospital District tax levies
- State or federal grants

These programs, though essential, are notoriously difficult to navigate. They often require advanced compliance reporting, ever-changing eligibility requirements, and lengthy delays in disbursement. For smaller hospitals with limited administrative staff, managing these programs can feel like an entire job unto itself.

Additionally, fluctuations in political support and budget allocations mean these funding sources are never guaranteed - there have been partial and full recoupments of prior-year payments - placing hospitals in a constant state of uncertainty.

#### 3. Erosion of the 340B Drug Pricing Program

The 340B Drug Pricing Program, established in 1992, allows eligible hospitals-including all Critical Access Hospitals—to purchase outpatient drugs at significantly reduced prices. The savings generated through 340B are intended to help hospitals "stretch scarce federal resources" to better serve vulnerable populations.

For rural hospitals, 340B funds often support uncompensated care, medication assistance programs, and the ability to keep outpatient pharmacy services open in areas where no alternatives exist.

However, the 340B program is under increasing threat:

- Major drug manufacturers are restricting access to 340B pricing if hospitals do not meet certain criteria.
- Pharmacy benefit managers (PBMs) and payers are reducing reimbursements for 340B-discounted drugs.
- **Policy debates** at the federal level have questioned whether CAHs should continue to be eligible for the program at all.

These changes erode the value of a program that was once a financial stabilizer for rural hospitals. If the 340B program continues to be weakened, many rural facilities will face impossible choices between reducing services, eliminating medication support programs, or absorbing even greater losses on outpatient drug dispensing.

### 4. Loss of Tele-Specialty Services Threatens Core Clinical Functions

One often-overlooked consequence of rural workforce shortages is the **increasing fragility of tele-specialty networks,** particularly in high-demand areas such as radiology.

In recent years, telehealth has become a vital tool for rural hospitals, allowing them to provide specialty care that would otherwise be unavailable. However, the availability of tele-specialists is starting to decline, especially in critical services like **radiology**, which is foundational to emergency and inpatient care. Delays in obtaining radiology reads can stall diagnoses, delay treatment plans, and reduce throughput in emergency departments.

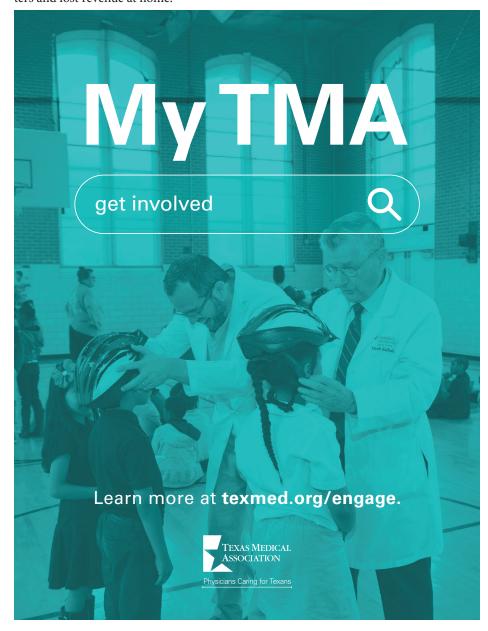
Rural hospitals are increasingly finding themselves on the receiving end of massive cost increases and/or service cutbacks from telemedicine groups. Rising costs, provider shortages and burnout, and consolidation in the telehealth market have led some groups to **limit services to higher-volume clients**, leaving small rural hospitals with inconsistent coverage or outright service loss.

When a hospital can no longer reliably access radiology, or other similar services, it jeopardizes their **ability to safely operate essential departments** like emergency rooms, surgery departments, OB units, and inpatient beds. Without these services, hospitals are left with no choice but to transfer patients who could have otherwise been treated locally, resulting in increased patient burden in tertiary centers and lost revenue at home.

Maintaining strong tele-specialty partnerships and ensuring reimbursement parity for telehealth services is now a **strategic necessity**, not a luxury, for rural hospitals that wish to continue offering a full spectrum of care.

#### 5. Staffing Shortages

No challenge is more immediate or more difficult to solve than the **shortage of healthcare professionals** willing to live and work in rural communities. Physicians, nurses, pharmacists, imaging technicians, and even custodial staff are in short supply.



Recruitment is hindered by a variety of factors:

- Lower salaries compared to urban centers
- Limited professional development opportunities
- More required call coverage
- Fewer employment opportunities for spouses
- Perceived professional isolation

The result is a vicious cycle: staffing shortages increase workloads, stress, and burnout—leading to further turnover and instability.

#### 6. Regulatory and Compliance Burdens

Rural hospitals must comply with the same federal and state regulations as their urban counterparts but without the same scale or resources. Meeting CMS requirements, preparing for inspections, participating in quality programs, and adhering to documentation rules consumes immense administrative time and energy.

Furthermore, each new state and federal initiative—no matter how well-intentioned—requires local implementation, training, and oversight. For hospitals operating on thin margins and minimal staff, these added responsibilities can threaten their ability to focus on patient care.

#### THE CASE FOR THE PRESERVATION OF RURAL HOSPITALS

Despite these obstacles, the argument for preserving and investing in rural hospitals is stronger than ever.

- 1. Access to Care: Without rural hospitals, residents must travel significant distances-often an hour or more-for emergency care, maternity services, or outpatient treatments. For elderly or low-income Texans, this is often not feasible.
- 2. Economic Engine: Hospitals are often one of the largest employers in rural counties. They support not only healthcare workers but the entire local economy, including vendors, support services, and small businesses.

#### 3. Public Health Infrastructure:

Rural hospitals play a critical role in surveillance and response to public health threats, including pandemics, natural disasters, and environmental hazards.

4. Equity and Justice: Ensuring that all Texans, regardless of zip code, have access to quality healthcare is a matter of fairness and human dignity. Likewise, urban residents are often rural patients when accidents happen far from home.

#### **BRIGHT SPOTS: MOORE COUNTY** HOSPITAL DISTRICT THRIVES **DESPITE ODDS**

Not all rural hospitals are struggling. For instance, in Moore County, we choose to be forward-thinking, visionary, and open to smart strategic partnerships.

Refusing to be victimized by the turbulent market, Moore County Hospital District is showing what is possible with a positive organizational culture, community partnerships, and fiscal responsibility. Physician and employee engagement efforts have resulted in MCHD becoming a National Top 100 hospital, as ranked by the Chartis/National Rural Health Association, and a National Top 20 in Quality ranking two years in a row. Employee Engagement, as surveyed by Press-Ganey, places MCHD in the Top 94th National Percentile. Through partnerships with other regional rural hospitals and community colleges, MCHD has responded to the effects of the pervasive nursing shortage through the development of the Rural Nursing Educational Consortium - a partnership to graduate home-grown nurses. By working with specialty services vendors, MCHD is reducing unnecessary transfers by building an inpatient dialysis program. A relationship with the USDA secured \$40 million in funding to construct a new hospital that vastly improves the care setting and is a springboard for future growth.

#### LOOKING AHEAD

The path forward is neither easy nor guaranteed. Yet, the stakes are too high to accept decline as inevitable. Policymakers, healthcare leaders, and communities must continue working together to:

- Reevaluate reimbursement formulas for rural facilities, especially under Medicare Advantage.
- Simplify and stabilize non-operating revenue streams.
- Invest in rural healthcare workforce development.
- · Modernize telehealth and technology infrastructure.
- Reduce duplicative regulatory burdens that drain limited resources.

Texas has always been a land of resilience, independence, and innovation. That spirit is alive in every rural hospital that opens its doors each day to care for its neighbors. Defending the long-term stability of rural healthcare is vital to the strength of our great Nation and State because, when rural hospitals survive, Texans thrive.

Jeff Turner has been CEO of the Moore County Hospital District since 2008. He is an active participant in the civic life of Dumas, having served as president of the Chamber of Commerce and chair of the United Way fund drive in past years. Currently, he serves on the Amarillo College Board of Regents. Under his leadership, the Moore County Hospital District has received widespread recognition, including most recently a prestigious 5-star recognition from CMMS. Jeff completed a Master of Science degree in health administration from the University of Alabama at Birmingham. He and wife Danielle have raised their two children in Dumas.



# Emergency Care Under Pressure: The Rural EMS Workforce Crisis and Health System Collapse in Texas

by Jeff Barnhart, FACHE, NREMT Chief Executive Officer, Amarillo Medical Specialists

#### **ABSTRACT**

Texas's rural communities are confronting a worsening emergency care crisis. Strains on Emergency Medical Services (EMS)—driven by personnel shortages, hospital closures, and workforce aging—are increasingly threatening access to life-saving care across medically underserved areas (1,2).

#### INTRODUCTION

On June 16, 2023, Perryton, Texas, a rural community in the Panhandle, was devastated by a tornado that killed three and injured dozens. As the former CEO of Hereford Regional Medical Center and a previous CEO at Perryton's hospital, I witnessed firsthand the fragility of rural emergency infrastructure. Perryton's ambulances and fire apparatus were destroyed, pushing regional EMS systems to their limits. This disaster demonstrated the critical role that EMS plays in rural resilience—and how vulnerable those systems are without sustained support and regional surge capacity.

Rural Emergency Medical Services (EMS) form the backbone of emergency care across America's rural landscape. For more than 60 million rural residents, EMS providers serve as the first—and often only—line of defense during medical crises, including cardiac arrest, trauma from agricultural accidents, obstetric emergencies, and other life-threatening conditions (1). In many medically underserved regions, EMS is the sole provider of acute and emergent care, particularly where access to hospitals is restricted by geography, facility closures, or health workforce shortages (2).

This role is even more pronounced in areas classified as maternity care deserts, where access to obstetric services is nonexistent or severely limited (3). EMS providers frequently manage childbirth complications, premature labor, and maternal hemorrhage in transit—despite often lacking obstetrics-specific training or resources.

"EMS is the front door for a total health care system. EMS has to be prepared, funded, and educated to meet the emergency needs of the patients we treat and transport once every 10 seconds."

—Joseph Schmider, Texas State EMS Director (personal interview, August 29, 2025) (2)

Rural EMS agencies are vital in bridging systemic healthcare gaps, particularly in communities designated as Health Professional Shortage Areas (HPSAs) (4). In addition to emergency transport, many rural EMS systems provide chronic disease monitoring, public health outreach, and mental health crisis intervention (5). However, these critical functions are increasingly undermined by staffing shortages, underfunding, outdated infrastructure, and collapsing rural hospital networks (6).

Texas, with 172 rural counties, faces unique challenges. These include vast geographic distances, aging of the population, and reduced insurance coverage, all of which increase reliance on EMS for care while diminishing revenue and capacity. As a result, the rural health system—especially its EMS core—is stretched dangerously thin.

## 1. EMS WORKFORCE SHORTAGES AND AGING

Despite over 6,000 EMS certifications issued between 2020 and 2023, more than 70% of new personnel entered urban or

suburban agencies, leaving rural communities understaffed (3). In 2023, 94.9% of Texas counties reported gaps in ambulance coverage, with response times often exceeding 25 minutes in "ambulance deserts" (3). Additionally, 16.5% of Texas EMS professionals are over age 50, and 10% are expected to retire within the next eight years (3).

A 2022 national EMS workforce survey revealed that 62% of rural EMS agencies rely primarily on volunteers and that 73% report difficulty recruiting or retaining them (4).

#### **Key Contributing Factors**

- Required training exceeds 100–200 hours, often without financial support.
- Lack of stipends, loan forgiveness, or paid time for certification.
- Long on-call hours with minimal mental health support.
- Aging leadership and minimal succession planning.

These constraints result in frequent ambulance "blackout periods," missed 911 calls, and life-threatening delays—especially during disasters like the Perryton tornado.

### 2. CASE EXAMPLE: WHITE DEER EMS

- Fully volunteer agency
- \$38,650 in revenue vs. ~\$63,500 in expenses (2023)
- $\bullet$  Serving a rural population of ~2,000, located 30 miles from the nearest hospital
- Transferred to Hemphill County Hospital District in January 2025
- Emergency Services District (ESD) created to fund operations

White Deer Volunteer EMS provides a tangible case study in rural EMS fragility. Founded in 2014 as a 501(c)(3) nonprofit corporation, the service relied on volunteers and operated under constant financial strain. On January 21, 2025, the White Deer City Council voted to transfer the agency to the Hemphill County Hospital District and simultaneously established an ESD to stabilize funding through a \$100 fee and potential property tax support (11,12). This transition reflects the urgent need for sustainable rural EMS governance models, local taxing authority, and regional oversight.

#### 3. NURSING SHORTAGES AND EMERGENCY DEPARTMENT **BOTTLENECKS**

Rural hospitals in Texas increasingly face severe nursing shortages. The Texas Center for Nursing Workforce Studies reports that nurse vacancy rates across rural facilities exceed 20% (7). Emergency departments (EDs) are disproportionately affected, for the following reasons:

- Prolonged EMS offload times frequently over 60 minutes—leave ambulances unavailable for new emer-
- Small EDs often operate with just one or two nurses, who are responsible for triage, trauma care, and inpatient stabilization, all at the same time.

To compensate, rural hospitals are relying more heavily on travel nurses and temporary staff—an unsustainable practice that strains budgets and reduces continuity of care.

Nursing deficits directly affect EMS response by tying up units at hospitals and delaying return-to-service time. Without additional nursing support and ED staffing reforms, emergency medical response systems will continue to deteriorate.

#### 4. RURAL HOSPITAL CLOSURES

Hospital closures across Texas have removed critical stabilization and referral centers from rural communities. More than two dozen rural hospitals have closed statewide since 2005, with at least 13 others shutting down emergency services entirely (5,6).

These closures disproportionately affect low-income and aging populations, resulting in longer transport times, increased mortality risk, and delayed trauma care. Many communities now rely solely on EMS for even basic emergency stabilization.

A 2021 study by Joynt Maddox et al. found a direct association between rural hospital closures and increased use of emergency services, particularly among residents with chronic conditions or limited mobility (6).

#### 5. LEGISLATIVE AND POLICY GAPS

While the Texas Legislature passed House Bill 3000 in 2023 to establish a rural EMS funding mechanism, implementation challenges persist (9). The law enables readiness-based reimbursement, strike team support, and standby fee funding, but requires sustained administrative support and local agency engagement.

House Bill 18 (2025), signed into law by Governor Abbott on September 17, seeks to bolster rural hospitals through

grants, technical assistance, and infrastructure investments (8). However, both initiatives need robust follow-through to ensure effectiveness.

Community Paramedicine, where EMS units perform preventive care, follow-ups, and home visits, remains underutilized due to the lack of Medicaid reimbursement and consistent regulation (4) (in addition, see article by Hazlett and Florez in this issue of Panhandle Health).

#### **DISCUSSION**

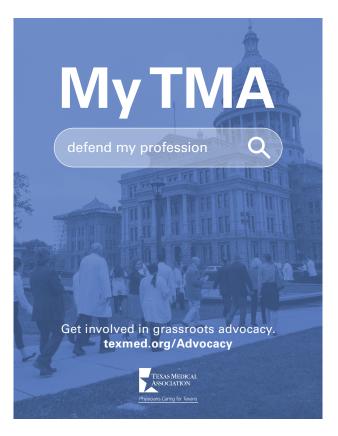
Texas's EMS crisis is not an isolated failure but a cascading consequence of decades of underinvestment in rural health systems. As EMS providers take on expanded roles—including primary care extender, behavioral health first responder, and public health sentinel they must be supported with a modern reimbursement model, regulatory clarity, and workforce investment.

Without action, the current state of rural EMS will worsen. Hospital closures will multiply, call volumes will surge, and overworked EMS agencies will collapse under the weight of impossible expectations. For all the reasons mentioned above, the situation requires immediate and sustained attention. Otherwise, the health and safety of all our rural patients will be further jeopardized.

#### RECOMMENDATIONS

#### 1. Modernize EMS Reimbursement

- o Fund EMS readiness and capacity not just transport.
- o Develop state grants linked to geographic coverage, performance metrics, and surge readiness.



#### 2. Scale and Regulate Community

Paramedicine

- o Establish clear licensure, scope of practice, and training pathways.
- o Enable Medicaid and private insurance billing for community EMS roles.

#### 3. Rebuild the Rural Workforce

- o Create tuition and loan forgiveness programs for rural EMS and nursing students.
- o Expand rural EMS and nursing programs through local colleges and career pipelines.

### 4. Invest in Technology and Infrastructure

- o Fund broadband expansion for tele-EMS and virtual ED access.
- o Equip rural ambulances with telehealth devices and remote triage tools.

#### **CONCLUSION**

I began my healthcare career as an EMS provider in 1985. On September 6, 2025, I will have been a certified EMS provider for 40 years. I continue to volunteer with the Lake Tanglewood Fire Department and have served for six years on the Governor's EMS and Trauma Advisory Council.

These issues are not theoretical for me—they are deeply personal. When Perryton lost its EMS infrastructure in the 2023 tornado, it could just as easily have been our community. The disaster exposed the fragility of rural EMS and the urgent need for transformation.

Without bold, coordinated action, rural Texans will continue to suffer dangerous delays in care, worsening health outcomes, and the ongoing collapse of foundational health systems.

#### REFERENCES

- Health Resources and Services
   Administration. HPSA and MUA Data
   Portal [Internet]. 2023 [cited 2025 Jun 20].
   Available from: https://data.hrsa.gov
- Schmider J. Interview with: Jeff Barnhart. 2025 Aug 29. Austin (TX). Topic: Emergency Medical Services policy in Texas. Unpublished interview.

- Texas Department of State Health Services. EMS Workforce Data [Internet]. 2023 [cited 2025 Jun 20]. Available from: https://www.dshs.texas.gov
- Mears G, Spencer C, O'Neill M, Liu
  J. 2022 National Emergency Medical
  Services Workforce Data Report. Falls
  Church (VA): National Association of
  State EMS Officials; 2022. 140 p. Available
  from: https://nasemso.org/wp-content/
  uploads/2022-National-EMS-WorkforceReport.pdf
- Sheps Center for Health Services Research. Rural Hospital Closures Data [Internet].
   2023 [cited 2025 Jun 20]. Available from: https://www.shepscenter.unc.edu
- Joynt Maddox KE, Chen LM, Zuckerman R, Epstein AM. Association between hospital closures and emergency services use among rural residents. Health Aff (Millwood). 2021 Jul;40(7):1109–1118. doi: 10.1377/hlthaff.2021.00110
- Texas Center for Nursing Workforce Studies. Nursing Workforce Reports. Austin (TX): Texas Department of State Health Services; 2024. Available from: https://www.dshs.texas.gov/nursingworkforce
- 8. Texas Legislature. House Bill 18: Rural Hospital Stabilization and Innovation Act. 89th Legislature, Regular Session; 2025. Available from: https://capitol.texas.gov/ tlodocs/89R/billtext/html/HB00018H.htm
- 9. Texas Legislature. House Bill 3000: Rural Ambulance Funding. 88th Legislature, Regular Session; 2023. Available from: https://capitol.texas.gov/tlodocs/88R/ billtext/html/HB0003000H.htm
- 10. Texas Higher Education Coordinating Board. Rural Nurse Retention Initiative. Austin (TX): Texas Higher Education Coordinating Board; 2024. Available from: https://www.highered.texas.gov
- 11. White Deer Volunteer Emergency Medical Services. IRS Form 990-N and Financial Disclosure Report, Fiscal Year 2023. White Deer (TX): White Deer EMS; 2024.
- City of White Deer. City Council Minutes

   EMS Transition and ESD Formation.

   White Deer (TX): City Council of White Deer; 2025 Jan 21. Municipal archive (unpublished).

Jeff Barnhart, FACHE, is Chief Executive Officer of Amarillo Medical Specialists, a 52-provider multi-specialty medical group in Amarillo, Texas. He previously served as CEO of the Deaf Smith County Hospital District in Hereford, Texas, and other rural hospitals across the state. He is a Fellow of the American College of Healthcare Executives and is a Nationally Registered Emergency Medical Technician. Appointed by Governor Greg Abbott, he served two terms on the Governor's EMS and Trauma Advisory Council (GETAC), representing rural hospitals statewide. Barnhart also teaches emergency response and recovery in healthcare as an adjunct professor at Texas Tech University Health Sciences Center in Lubbock.

#### **Give and Get Back**

This holiday season, in the spirit of giving, make a donation to bring life-changing scholarships to medical students. Then enjoy the warm-and-fuzzy feeling that comes from having helped someone. Take advantage of year-end tax deductions when you give now at TMAF.org.





### **Guest Editorial:** What We Wish You Knew About Rural **Mental Health in the Texas Panhandle**

by Sridevi "Shree" Veeramachaneni, Executive Director, and Mary Coyne, Past Chair, Panhandle Behavioral Health Alliance



**A** Then communities are separated by miles and neighbors are often miles — not blocks — apart, a complex paradox emerges: the need for mental health care is exceptionally high, and access is exceptionally low. This rural paradox is particularly stark when you consider that most resources are anchored in Amarillo, while the people who need them most may live hours away in smaller, underserved towns.

In fact, many of the counties in our region aren't just rural, but they're classified as frontier, indicating fewer than seven people per square mile. In these areas, stigma, scarce services, isolated geography and the mental health workforce shortage can be insurmountable barriers to care.

#### WHAT WE MEAN BY MENTAL **HEALTH**

Mental health exists on a continuum - from well, to struggling, to ill. Someone who is well can cope with stress and function in relationships and work. But when distress leads to significant impairment of daily life, deteriorating relationships or a sense of despair, we move into the realm of mental illness. Clinical diagnosis is based on the severity and duration of symptoms.

In rural areas, the causes of that distress may look different due to isolation and scarcity of social outlets. Farmers, ranchers, small business owners, caregivers and teachers alike are facing chronic stressors, with few tools or outlets to manage them.

#### STIGMA AND SELF-RELIANCE

In the Panhandle, cultural pride in self-reliance runs deep. But that same value can evolve into isolation, shame

and silence when someone struggles mentally. Resiliency is typically defined as the ability to bounce back and adapt. This adaptability includes knowing when and how to ask for help. And yet, asking for help is often seen as weakness.

As one rural provider told us, "People will patch a tractor with duct tape and baling wire for years before they ever say, 'I'm not doing okay." If we can reframe seeking help as an act of strength and responsibility, we can save lives.

#### LISTENING TO RURAL VOICES

Through our work in Hutchinson, Moore and Deaf Smith counties, we've seen how different this issue looks depending on who you ask. Julie Winters, a community advocate in Borger, emphasizes the need for awareness and education: "Most folks still don't know what resources exist or how to get started."

Katie Strohmeier in Dumas focuses on barriers to access: "We need a hub in every county, or a way to bring the services here more consistently."

From the provider side, Trevor Rohm, MD, a family medicine physician in Hereford, stresses the pressure of serving as the de facto psychiatrist for his area: "It's all falling on primary care."

Meanwhile, Maude McCullough, a licensed professional counselor in Hereford, underscores the value of peer supports and warm handoffs: "If you hand them a number and wish them luck, they won't make the call."

#### HOW TO USE EXISTING RESOURCES

#### 1 CRISIS CARE: START WITH 9-8-8

In an emergency, patients or providers should call 9-8-8, the national suicide and mental health crisis lifeline. Locally, that line routes to Texas Panhandle Centers.

#### 2 TEXAS PANHANDLE CENTERS (TPC)

As the Local Mental Health Authority (LMHA) for our 21-county region, TPC provides core mental health services regardless of ability to pay. Although every county in Texas is assigned to an LMHA, that doesn't mean a physical office exists in every community.

#### **TPC offers:**

- Mental health screenings
- Outpatient therapy and medication support (based on eligibility)
- Case management
- A Mobile Crisis Outreach Team (MCOT) - Calls to 9-8-8 have the potential to activate the Mobile Crisis Outreach Team (MCOT) when needed. The MCOT provides in-person crisis intervention anywhere in the region, including homes, schools and roadside locations.

TPC services may have wait times, particularly for outpatient care, so it's important to refer early and encourage support strategies while patients wait.

#### 3 PEER SUPPORT: AGAPE CENTER WARMLINE

The Agape Center offers non-crisis **peer support** by trained individuals who have lived experience. Their Warmline is open at select hours — updated regularly on their calendar at aamhc.us/cal. html — and can be reached at (806) 367-0028. Please note, this is not a 24/7 line. Currently, the warmline is active during evenings and weekends.

#### 4 PANHANDLE MENTAL HEALTH **GUIDE**

PanhandleMentalHealthGuide.org is a vital, up-to-date tool for finding therapists, psychiatrists, support groups, warm lines and emergency contacts.

The Panhandle Mental Health Guide "has been huge. That was one of the original things we talked about, and it's been accomplished. I think the product is outstanding. Those who know about it use it. It's super helpful, and it's up to date." - PBHA Stakeholder

> Clinics, hospitals, schools, faith communities and nonprofits are urged to embed the Panhandle Mental Health Guide widget on their websites to streamline access for patients and staff alike. For instructions, go to PanhandleBehavioral-HealthAlliance.org/widget or scan this QR Code:



#### WHAT PROVIDERS SHOULD KNOW

A mental health crisis is not the time to test a patient's perseverance. When a patient is struggling, it's not enough to give them a phone number. The most effective way is for providers call on behalf of the patient and ask:

"Can you please squeeze them in?"

And while patients wait for an appointment, especially in rural areas, encourage them to:

- Connect with warm lines
- Seek out **peer support**
- Attend **support groups** (available for family members, as well)
- Talk to their primary care provider or trusted clergy

Providers should also screen regularly, using tools like the Patient Health Questionnaire-9 (PHQ9) and General Anxiety Disorder-7 (GAD 7) and refer early, not just at crisis points.

#### SPECIAL POPULATIONS AND PRACTICAL SOLUTIONS

Help for providers for children and adolescents

- CPAN (Child Psychiatry Access Network) offers free psychiatric and medication consults to primary care doctors within 30 minutes.
- TCHATT (Texas Child Health Access Through Telemedicine) connects students with counseling via schools.

#### ADVICE TO PROVIDERS REGARD-ING MATERNAL MENTAL HEALTH

• PeriPAN provides the same fast consult access as CPAN, tailored for providers treating pregnant and postpartum women.

#### LOCAL COUNTY COALITIONS

In Hutchinson, Moore and Deaf Smith counties, the Panhandle Behavioral Health Alliance has helped communities:

- Develop recovery and peer support services
- Coordinate with law enforcement
- Subsidize access to care
- Deliver mental health education campaigns
- Build coordinated school support teams

These models are replicable and urgently needed in other counties.

#### COMMUNITY SUPPORT IS NOT **OPTIONAL!**

Mental illness can be isolating, especially in frontier communities. That isolation can delay care or worsen conditions. Family members, churches, neighbors and schools play essential roles in bridging the gap.

#### Key supports include:

- Family education about mental health signs and how to help
- Connection to support groups
- Faith-based or school-affiliated outreach
- Community coalition support

When we look at the ways people intersect with behavioral health care, one thing is clear: clinical care is only one part of the solution. Community infrastructure is essential.

#### OTHER NOTABLE PROVIDERS AND **SERVICES**

 Northwest Texas Healthcare System Behavioral Health - inpatient psychiatric services in Amarillo. Call for a no-cost assessment, available 24/7.

> 1501 S. Coulter, Amarillo; 800-537-2585 or 806-354-1810.

• Regence Health Network - integrated care for underserved populations, including individual and family counseling for all ages.

> 3113 Ross St., Amarillo, 806-374-7341.

125 W. Park Ave., Hereford, 806-364-7688.

410 Canyon St., Plainview, 806-291-0297.

• Heal the City - free care including individual and group therapy.

> 609 S. Carolina St., Amarillo, 806-231-0364.

• Northwest J.O. Wyatt Clinic - primary care and behavioral health services for low-income and uninsured individuals (serves eligible citizens of the City of Amarillo and all of Potter County.)

> 1411 E. Amarillo Blvd., Amarillo, 806-351-7200.

• Oceans Behavioral Hospital - inpatient psychiatric treatment for adults and seniors in Amarillo and surrounding areas.

> 7501 Wallace Blvd., Amarillo, 806-310-2205.

• Cenikor Foundation - addiction treatment and recovery services, now limited to outpatient programs.

> 1001 Wallace Blvd., Amarillo, 888-236-4567

· NAMI (National Alliance on Mental Illness) Texas Panhandle - support, education and advocacy for individuals, family members, professionals, other stakeholders and the community at large.

Meeting and class location: St. Andrew's Episcopal Church, Lowndes Hall, 1601 S. Georgia St., Amarillo, 806-567-1372.

#### **FINAL THOUGHTS**

The Panhandle Behavioral Health Alliance exists to connect the dots. We work with providers, schools, law enforcement, churches and coalitions to make mental health care more accessible, coordinated and responsive to the needs of the people of the Texas Panhandle.

If we could share one message, it's this: When someone finally reaches out, meet them there. Not with a hurdle. Not with a delay. But with a path forward.

Shree Veeramachaneni has been executive

director of the Panhandle Behavioral Health Alliance (PBHA) since 2018. Since joining PBHA, Shree has been a community change agent for the Texas Panhandle, building community-led coalitions and strengthening cross-sector collaborations to improve behavioral health access and wellbeing with a focus on health equity and sustainable impact.

Mary Coyne is a principal of AscentHealth Consulting, a firm specializing in public health research and strategy. She is past chair and a current member of the leadership team of the Panhandle Behavioral Health Alliance, working for systems change on behalf of the health of Panhandle residents. She is a native of Carson County and is president of MCMC, an advertising, public relations and crisis communications firm in Amarillo.

#### ABOUT THE PBHA

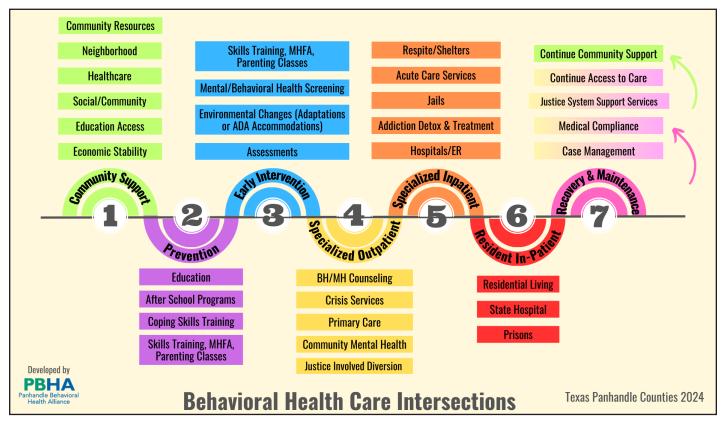
The Panhandle Behavioral Health Alliance brings together people from all sectors of the mental health system, breaking down silos and creating connections to strengthen the continuum of mental health care. PBHA has three main focus areas:

- Wellness and Access - Improving

the capacity of our communities to practice prevention, early intervention and recovery principles

- Provider Shortages Increasing the number of clinical mental and behavioral health providers in the Texas Panhandle
- Justice-Involved Improving mental health outcomes for justice-involved individuals with mental and behavioral health issues by collaborating with the justice system

For more information or to join our efforts, please contact PBHA Executive Director Shree Veeramachaneni at (806) 350-5277 or Shree@ PanhandleBehavioralHealthAlliance.org





### **Bridging the Rural Health Divide:** The Coalition of Health Services and Its Impact **Across the Texas Panhandle**

by Susan Bailey, Executive Director, Coalition of Health Services, Inc.

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Texas Panhandle, rural communities face persistent challenges accessing healthcare and vital resources. Geographic isolation, limited transportation, healthcare provider shortages, and stark resource disparities deepen the divide between rural and urban Texans. But in the heart of this region, the Coalition of Health Services, Inc., stands as a powerful unifying force--connecting, empowering, and strengthening rural healthcare through strategic collaboration and bold leadership.

At the helm of our organization are the area's hospital chief executive officers and visionary leaders who form the COHS board of directors. These CEOs are not only administrators of their respective facilities but are also fierce advocates and tireless champions for rural healthcare across the Texas Panhandle. Their leadership, insight, and day-to-day experience drive every program we implement and every decision we make. They are the engine behind our mission and the reason our work delivers such a wide-reaching impact. Seeing the work they do-working together to tackle the many challenges faced by rural hospitals and rural residents--is awe-inspiring.

#### WHO WE ARE

Headquartered in Amarillo, the Coalition of Health Services, Inc., is a nonprofit serving 14 rural hospitals and dozens of partner organizations across the top 26 counties of the Texas Panhandle. We touch the lives of more than 200,000 clients, students, patients, and families each year, ensuring that access to care is not dictated by zip code but is available to all who call this region home.

The Coalition of Health Services, Inc. was founded in 1997 by an alliance of forward-thinking rural hospital leaders and CEOs who recognized that the best way to survive and thrive was to work together. Our mission, "to develop and support the collaboration of area health providers in the provision of health services," is deeply embedded in our daily operations. Our vision, "healthier communities through shared services, programs, advocacy, communications, and education," propels us forward.

We work as a force multiplier, bridging gaps in care, securing grants and funding, advocating on behalf of our hospitals, and delivering programs that meet our communities' most urgent needs.

#### WHAT WE DO: PROGRAMS THAT DRIVE IMPACT

The Coalition of Health Services administers several cornerstone programs that are uniquely designed to address health disparities, build rural capacity, and improve health outcomes while supporting our rural residents and healthcare facilities. They include:

Nurse-Family Partnership (NFP): A free, evidence-based, nationally recognized home visiting program that pairs registered nurses with first-time, low-income mothers, from pregnancy through the child's second birthday, improving maternal-child health and economic stability.

Parents as Teachers (PAT): A free program supporting parents and caregivers of children from the prenatal period to age five. PAT promotes school readiness and healthy development through personal home visits, developmental screenings, and group connections.

Home Instruction for Parents of Preschool Youngsters (HIPPY): A home-based early learning program that empowers parents to be their child's first teacher, building school readiness and strengthening family engagement in early education.

Uniting Parents: A parent-led case management program for families of children with chronic illnesses or disabilities. Our staff, many of whom are parents of children with special needs, provide peer support, advocacy, referrals, and education across 32 counties in the Panhandle.

Families Respite Program: Funded by the Texas Department of State Health Services (DSHS), this short-term respite care initiative gives caregivers of children with special health care needs the support they need to rest, attend appointments, or participate in family and community activities, helping to preserve family unity and reduce stress.

Gateway to Health Careers: A robust workforce pipeline designed to train rural high school students. In collaboration with Region 16 and Canyon ISD, Gateway trains high school students for health careers through a four-year health science curriculum, clinical experiences, and certification programs like Certified Nursing Assistant (CAN) and Patient Care Technician (PCT). The program is shaping tomorrow's rural healthcare workforce today. We serve thirty-two rural high schools in our twenty-six-county region, with 780 high school students in the 2024-25 school year and a projected 1,000 students for the upcoming school year. Our Gateway to Health Careers program has garnered much attention nationwide, and our model has been presented at both the state and national levels.

Primary Health Care Program (PHC): Provides primary and preventive care, including diagnostic testing, family planning, immunizations, and health education for uninsured or underinsured Texans whose incomes fall below 200% of the federal poverty level.

Family Planning Program: Offers no-cost or low-cost reproductive healthcare services to eligible women and men. This includes contraception, cancer screening, pregnancy testing, and counseling to promote healthy family planning and reduce unintended pregnancies.

Community Health Education & Outreach: From health fairs and clinic support to culturally tailored disease prevention initiatives, COHS reaches thousands yearly with education and services that save lives and close gaps.

Each program is fueled by the dedication of our small but mighty team and is made possible by the incredible advocacy of our extraordinary Board of Directors, again made up of rural hospital CEOs who are deeply committed to building a healthier, stronger Texas Panhandle.

#### STRENGTHENING RURAL HOSPITALS: ADVOCACY, STRATEGY, AND SUPPORT

Our work is not just about programs and service delivery; it's about protecting and expanding the healthcare safety net. COHS actively writes and manages grants directly supporting our rural hospitals and healthcare facilities. These funds help hospitals navigate complex regulatory landscapes, maintain essential services, recruit workforce, and stay financially viable in the face of mounting operational pressures. Whether it's securing funding to expand OB services in the "maternity desert" that is the Texas Panhandle, coordinating a regional telehealth strategy, or collaborating on disaster preparedness, COHS stands side by side with our hospitals. We know that, when a rural hospital closes, it is not just a loss of care; it's a loss

of community stability, jobs, hope, and, ultimately, the lives of rural residents who may find themselves in an emergency. We are relentless in our efforts to keep these vital institutions open and thriving.

#### A REGIONAL AND STATE VOICE WITH LOCAL ROOTS

What sets COHS apart is our locally rooted governance model. Our Board is made up entirely of CEOs from the hospitals we serve, leaders who know first-hand what rural healthcare delivery requires. Their voices are not just heard; they shape the very programs, policies, and partnerships that define our success.

During the COVID-19 pandemic, this Board's leadership helped guide the region through a time of great uncertainty, ensuring the timely distribution of PPE, supporting maternal-child health, and coordinating regional planning that extended far beyond any one hospital's reach.

Today, they continue to lead the charge on rural workforce development, mental health, rural maternity care, chronic disease prevention, and health equity. Their shared commitment has transformed COHS into not only a service provider but a trusted advisor and indispensable partner across the rural Texas Panhandle.

#### MOVING FORWARD: COMMITMENT TO RURAL TEXAS

As rural hospitals and communities face unprecedented challenges—including the risk of hospital closures, workforce shortages, and the shifting terrain of insurance and reimbursement--COHS stands ready to lead the way forward. We're not just closing gaps in care, we're building pathways, fostering innovation, and amplifying rural voices in every room where decisions are made.

We believe that access to quality care should be available to every resident in every county of the Texas Panhandle. That belief fuels our mission and powers the tireless work of our staff, partners, and

exceptional board members. These leaders are the heart of our Coalition, and their commitment to rural Texas's health and well-being is extraordinary and unwavering.

*In addition to her full-time job as Executive* Director of Coalition of Health Services, Inc., Susan Bailey also works as a Nurse Practitioner at Amarillo I-40 First. In addition, she is the Clinical Director for Panhandle AIDS Support Organization (PASO) and serves on the Board of Directors for Amarillo Housing First. Her passion for healthcare education and mentorship extends to her role with the Tri-Agency Regional Convener Panhandle Pathways and the TTUHSC Amarillo School of Nursing Advisory Board, where she helps shape the future of healthcare education and workforce development with a focus on rural development. She also collaborates with the Texas Department of Agriculture's (TDA) State Office of Rural Health (SORH). When she isn't working, Susan finds joy in family adventures with her four children--camping, kayaking, and making cherished memories on trips to Port Aransas.





# From Classroom to Country Roads: Cultivating Rural Healthcare in Texas

by Rodney Young MD and Adrian Billings, MD, PhD Department of Family and Community Medicine, TTUHSC



Nearly twenty percent of Americans live in rural areas, but only about ten percent of physicians practice there. This large gap in available healthcare affects many essential aspects of rural life. Access to primary care close to home isn't just a convenience for residents--it's a lifeline for rural communities. Businesses need access to quality healthcare for their employees. The road to a thriving rural community is paved with an influx of businesses that create jobs, which in turn motivates families to relocate, which sustains rural schools, which ultimately fuels stronger local economies.

For most rural areas, educating, attracting, and retaining a healthcare workforce is a challenging proposition. Some towns are too small to operate and maintain a hospital or even a clinic. Other rural communities offer a wider array of services which allow their residents the comfort and convenience of staying closer to home to receive their care. Telehealth is one option to improve access to care. While telehealth provides some access to care, it lacks direct and in-person connection to a provider, which most patients prefer. Rural communities deserve local community physicians to respond to emergencies, deliver babies, and provide in-person care. And the strongest predictor of a future rural medical practice is rural origins (other predictors are significant rural life experience and rural medical training). The problem is that most traditional medical education pathways provide very little, if any, rural medicine training.

# HOW TO ATTRACT PRACTITIONERS TO RURAL AREAS

Landmark New England Journal of Medicine (NEJM) articles on the ecol-

ogy of medical care (1961, 2001) demonstrated that medical education centered in traditional medical centers produces a physician workforce well-trained to care for the sickest patients. However, fewer than 1% of the population are hospitalized in acute care facilities at any given time (1,2). While it is essential to train physicians to treat the most critically ill, educational models that rely too heavily on large referral centers overlook the broader needs of the majority who seek care in outpatient facilities or community hospitals.

Internet-based remote learning technologies have advanced dramatically in recent years, making it easier to bring conferences, classroom sessions, online learning modules, and advanced software-based technologies to remote learners. Leveraging these new technologies and others, Texas medical schools are developing and implementing innovative programs—including telehealth and remote patient monitoring—to help address the rural physician shortage,

# ATTRACTING DOCTORS TO RURAL TEXAS: MEDICAL SCHOOL EFFORTS

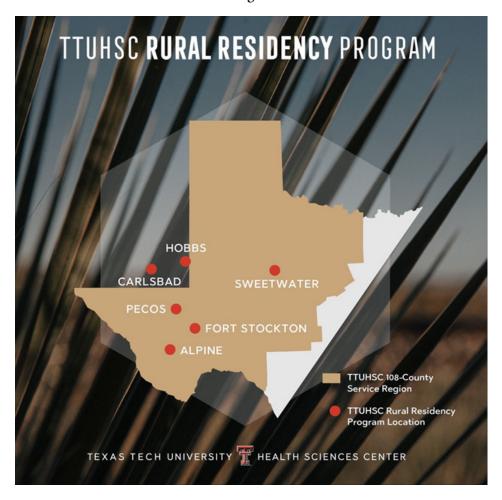
Experience shows that physicians often choose to practice near where they complete medical training. This simple truth led to the establishment of the Texas Tech University Health Sciences Center's School of Medicine, with its multiple campuses spread across West Texas, as a means to help populate West Texas with physicians. Established in 1969, the School of Medicine was the first of many Texas Tech University Health Sciences Center (TTUHSC) schools now training health professionals of all types for West Texas and beyond. TTUHSC also sup-

ports telehealth medical facilities in rural areas of Texas, such as Marathon and, more recently, in Fort Davis.

With so many rural counties in Texas still struggling to recruit physicians, the need to create training opportunities in those areas has never been more acute. As a result, in 2010 TTUHSC launched a first-of-its-kind accelerated medical pathway program, the Family Medicine Accelerated Track (FMAT). In it, well-qualified candidates can complete the full medical school curriculum in just three years and match directly into a TTUHSC Family Medicine residency program. FMAT allows medical students to bypass a year of tuition, fees, and living expenses, earn a scholarship that helps offset another partial year of tuition costs, and accelerate their full income potential by one year. Importantly, the FMAT program adds family medicine physicians to the workforce sooner. Family physicians are the doctors most likely to practice in rural areas, due to the broad scope of their training, which enables them to treat patients of all ages and genders. The FMAT program has helped TTUHSC increase student interest in family medicine, with many of the FMAT graduates practicing in rural Texas.

For over a decade, the TTUHSC Family Medicine program in the Permian Basin has offered rural family medicine residencies for learners who spend their first post-graduate year in Odessa or Midland. Most of the final two years of training are embedded in one of six rural communities throughout the region (Figure 1). These sites offer strong training in inpatient medicine, maternity care, surgical and emergent care, as well as longitudinal clinic and long-term care expe-

Figure 1



riences. They often have greater access to hands-on procedural training and learn to serve as true community physicians. The learners play key roles where they not only experience the central role of the family physician in those communities, but also get a taste for rural life on both a personal and professional level. To date, approximately one-third of the graduates have remained to practice in their rural residency sites, with many others practicing elsewhere in Texas in various roles. These programs are funded through a combination of Texas Higher Education Coordinating Board funds and local support from the rural communities.

#### STARTING THE PROCESS EARLY: SCHOOL DISTRICT AND UNDER-**GRADUATE EFFORTS**

Beyond the level of medical education, TTUHSC has also collaborated with local communities by hosting a Summer

Camp for Rural High School Students from West Texas who are interested in healthcare careers (3). The camp is held on the Sul Ross State University campus in Alpine and is a collaboration between TTUHSC and the Permian Basin Area Health Education (AHEC) Program. The program involves West Texas higher education institutions and exposes these rural students to healthcare careers from an associate's degree to higher professional degrees. During the camp, students are exposed to talks by faculty, healthcare training students, and rural clinicians. Hands-on activities include simulations, exercises, and visits to the Big Bend Regional Medical Center. This camp has helped create rural shadowing opportunities for the high school students when they return to their West Texas rural communities.

The Rural Osteopathic Medical Education (ROME) Program at the University of North Texas (UNT) Health is a longstanding undergraduate medical education program that gives UNT Texas College of Osteopathic Medicine (TCOM) students exposure to rural communities during all four years of medical school. The ROME program exposes medical students to medical mission trips to the Big Bend area as well as to rural clinical rotations throughout the state. The ROME program includes rural curricula that help prepare these medical students for future rural and global medical practice. Some of these ROME students matriculate in their third and fourth years at sites throughout the Permian Basin, including Odessa, Midland, and Andrews.

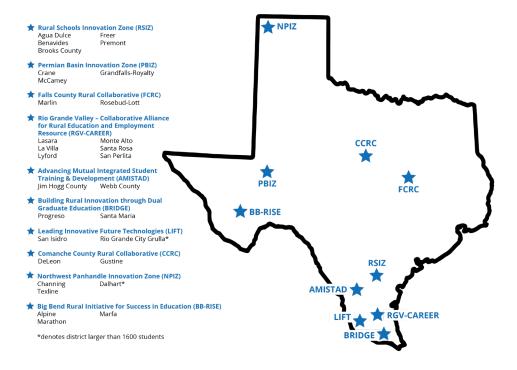
The Primary Care Pathway Program (PCPP) is an innovative and accelerated medical school pathway program created between Midland College, the University of North Texas, and its Texas College of Osteopathic Medicine in 2015 (4). A particular focus of the PCCP is primary care and care for the underserved, including rural, populations. Premedical students spend their first two years enrolled at Midland College and their third undergraduate year studying premedical classes. The PCPP students are exposed to prescribed summer internships, diverse shadowing and volunteering opportunities, and rural medical mission trips in the Big Bend with ROME students. After completing their second year, some of the students qualify for an interview with UNT TCOM. If accepted into TCOM, these PCPP students begin early matriculation into UNT TCOM in what would have been their 4th year of college. The PCPP program has a particular interest in recruiting West Texas students who are interested in primary care careers. Many of these students include rural students from throughout the Permian Basin and Big Bend areas. During their clinical years, the PCPP students have the opportunity to return as ROME students to the Permian Basin and do their third and fourth years of medical school in West Texas.

Figure 2 - West Texas AHEC Map



Source: https://www.westtexasahec.org/aboutus.html

Figure 3
Current Rural Pathway Excellence Partnerships (R-PEPs)



Source: https://tea.texas.gov/texas-schools/district-initiatives/rural-pathway-excellence-partnership-program

Other initiatives in Texas to promote rural training include Texas A&M's Rural Medicine Program, which creates training opportunities for medical students to rotate in various rural communities throughout the state (5). The Texas A&M model emphasizes broad development and involvement within the rural communities, not just in the healthcare sector, but across many aspects of rural life. It also includes partnering with rural K-12 school districts to begin to cultivate future clinicians in these rural communities. The Texas A&M Rural Medicine Program also hosts rural high school students at their College Station medical school campus for a summer high school camp for students interested in premed studies.

Area Health Education Centers (AHEC) programs are federally supported programs that aim to improve healthcare access in underserved areas (Figure 2). AHEC staff interact with K-12 students and attempt to inspire these students to begin to think about healthcare careers. In addition, various AHEC programs help support rural rotations for healthcare training students. The AHEC Scholars program is a two-year, interprofessional program for healthcare training students focused on community-based education, particularly in rural and underserved communities. The goal of the program is to improve healthcare students' understanding of primary care, community health, and rural health care (6).

A new high school and Texas Legislature-funded program is the Rural Pathway Excellence Partnerships (R-PEP) program, which allows rural school districts to enter into agreements with neighboring school districts to develop rural college and career pathway partnerships (Figure 3). Many of these career programs are healthcare-training programs. The goal of the R-PEP program is to increase access to high-quality post-secondary pathways for rural students through multi-district collaboration. Many of these high school students are beginning to explore careers in these R-PEP programs and represent a future pipeline for

academic health centers to create pathway programs into their institutions. These rural school districts and communities also have the opportunity to help students consider future healthcare careers and support them in their academic journey, in hopes that they will return home as rural healthcare solutions for their communities (7). Collaboration is a key component in all the aforementioned educational initiatives and can help pave the way to expand rural healthcare.

#### ACTION STEPS FOR RURAL COMMUNITIES TO IMPROVE **ACCESS TO HEALTHCARE**

- 1. Engage local K-12 schools and cultivate these students as the future rural health workforce. Develop healthcare-oriented R-PEP programs between neighboring school districts.
- 2. Host medical students and resident physicians in local communities. Engage with local hospitals, clinics, and physicians to help enable rural medicine rotations. Provide housing support to visiting trainees. Create a local welcoming and recruitment committee to engage trainees during and after rotations. Continue a relationship with the trainees post-rotation.

- 3. Reach out to academic health centers in the region and request healthcare resources, including advocating for rural residency program development in your communities.
- 4. Work with community colleges and universities to create pathway programs for rural students into healthcare training programs. Ask to have rural community members on admission committees.

#### REFERENCES

- 1. Green LA, Fryer GE, Yawn BP, Lanier D, Dovey SM. The ecology of medical care revisited. New England Journal of Medicine. 2001;344(26):2021-2025. https://doi.org/10.1056/ NEJM200106283442611
- 2. White KL, Williams TF, Greenberg BG. The ecology of medical care. New England Journal of Medicine. 1961;265(18): 885-892. https://doi.org/10.1056/ NEJM196111022651805
- 3. https://www.oaoa.com/community/ good-news-community/ summer-camp-providedopportunities-for-high-school-studentsto-explore-careers-in-rural-health/
- 4. https://www.unthsc.edu/texas-college-ofosteopathic-medicine/admissions-andoutreach/primary-care-pathway-program/
- 5. https://medicine.tamu.edu/ruralmedicine/index.html

- 6. https://www.westtexasahec.org/
- 7. https://tea.texas.gov/texas-schools/districtinitiatives/rural-pathway-excellencepartnership-program

Rodney Young, MD is a professor and the Regional Chair of the Department of Family & Community Medicine at the TTUHSC School of Medicine in Amarillo. He has been actively involved in advocacy and policy on physician workforce development for more than 20 years through his work with the Texas Academy of Family Physicians and the Texas Medical Association. Rodney was a prior chair and current consultant to the Council on Medical Education and serves currently as a member of the TMA Board of Trustees.

Dr. Adrian Billings, MD, PhD, FAAFP, FACU of Alpine, Texas is a National Health Service Corps Scholar alumnus, the Chief Medical Officer of Preventative Care Health Services FQHC in the rural Big Bend of Texas, Professor in the Department of Family and Community Medicine, Associate Academic Dean of Rural and Community Engagement and Senior Fellow of the F. Marie Hall Institute for Rural and Community Health at Texas Tech University Health Sciences Center. Additionally, Dr. Billings serves as a school board trustee for the Alpine Independent School District.





# Rural Surgical Deserts. All Fingers are not Equal: Addressing Surgical Inequity

by Izi Obokhare MD FACS FICS, Professor of Surgery TTUHSC Amarillo and Muhammad Haris Nazim FACS, FICS, MEHP Professor of Surgery TTUHSC Amarillo



Surgical deserts refer to underserved rural and urban geographical areas with absent or limited access to surgical care. These geographical areas either lack surgical facilities, surgical equipment or well-trained healthcare providers, resulting in limited access to life-saving procedures (1). Rural surgical deserts are plagued with increased morbidity and mortality as well as increased cost due to delay in care and transportation needed to receive care. For example, a patient with a common bile duct stone in a surgical desert presenting with symptoms of fever, right upper quadrant abdominal pain and jaundice will often require a general surgeon and a gastroenterologist for a laparoscopic or robotic cholecystectomy and endoscopic retrograde pancreatography for stone extraction. In a surgical desert, this patient will encounter a delay in care and may progress to cholangitis if not treated expeditiously; they will need to be transported either by vehicle or by air to the nearest facility with a gastroenterologist and surgeon with the adequate expertise to remedy this situation. If the patient is diabetic or immuno-compromised, even with the right antibiotic coverage, the mortality rate increases significantly when there is a delay in care.

A substantial portion of our country can be characterized as surgically underserved, despite several programs designed to provide healthcare services in underserved communities through enhanced reimbursement (2). The prevalence of surgical deserts is due to multiple factors which are difficult to surmount. These factors can be broken up into several major reasons such as geographical, insufficient human resources, economic barriers (limited facilities), and finally cultural/linguistic challenges.

#### **GEOGRAPHICAL ISOLATION**

Due to geographical isolation, patients must travel long distances to reach a specialist or subspecialist in that field. Amarillo Texas attracts patients from surrounding geographical locations including parts of New Mexico, Oklahoma, and other parts of rural North Texas. Although the population of the Amarillo metropolitan area is approximately 300,000 and growing, the population of the rural areas surrounding Amarillo is approximately 150,000 people and growing. Despite this population growth, the number of medical facilities has not increased to meet the needs of the growing population. Patients in rural Texas typically travel over 100 miles for a doctor's visit.

The growth of telemedicine has made a positive impact on rural access; unfortunately, invasive surgical procedures cannot be practiced via telemedicine. Examples include procedures ranging from preventive and screening services such as upper and lower endoscopies to life-saving emergency situations like blunt and penetrating trauma. The Texas Panhandle continues to face a scarcity of well-trained specialists and subspecialists in the field of surgery. To compound this problem, more than half of the surgical workforce in the Texas Panhandle will be of retirement age in 10 to 15 years. Due to geographical isolation, it is extremely difficult to recruit and retain surgical specialists and subspecialists in the area because most of them do not have family ties in the area.

# INSUFFICIENT HUMAN RESOURCES

Delivery and continuation of healthcare are made possible by having an adequate level of human resources. Efficiently running a surgical hospital or health care facility requires surgical staff ranging from the central supply manager, surgical instrument cleaners, OR nurses, first assistants, certified nurse anesthetists, anesthesiologists, cardiac perfusionists and surgeons. If any member of the team is absent or poorly trained, the volume and quality of health care delivered suffers. According to the analysis by Uribe-Leitz et al, a surgical desert with minimal access to surgical care has a benchmark of less than six general surgeons, six orthopedists and eight anesthesiologists per 100,0000 people per county. Despite increased technology, without the human factor providing interaction with the patients, the delivery of healthcare is impossible (3).

#### LIMITED FACILITIES

One hallmark of surgical deserts is the absence or limited number of health care facilities. While the expansion of Medicare and Medicaid coverage has been a lifeline to rural patients needing medical services, these benefits don't always extend to surgical services. In addition, medical facilities in surgical deserts depend on the availability of government support to remain financially viable. Recently the Big, Beautiful Bill was passed, but its impact on surgical deserts remains unknown. Keeping Critical Access Hospitals open will have a positive impact on morbidity and mortality of surgical patients. For a patient involved in a motor vehicle accident, local first responders will need to take the patient to the nearest trauma facility during the "golden hour," when more than 80% of the mortality after trauma can be prevented by arresting life-threatening bleeding. The term "golden hour" was coined by Professor Richard Cowley after his observations in Baltimore and in the second world war. He concluded that the vast majority of deaths within the first hour after polytrauma are due to massive head injury or exsanguination. The presence of a facility with health care professionals trained in conducting the Advanced Trauma Life Support (ATLS) primary survey significantly reduces mortality by arresting life-threatening bleeding. First responders and local hospitals need to be familiar with the management of these five crucial steps: Airway, Breathing, Circulation, Disability and Exposure (ABCDE) (4).

#### **ECONOMIC BARRIERS**

The impact of economic barriers can be felt from the standpoint of the patient, healthcare provider and the facility. Lack of insurance coverage or inadequate coverage can result in patients waiting until the last minute to receive medical care. End-stage surgical disease is not only costly financially due to the need for prolonged recovery periods and surgical intensive unit care, it often requires surgical subspeciality care. An example is a patient with a symptomatic ventral hernia who waits until the last minute to seek medical care and presents with gangrene of the bowel and a necrotizing soft tissue infection. Typically, hernia repairs are performed as a same-day procedure, but this patient will require a prolonged stay in the hospital, multiple surgical procedures and perhaps many days on the ventilator. This causes a strain on the already limited hospital resources. Ultimately, that patent may need to be transported to a tertiary medical facility for multidisciplinary care. At the end, the final hospital bill may be over a million dollars, to be covered via taxpayers' contribution (or not covered at all). Patients with adequate insurance coverage and the financial ability to seek care often seek specialized care and do so early, before such devastating complications can arise.

#### CULTURAL AND LINGUISTIC BAR-**RIERS**

Language barriers and cultural differences commonly seen in our rural patients can also pose an obstacle to the delivery

of timely and well-informed health care. Patients are more likely to be compliant with screening and preventive services if they understand the need for the service. Compliance with therapy and patient outcomes are closely related. In surgical deserts, an adequate number and sufficient diversity of the medical staff is crucial to improving the outcome of the patient. Several complex factors often interact to lead to racial or cultural disparities in the delivery of healthcare; however, at the core of this issue are language and educational barriers. According to Haider et al, systemic factors (low volume hospital, low capacity, large minority population with limited access) and patient factors (underinsured or uninsured patients with advanced presentation, greater disease burden and increased comorbidity), coupled with provider factors (low volume surgeon, bottom decile surgeon and few specialist referrals), contribute to worse outcomes in these populations (3). Lack of culturally competent providers can hinder or delay access to adequate surgical care for these diverse populations in surgical deserts.

#### **IMPACT OF SURGICAL DESERTS**

In short, the presence of surgical deserts has deleterious consequences for the health and well-being of rural residents by increasing morbidity and mortality through the delay of surgical intervention in patients with urgent and chronic conditions. Surgical deserts also aggravate health disparities by disproportionately affecting vulnerable populations, such as low-income individuals, minorities, and those with chronic health conditions. The major financial impact of surgical deserts is strain on the healthcare system and increased cost of access to timely and appropriate surgical care, often leading to prolonged care or travel long distances for treatment.

#### INTERVIEW WITH DR. JAY BLASINGAME FROM PERRYTON, **TEXAS**

(Jay Blasingame, M.D is an American Board of Surgery Certified Surgeon born and raised in Perryton, trained at Methodist Health System in Dallas Texas and practicing as a general surgeon in Perryton, Texas)

**IO:** what is the impact on the patient living in a surgical desert?

**JB:** Living in a surgical desert can be exceptionally challenging for our patients because the nearest higher-level facility is about 2 hrs. away in Amarillo. As a result, most patient present with a delay in care and, when they do arrive, they may be too sick for transport or may require ICU care. This often leads to delayed care.

**IO:** What is the impact on the community?

**JB:** Patients living in surgical deserts often lose faith and confidence in the medical care they receive, especially if there is lack of continuity of care after a referral is made. They may have to jump through many hurdles such as financial and geographical ones to get care at a tertiary center.

IO: What difficulties and challenges have you faced as a surgeon in a surgical

JB: There are many difficulties one would face out here. A good example was during the COVID- 19 pandemic, when transferring complicated surgical patients out was very difficult due to the lack of beds in other hospitals. At one time, I had to perform a complex operation with makeshift surgical abdominal wall retractors and an assistant who passed out during the procedure because that was her first time assisting in a complex procedure. The patient needed ICU care and there were no beds available.

IO: What potential solution or advice would you give to a surgeon working in a surgical desert?

JB: I would recommend developing an alliance or a network/support system locally and regionally. So, there is someone you can call right away if you need a specialist in a higher level of care center. It takes a team to get a sick patient well again. More importantly, as a surgeon, you have to know your limitations. Some patients would be best served at a facility with more resources. Identify those and send them as soon as possible.

**IO:** Looking ahead, where do you see the future of caring for patients in surgical deserts and the impact of the Big, Beautiful Bill?

JB: Facilities with reduced financial backing will face some difficulties and may close down, but facilities with a good financial foundation will thrive as safety net hospitals. Facilities in surgical deserts can bring in specialists and subspecialists on a weekly or monthly basis so patients can receive quality care in their own back yards. We can do a better job educating the patient on the need to seek medical care early to avoid requiring emergency

ing and retaining talented practitioners. Retaining physicians and practitioners can be achieved by offering financial incentives such as higher pay, sign-on bonuses, loan forgiveness programs, and housing support in order to encourage practitioners to relocate to underserved areas. In addition, specialists from surrounding urban centers can be hired to visit on a periodic basis, either weekly or monthly. An example is having an orthopedic surgeon or colorectal surgeon visit a surgical desert twice a month to provide service at that facility, so the patient does not have to travel many miles to get the same level of care. This may provide major benefits to the hospitals, the patients, and the community.

Expanding training programs: Increasing residency training spots for

The old mantra of train and retain is a proven strategy to build and sustain a robust workforce in surgical deserts.

Leveraging technology: Utilizing telemedicine and robotic assisted surgery has been a pipeline dream and is gradually becoming a reality. Used in combination, this technology will be a valuable tool to mentor, provide expert consultation and even perform remote surgery, potentially expanding access to surgical care in remote areas.

#### Strengthening existing resources:

Financial support for existing critical access healthcare facilities in rural areas can improve the capacity to provide excellent surgical care, particularly for emergency and preventative care. Developing and nurturing relationships with higher level centers can facilitate rapid transfer of patients through resource sharing.

Community-based initiatives promoting local programs and grant-funded programs such as the Cancer Prevention and Research Institute of Texas (CPRIT) has stepped up to fight colorectal cancer by providing education and screening services to the Texas Panhandle. Programs like this promote education of residents about surgical care by providing transportation assistance and culturally sensitive support that can help address social and cultural barriers to screening services.

Ultimately, addressing the unique needs of surgical deserts and fighting for surgical care equity requires collaboration among policymakers, healthcare organizations, professional associations, and local communities to ensure equitable access to essential surgical care for all individuals, regardless of their geographic location or socioeconomic status. State and national legislatures, organizations like the ACGME and the American College of Surgeons, surgical subspecialty organizations, and regional entities like Texas Tech School of Medicine need to redouble their efforts if we are to bring life to these surgical deserts.





surgical procedures.

#### POTENTIAL SOLUTIONS TO ADDRESS THE UNIQUE NEEDS OF SURGICAL DESERTS

Addressing the profound impact of surgical deserts on patient care and patient outcomes requires a multifaceted approach involving policy changes, workforce optimization and deployment and innovative customized solutions.

*Incentivizing practitioners:* Surgical deserts face extreme difficulty recruit-

surgeons with a focus on rural surgery is an excellent way to increase the number of surgeons equipped and mentored to practice in surgical deserts. According to an AAMC survey, about 66% of residents trained in Texas remain in the same area after training. Recently, the Accreditation Council for Graduate Medical Education (ACGME) approved 14 new training spots for general surgery residency in Amarillo. The residents will have elective rotations in rural towns such as Hereford and Perryton.to encourage graduates to practice in rural areas after graduation.

#### REFERENCES

- 1. Brînzac MG, Kuhlmann E, Dussault G, Ungureanu MI, Chereches RM, Baba CO. Defining medical deserts—an international consensus-building exercise. European Journal of Public Health. October 2023;33(5):785-788.
- 2. Belsky D, Ricketts T, Poley S, Gaul K. Surgical deserts in the US Counties without surgeons. Bulletin of the American College of Surgeons. Sept 2010:32-35.
- 3. Uribe-Leitz T, Esquivel MM, Garland NY, Staudenmayer KL, Spain DA, Weiser TG. Surgical deserts in California: an analysis of access to surgical care. J Surg Res. 2018 Mar;223:102-108. doi: 10.1016/j. jss.2017.10.014. Epub 2017 Nov 15. PMID: 29433860.
- 4. Marsden NJ, Tuma F. The polytraumatized patient. 2023 Jul 3. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan.
- 5. Haider AH, Scott VK, Rehman KA, Velopulos C, Bentley JM, Cornwell EE 3rd, Al-Refaie W. Racial disparities in surgical

care and outcomes in the United States: a comprehensive review of patient, provider, and systemic factors. J Am Coll Surg. 2013 Mar;216(3):482-92.e12. doi: 10.1016/j. jamcollsurg.2012.11.014. Epub 2013 Jan

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M. Haris Nazim, MD, FACS, FICS, FACCWS, CWSP, MEHP, is the Dr. William and Sue Hale Distinguished Professor

of Surgery, Regional Chair of Surgery, and Regional Assistant Dean for Quality Improvement at Texas Tech University Health Sciences Center in Amarillo. With more than a decade of experience in clinical care, surgical education, and public health, he has led transformative initiatives in rural and underserved regions of the Texas Panhandle, including launching new subspecialty services and securing ACGME accreditation for TTUHSC's General Surgery Residency Program on its first attempt. Dr. Nazim has directed major trauma system advancements at multiple hospitals, expanded cancer screening programs across 30+ counties, and published extensively on trauma, wound care, and rural health systems.





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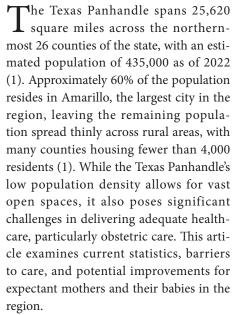




### **Rural Maternal Care Deserts** in the Texas Panhandle

by Joshua Briggs, DO; Delaney Sauers, MS4; and Teresa Baker, MD

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#### PROBLEM #1: PROVIDER AND **FACILITY SHORTAGES**

In Texas, four types of medical professionals provide obstetric care, each with varying scopes of practice: obstetrics and gynecology physicians (OBGYNs), family medicine physicians with obstetrics training, midwives, and family nurse practitioners (FNPs) (2). Among these, OBGYNs possess the highest level of specialized obstetric training and can handle any complication during pregnancy and delivery. Family medicine physicians (FM) with obstetric training have similar training as OBGYNs but cannot perform all the procedures that an OBGYN can. While midwives and nurse practitioners provide similar antenatal and postpartum patient care, midwives can independently oversee vaginal deliveries, while nurse practitioners cannot. Neither one of these professionals can perform cesarean sections, which can become necessary during delivery with little warning. Additionally, only physicians (OBGYNs and FMs) are able to admit and provide in-hospital patient care. The Texas Panhandle also

benefits from having OBGYN residents, or future OBGYNs in training, through the Texas Tech OBGYN Residency Program, which contributes significantly to patient care. Currently, there are 17 board-certified OBGYNs, 12 OBGYN residents, 5 family medicine physicians with obstetrics training, 3 midwives, and 9 obstetric nurse practitioners in the Texas Panhandle—an insufficient number for the region's needs.

Facilities for labor and delivery (L&D) are similarly scarce. Not all hospitals and clinics were created equally when it comes to obstetric care. Facilities must be equipped with the right personnel, equipment, and rooms to be able to provide labor and delivery services. Currently, the Texas Panhandle has 7 L&D facilities: 6 hospitals and 1 midwifery birthing center. While midwifery centers reduce some of the burden, they cannot perform cesarean sections, operative vaginal deliveries, intensive management of pre-eclampsia, or trial of labor after cesarean (TOLAC) patients. Patients requiring emergency procedures must be transferred to larger hospitals, such as BSA Health System or Northwest Texas Healthcare System. This lack of facilities exacerbates the challenges of providing timely and effective care across such a vast area.

#### COMPOUNDING THE PROBLEM: FINANCIAL AND DEMOGRAPHIC **CHALLENGES**

Payment for obstetric care presents another significant barrier for women. In 2019, the uninsured rate in the Texas Panhandle was 23.4%, significantly higher than state and national averages of 18.4 and 9.2 percent, respectively (3). While programs like Medicaid and CHIP are available, many women fall into a coverage gap, earning too much to qualify





but too little to afford private insurance (2,4). This problem is exacerbated by the fact that Texas, unlike most states, has not accepted federal funds for Medicaid expansion; so a woman has to be almost destitute for Medicaid to help pay for her obstetric care. Even for those who qualify, coverage inconsistencies create additional challenges. For example, Medicaid or CHIP may refuse to pay for standard obstetric services provided by OBGYNs, creating frustration for patients and providers alike. While midwives can relieve the burden, their services often come at a higher cost for patient due to out-ofpocket expenses.

Demographic factors further complicate the delivery of obstetric care in the Texas Panhandle. Travel distances for expectant mothers in the Texas Panhandle hinder access to care, making frequent prenatal visits logistically and financially burdensome for many patients. As a result, some women are forced to forgo essential prenatal care, jeopardizing both maternal and fetal health. In addition, Amarillo has become a haven for refugees from countries such as Afghanistan, Cuba, Haiti, Myanmar and Ukraine (5). While these individuals are brought to the area through resettlement programs and charitable organizations, they often lack health insurance and face numerous barriers to accessing care. Language and cultural differences, combined with the financial strain of adjusting to life in a new country, make it difficult for these populations to obtain consistent and comprehensive obstetric care. This unique demographic challenge underscores the need for culturally competent care and targeted resources to address the needs of underserved populations.

# POTENTIAL SOLUTIONS TO OBSTETRIC CARE SHORTAGES IN THE PANHANDLE

The most straightforward solution is increasing the number of providers and facilities, but this is complicated by the high cost, time commitment, and rigor of medical training. Board certified OBGYNs require an additional 12 years of schooling after graduating from high school before they can practice independently. Mid-level providers, such as nurse practitioners and midwives, help alleviate some of the burden but, again, cannot admit patients to the hospital or perform life-saving procedures like cesarean sections. Lastly, even if there were enough providers, rural clinics and delivery facilities often struggle to remain financially viable due to low annual patient volumes.

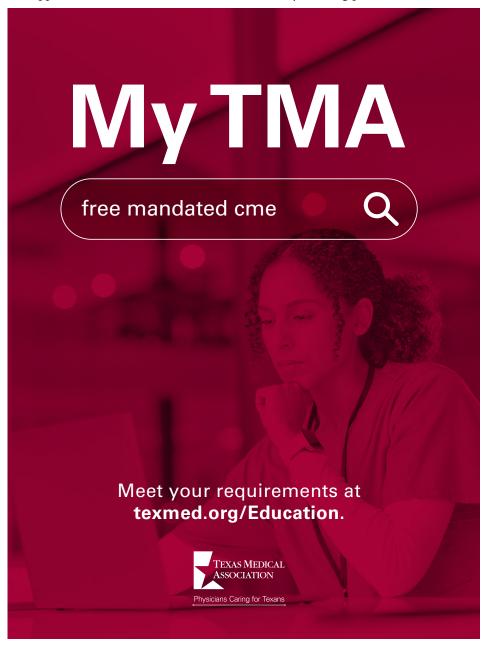
Despite these daunting challenges, efforts are being made to improve maternal health in the Texas Panhandle. Texas Tech University Health Sciences Center (TTUHSC) - Amarillo and its affiliated programs in the Texas Panhandle continue to be a hub for improving maternal health through ongoing research, medical training, and OBGYN clinics. Institutional priorities at Texas Tech School of Medicine encourage rural healthcare, and Tech selectively accepts medical school applicants who have an interest in rural medicine. Additionally, the accelerated three-year Family Medicine Accelerated Track (FMAT) program offered through the School of Medicine allows students to graduate early and begin practicing sooner, with the option to train in obstetrics. These programs aim to address provider shortages by encouraging physicians to remain in West Texas after completing their train-

Texas Tech's research efforts also contribute to improving maternal health. One notable project is the National Institutes of Health (NIH)-funded VIBRANT Moms study, which aims to collect data on maternal experiences and access to care. The study focuses on improving

outcomes for pregnancy complications, such as pre-eclampsia, and offers hope for developing evidence-based interventions to enhance care (6). This ongoing research highlights TTUHSC's commitment to not only create solutions to address maternal health disparities in the Texas Panhandle but also to incorporate our community partners in a multi-layered approach.

Community organizations also play a crucial role in supporting expectant mothers. Programs such as Catholic Charities, Haven Health, and informal local church initiatives provide essential services, including transportation to medical appointments, financial assistance, and access to healthcare (7,8). As mentioned in the article in this issue by Casie Stoughton, Amarillo Public Health will soon be opening a women's clinic at 850 Martin Road, where social workers and Medicaid nurse navigators will be available to help smooth a women's entry into the system. As trusted advocates, these organizations help bridge the gap for women who might otherwise struggle to access necessary care, offering a lifeline to some of the region's most vulnerable populations.

Telemedicine could offer a promising solution for bridging the gap in prenatal care. By allowing patients to consult with



healthcare providers remotely, telemedicine may reduce the need for travel and enable more frequent remote check-ins. Expanding telemedicine services in the Texas Panhandle could help ensure that more women receive consistent prenatal care, even in remote areas. However, implementing telemedicine requires reliable internet access, which is not always available in rural regions, as well as technological competency. Addressing infrastructure challenges, especially broadband access, is therefore a critical component of expanding telemedicine services.

Policy changes are also necessary to address the financial barriers to care. Reforming Medicaid and CHIP to provide more immediate comprehensive coverage for obstetric services would alleviate the financial strain on both patients and providers. Care is often delayed to the patient's detriment by delays in Medicaid or CHIP approvals. Additionally, increasing funding for rural healthcare initiatives and incentivizing providers to work in underserved areas could help attract and retain highly qualified healthcare professionals who desire to practice in the Texas Panhandle.

#### **CONCLUSION**

The Texas Panhandle faces significant challenges in providing obstetric care to its most vulnerable residents. The combination of provider shortages, limited facilities, high uninsured rates, and unique demographic factors creates a complex and multifaceted problem. However, ongoing efforts by institutions like Texas Tech University Health Sciences Center, community organizations, and healthcare providers offer hope for the future. By addressing these challenges through a combination of training programs, research, community support, telemedicine, funding and policy reforms, the Texas Panhandle can move closer to ensuring that every mother and baby receives optimum care, ensuring safe and healthy outcomes. While the road ahead is long, the commitment and resilience of the Texas Panhandle's healthcare community provide a strong foundation for progress.

#### REFERENCES

- 1. Hope Osborn, https://texas2036.org/posts/ get-to-know-texas-panhandle/
- 2. https://www.dshs.texas.gov/maternalchild-health/healthy-texas-mothersbabies/providers
- 3. https://comptroller.texas.gov/economy/ economic-data/regions/2022/high-plains.
- 4. https://www.medicaid.gov/chip/index.
- 5. https://refugeelanguage.org/about/ amarillo/
- 6. https://www.vibrantmoms.org/home
- 7. https://cctxp.org/programs/josephsproject/
- 8. https://www.havenhealthamarillo.com/

After spending over a decade in pharmaceutical sales, Dr. Joshua Briggs and his family decided to pursue his true calling of medicine. After experiencing the unique joys and diversity of clinical rotations, OB/GYN called him for a lifetime of service. He and his kids are excited to train/live here in the Texas Panhandle, with TTUHSC Amarillo serving such a diverse population.

Delaney Sauers is currently a third-year medical student at the Amarillo campus of the Texas Tech Health Sciences Center School of Medicine. She is applying for OBGYN residency this year and is excited for her last year of school and all that is to come afterwards. Her hobbies include reading, powerlifting, and being a cat mom to a 4 year-old tabby cat, Ruthie.

Dr. Teresa Baker is professor and chair of the Obstetrics and Gynecology department at Texas Tech School of Medicine in Amarillo. Originally from Hereford TX, she trained at the University of Texas Southwestern in Dallas, completing her residency training in the Parkland Hospital system in Dallas. She is a fellow of the American Board of Obstetrics and Gynecology. Her primary interests are teen pregnancy, postpartum depression, and promoting preventive medicine for the women of the Texas Panhandle, as well as medical student and resident education at TTUSOM.

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# Bridging the Gap: Neonatal Intensive Care in Rural Texas

by Mackenzie Romero, BSN, RN and Dena Shapley, MSN, RN, NE-BC



Imagine being pregnant, living in a small rural town, and needing immediate care for your baby who was born prematurely or had complications following birth. And consider that the Panhandle is huge, with 26 counties covering a 26,000 square mile area, with most residents in the central hub of Amarillo (1). Finally, realize that 1 in 9 infants in Texas are born prematurely, leaving rural families with limited options when their infant requires higher level of care (2). You can well imagine, then, that access to highlevel neonatal care is a challenge for many communities in the Texas Panhandle.

A Neonatal Intensive Care Unit (NICU) provides critical care for many of these types of newborns, but in the Panhandle only two units are qualified to provide this specialized type of care. This article will explain the differing levels of neonatal care services, the risks associated with rural births, the options for neonatal transport, and the support services available for families to improve outcomes and provide community outreach and education in the Panhandle.

# UNDERSTANDING NICU LEVELS OF CARE AND SERVICES

In the state of Texas, there are four levels of care available for Neonatal services. These levels range in complexity, from Level I (the least complex) to Level IV (the most complex). The Department of State Health Services (DSHS) characterizes these levels as the following:

- Level I: Newborn Nursery (healthy uncomplicated births)
- Level II: Special Care Nursery (low risk complications & uncomplicated late preterm neonates)

- Level III: Neonatal Intensive Care (moderate to high-risk complicated births, critically ill neonates, prematurity of any viable gestational age, and subspeciality services including moderate risk surgical intervention)
- Level IV: Advanced Neonatal Intensive Care (high-risk complicated births, critically ill neonates requiring complex services such as high-risk cardiac, respiratory, neurological, and surgical interventions)

BSA Hospital and Northwest Texas Healthcare Systems, both located in Amarillo, offer Level III Neonatal services, providing immediate access to higher levels of care for this community. Within the 26 Panhandle counties are 17 hospitals, but only 9 have obstetrical services available; 7 of these hospitals have a Level I or II nurseries. For neonates born at a rural facility who require Level III or IV services, immediate transfer is usually necessary (3, 4, 5).

#### RISKS IN RURAL HEALTHCARE

In the state of Texas, 17% of the total population lives in a rural area (6). Living in a rural area limits the options for healthcare delivery. Due to the limited number of rural hospitals in the Panhandle offering obstetrical services, mothers have fewer opportunities to receive prenatal care locally and are often forced to travel long distances for specialized medical services. This can lead to an increased maternal risk for complications and can delay diagnosis, which may lead to unfavorable outcomes for both the mother and infant. Furthermore, the March of Dimes has determined that up to 30% of neonatal deaths occur due to prematurity and birth complications (2). When these urgent or emergent situations requiring NICU care arise, rural hospitals will require the services of a neonatal transport team.

## NEONATAL TRANSPORT FOR THE RURAL COMMUNITY

When complicated births are anticipated in rural communities, BSA Hospital and Northwest Texas Health Systems both provide mobile NICU transport teams, readily available for infants who require care beyond the capabilities of a rural Level I or II facility. NICU transport teams assist with stabilization and safe transport to a higher level of care. The team is comprised of highly skilled registered nurses and respiratory therapists who become a lifeline for these babies and families. They utilize ground ambulances, helicopters, or fixed wing aircraft for transportation; they carry specialized equipment to support the team during lifesaving events, functioning as a mobile extension of the hospital. Often, rural facilities can experience challenges to neonatal transport including weather delays, limited resources, and time-sensitive emergencies impacting the odds of survival or long-term outcomes. The knowledge and skill set of the NICU transport team provide a solution for challenges faced in these rural communities.

#### **FAMILY SUPPORT SERVICES**

For rural families, admission to the Neonatal Intensive Care Unit can be physically, emotionally, and financially draining. Parents will face stressors that include:

- Isolation from family & emotional support systems
- Limited ability to participate in the newborn plan of care
  - Missed work & financial challenges
- Lack of local housing & transportation to and from the hospital

It is vital that families receive local support services when they are faced with these types of burdens. In an urban area such as Amarillo, community services are readily available to provide the assistance and resources necessary to alleviate these stressors. Hospital and community services include:

- On-site social work and case management
- Spiritual care
- Remote cameras including Angel Eye & NicView, allowing family members to live-stream their baby in the NICU
  - Family support groups
- · Temporary housing including Ronald McDonald House and League House
- Grant funding through Children's Miracle Network

These resources help families to better navigate these unique obstacles and sometimes heartbreaking situations. Family support services that use a holistic approach to meet each family's individual needs are crucial during NICU hospitalization.

#### **COMMUNITY OUTREACH** & EDUCATION

Connecting rural community hospitals with larger urban hospital NICUs through outreach and education is vital when striving to improve care for newborns and their families. By building strong partnerships with these rural facilities, NICU teams can provide hands-on training, higher level education courses and certifications, immediate phone consultation, and shared protocols to support local rural providers. Rural providers are then able to recognize early signs of neonatal distress, begin the stabilization process for transport while awaiting the teams' arrival, and provide early education for families using resources and tools given to them by the NICU teams. By participating in NICU education and outreach, NICU teams can foster continuity of care by ensuring that rural hospitals feel supported before, during, and after a

neonatal transfer. Follow-up phone calls are made when a NICU receives a patient that has been transferred to ensure that our rural facilities are left with peace of mind after a patient has left their facility. By investing in these relationships, NICUs are able to extend their areas of expertise and help build a more resilient and equitable healthcare model in rural areas—one that prioritizes every newborn, regardless of their zip code.

#### CONCLUSION

Access to high-quality neonatal care should not be determined by geography, yet families in the Texas Panhandle face significant barriers due to the limited availability of specialized services in rural communities. With only two Level III NICUs serving the Panhandle, timely care for the premature or critically ill newborn remains a pressing challenge. Through coordinated neonatal transport, family support services, and continued investment in community outreach and education, hospitals in Amarillo are working collaboratively to improve outcomes. Bridging the gap in NICU access can ensure that every baby, no matter where they are born, continues to thrive.

#### REFERENCES

- 1. https://texas2036.org/posts/get-to-knowtexas-panhandle/
- 2. https://www.marchofdimes.org/peristats/ reports/texas/prematurity-profile
- 3. https://www.dshs.texas.gov/dshs-emstrauma-systems/neonatal-systemdevelopment
- 4. https://publications.aap.org/pediatrics/ article/151/6/e2023061957/191305/ Standards-for-Levels-of-Neonatal-Care-II-III-and?autologincheck=redirected
- 5. https://www.panhandlerac.org/hospitals-1
- 6. https://www.americashealthrankings.org/ explore/measures/pct\_rural\_b/TX

Mackenzie Romero is a seasoned neonatal nurse and healthcare leader in the Texas Panhandle who currently serves as a NICU Manager and Neonatal Transport Team member. Mackenzie is actively pursuing her Master of Business Administration with an

emphasis in Healthcare Management to enhance her leadership skills and to drive system-level change in maternal and neonatal care. With over a decade of experience caring for infants, Mackenzie is dedicated to helping bridge the gap between the rural health platform and the NICU. When she isn't busy working or doing schoolwork, she enjoys spending time with her husband and 3 children, as well as traveling and being outdoors.

Dena Shapley has been in women, infant, and children's healthcare for over 30 years and is currently the Director of Women, Infant and Children at BSA Hospital. Dena received her BSN from Texas Christian University and her MSN-Administration from the University of Texas at Tyler. She is currently pursuing her Doctorate of Nurse Practice at the University of Texas at Arlington to advance her skills as a nurse leader. Dena lives in a small town in the Texas Panhandle with her husband and their two dogs and enjoys fly fishing, golf, tennis, and gardening.





# Community Paramedicine at Hereford Regional Medical Center: A Model for Rural Healthcare Innovation and the Use of EMS for Home Visits.

by Terry Hazlett, EMT-Paramedic & Esmeralda Florez, LMSW Hereford Emergency Medical Services and Hereford Regional Medical Center



#### INTRODUCTION

Rural communities across the United States face significant healthcare challenges, including limited access to primary care, transportation barriers, and higher rates of hospital readmissions. These issues contribute to poorer health outcomes and increased healthcare costs. To address these gaps, innovative care models such as Community Paramedicine (CPM) have emerged as promising solutions. CPM programs involve educated and trained Emergency Medical Services (EMS) providers who deliver preventive and follow-up care within the community, often reducing unnecessary hospital utilization (5).

The national trend toward value-based care emphasizes reducing readmissions and improving patient satisfaction, especially in underserved areas. According to recent data, rural hospitals experience higher readmission rates compared to urban counterparts, often exceeding 20% (6). Implementing CPM programs tailored to rural needs can help bridge healthcare gaps, improve outcomes, and foster community trust.

In 2022, Hereford Regional Medical Center (HRMC) / Hereford EMS launched a CPM initiative aimed at improving post-discharge care and reducing readmission rates. Despite initial challenges, the program has demonstrated substantial benefits, offering a replicable model for other rural communities.

#### ABOUT HEREFORD, TEXAS

Hereford, located in Deaf Smith County in the Texas Panhandle, has a population of approximately 14,700 residents (1). The community is renowned as the "Beef Capital of the World," with a strong agricultural economy.

Demographically, the population is predominantly Hispanic (81.5%), with White (16.3%) and American Indian (1.3%) minorities (2). The median household income is \$51,799, with 12.4% living below the poverty line (3).

Access to healthcare remains a challenge; 26% of Deaf Smith County residents lack health insurance, a number significantly higher than the Texas average of 20.7% (4). Transportation issues, language barriers, and shortages of primary care providers further exacerbate health disparities. These social determinants of health necessitate innovative approaches like CPM to ensure better health outcomes.

clinical skills to provide preventive care, chronic disease management, and social support services.

Research indicates that CPM programs can reduce hospital readmissions by as much as 30% in some settings, while also improving patient satisfaction and engagement (8). This approach aligns with the broader shift toward patient-centered care (9), emphasizing prevention and early intervention.

Nationally, successful CPM programs have integrated technology such as telehealth and electronic health records (EHRs) to facilitate communication among providers and ensure continuity of care (9). These innovations are crucial



## PURPOSE AND BACKGROUND OF COMMUNITY PARAMEDICINE

CPM program evolved from the need to extend healthcare services beyond traditional settings, especially in rural areas with limited healthcare infrastructure (7). The model leverages EMS personnel's

in rural settings, where healthcare access barriers are prevalent.

#### PROGRAM IMPLEMENTATION

The Hereford CPM program was funded through a state grant dedicated to rural health innovation, covering start-up

costs, supplies, and transportation vehicles. During planning, stakeholders (including hospital administrators, EMS leadership, and local physicians) collaborated to tailor the program to community needs.

The program initially targeted Medicare beneficiaries, with enrollment open to all discharged patients as capacity increased. Each patient received a comprehensive pre-discharge assessment, including review of social determinants and medical needs. Enrollment was voluntary and was provided free to eliminate financial barriers.

Post-discharge, patients received three structured visits: initial, follow-up, and discharge. These visits focused on reviewing discharge instructions, medication reconciliation, home safety assessment, and addressing social needs like transportation and food security. The team utilized physicians, mid-level healthcare providers, social services, and EMS providers to address the critical needs that were identified

The Team collaborated to deliver equipment such as blood pressure monitors, glucometers, and medication organizers, which improved adherence and self-management. The use of mobile electronic health records enabled realtime documentation and communication among team members.

#### CHALLENGES ENCOUNTERED

Implementing the CPM program was not without hurdles. Staffing shortages due to EMS response volume led to rescheduling and delays. To mitigate this, the team adjusted scheduling and expanded roles for other healthcare providers.

Geographic limitations restricted visits to within city and county lines, requiring coordination with neighboring jurisdictions. Reporting requirements for the grant posed additional challenges; the state's requirements changed frequently, and instructions were often unclear, caus-



ing delays in submission. To address this, the team designated staff members dedicated to compliance and data management.

Language and cultural barriers also posed significant obstacles. Many patients had limited English proficiency, and the lack of interpreter services in rural areas impeded effective communication. To improve cultural competence, staff received training in culturally sensitive care, and bilingual team members were recruited to foster trust and understanding.

Mental health crises among community members escalated during the COVID-19 pandemic, leaving EMS providers frequently responding to behavioral health emergencies without adequate mental health infrastructure. Rural communities face unique social determinants that impact health outcomes, including food insecurity, transportation barriers, and limited access to behavioral health services (11). Addressing these challenges requires innovative approaches, such as providing Mental Health First Aid training to Team Members and integrating behavioral health support into community-based programs. Additionally, recruiting and retaining qualified EMS personnel for CPM roles remains a significant challenge due to workforce shortages. Sustaining these programs depends on ongoing education, competitive compensation, and the formal recognition of EMS providers' expanded responsibilities.

#### THE ROLE OF EMS IN COMMUNITY **PARAMEDICINE**

EMS professionals play a fundamental role in the success of Community Paramedicine programs. Their unique education, training, experience, and 24/7 availability position them to deliver high-quality care directly to patients, even in non-emergent settings. Community paramedics leverage their clinical assessment skills, emergency response background, and familiarity with the community to provide in-home care that bridges gaps between hospital discharge and outpatient follow-up.

Despite their essential contributions, EMS professionals are too often referred to as "ambulance drivers"—a term that undermines their clinical expertise and education. This outdated label fails to reflect the true scope of their responsibilities, which extend far beyond patient transport. CPMs are highly skilled healthcare providers capable of making critical clinical decisions, initiating life-saving interventions, and managing complex patient needs in diverse settings.

EMS personnel are critical to the success of CPM initiatives. Their skills extend beyond emergency response to include chronic disease management, health education, and social support. In the Hereford program, EMS providers conducted medication reconciliation, blood pressure monitoring, and environmental assessments, which are vital for preventing hospital readmissions (12).

Education for EMS providers in community health principles, cultural sensitivity, and mental health first aid enhances their capacity to deliver holistic care. Certification programs and ongoing education ensure they stay current with best practices.

#### **PROGRAM OUTCOMES**

Before program implementation, HRMC's hospital readmission rate was approximately 55%, a common rate for rural hospitals (13). After initiating CPM, the rate decreased dramatically to 33%. In 2023 there were no early readmissions and HRMC did not incur any medicare Penalties. This reduction not only improved patient outcomes but also resulted in significant financial savings, as readmissions are costly and often unreimbursed (14).

Patient satisfaction surveys indicated high approval, with many patients expressing appreciation for the personalized, in-home care. Community feedback reinforced the program's value, fostering trust and engagement.

Long-term sustainability depends on continued funding, partnerships with insurers, and community buy-in. Expanding services to include mental health screenings and social support could further improve outcomes.

#### **CONCLUSION**

The Hereford CPM program exemplifies how rural healthcare systems can leverage community-based, patient-centered approaches to improve outcomes and reduce costs. Its success underscores the importance of multidisciplinary col-

laboration, culturally competent care, and innovative use of technology. As more rural communities adopt similar models, lessons learned from Hereford can guide best practices and policy development.

The CPM program at Hereford Regional Medical Center demonstrates the transformative potential of innovative, patient-centered care in rural healthcare settings. Its success reflects the dedication, adaptability, and collaboration of a multidisciplinary team committed to improving outcomes beyond traditional clinical environments.

By addressing both medical conditions and key social determinants of health—such as access to care, transportation barriers, mental health issues and health literacy--the program has achieved a substantial reduction in hospital readmissions and an improvement in overall patient satisfaction. These outcomes contributed not only to better quality of care but also to enhanced financial performance and operational efficiency. The program's recognition by the state leadership underscores its value as a replicable model for rural health systems seeking to close gaps in care, reduce avoidable hospitalizations, and enhance community well-being.

#### REFERENCES

- 1. United States Census Bureau. Annual estimates of the resident population: April 1, 2020, to July 1, 2023. https://www.census.gov
- United States Census Bureau. P2 Hispanic or Latino, and not Hispanic or Latino by race: 2020 Census. https://data.census.gov
- Texas Demographics. Hereford demographic statistics. https:// texas-demographics.com/hereforddemographics
- 4. United States Census Bureau. 2023 American Community Survey 5-Year Estimates. https://www.census.gov
- Flores G. Language barriers to health care in the United States. N Engl J Med. 2006;355(3):229–231.
- 6. Singh GK. Rural-urban disparities in health care access, mental health, and health outcomes. Am J Public Health. 2019;109(Suppl 4):S389–S392.
- 7. Brown CV, Stokes E, Kahn J. Community paramedicine: a review of the literature.

- Prehosp Disaster Med. 2018;33(2):129–135.
- 8. Hartung DM, et al. Impact of community paramedicine programs on health care utilization and costs: a systematic review. J Am Coll Emerg Physicians Open. 2020;1(4):e124–e132.
- EMS Agenda 2050: A People Centered Vision for the Future of Emergency Medical Services
- 10. Mears G, et al. Technology integration in community paramedicine: a case study. J Paramed Pract. 2021;13(3):144–150.
- Williams DR, et al. Social determinants of health and rural health disparities. Ann Rev Public Health. 2020;41:339–359.
- 12. Patel MS, et al. The role of EMS in managing chronic disease and social determinants. Ann Emerg Med. 2019;74(6):835–841.
- 13. US Department of Health and Human Services. Rural hospital quality improvement report. 2022.
- 14. Medicare Payment Advisory Commission. Hospital readmission reduction program: impacts and future directions, 2023.

Terry Hazlett, EMTP brings over 40 years of experience in pre-hospital care to her work as the EMS Director at Hereford Regional Medical Center in Deaf Smith County, Texas. A dedicated public servant, she retired from the Hereford Volunteer Fire Department after 17 years of service. During her time with the department, she held key leadership roles as Communications Captain and Secretary. Terry actively contributes to regional emergency preparedness efforts as a member of the Panhandle Regional Advisory Council (RAC), where she serves as Chair of the Regional Preparedness Committee. In recognition of her outstanding leadership and service, she was honored as the EMS Administrator of the Year at the Texas EMS Conference in 2021.

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Mental Health Task Force, the Hereford Cancer
Coalition, and the L'Allegra Study Club.



## **Bridging the Divide:** The Role of Telehealth in Rural Healthcare

by Ariel Santos, MD, MPH, FACS, FRCSC, FCCM Professor and Chair, Department of Surgery, TTUHSC Lubbock

Tealth care is increasingly becoming Ltechnology-driven, and its utility is still evolving. We all experienced how telehealth can remotely deliver effective and personalized health care services during the recent pandemic. Telehealth can improve access, reduce barriers to care in rural areas, improve patient outcomes, lower costs, and give a better patient and provider experience. Kruse et al conducted a literature review to examine the association of telehealth and patient satisfaction and noted that telehealth decreases travel time, improves communication with providers, increases access to care, and leads to an increase in the patient's self-awareness, while empowering them to better manage their chronic conditions (1).

The United States is faced with the problem of physician shortage, and this significantly affects Texas, with 224 counties classified as Health Professional Shortage Areas (HPSAs) as of December 2022, impacting over 15 million people (2). By 2030, it is projected that Texas will be short of about 20,420 physicians (2). In 2021, 71 counties in Texas had no hospital facilities, and 11 had no emergency medical services (EMS), forcing residents to travel long distances for basic and emergency care (3). Texas leads the nation in rural hospital closures, and current primary care physician and specialist shortages will likely worsen healthcare inequities in rural areas. Telehealth can potentially mitigate this problem. Telehealth can bring primary care physicians (PCPs) and specialists to the rural areas using remote technology. It can potentially prevent clinician burnout by enhancing work-life balance through flexible work locations and schedules, reducing physical travel and exposure to infectious agents, improving collaboration and support among staff, and increasing work efficiency by streamlining workflows and access to specialists. All of these factors can potentially improve recruitment and retention of physicians (4).

Rural health can benefit from evolving virtual health care delivery, including regular wellness checks, physician-to-physician referral for specialty care, patient care coordination for tele-stroke, tele-ICU and tele-trauma, and remote patient mon-



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itoring to manage chronic diseases such as diabetes mellitus, congestive heart failure, and hypertension. Wearable technology like smart watches or smart rings can track sleep patterns, oxygen saturation, heart rate, and temperature to provide accurate and real time monitoring, thus improving awareness and empowerment to the patient. Because of their geographic remoteness, several rural areas in Texas are also considered pharmacy deserts, where patients may be required to drive 50 to 100 miles (or more) to get diagnostic tests done or medication filled. Rural health care may be further benefited by the advancements in drone technology; drones can be used to deliver lifesaving medications and even point-of-care test kits. Mobile clinics can be used to provide appropriate screening and testing for rural patients. These telehealth resources together can provide increased convenience for both patient and providers, as well as improved healthcare delivery.

Sadly, despite the availability of Telehealth technology, we have not fully capitalized on the benefits of virtual healthcare, especially in rural areas. Texas Louisiana Telehealth Resource Center (TexLa TRC) recently did a survey on the barriers to adopting telehealth, and they found several contributing factors, including: poor health care provider buy-in, lack of training and education in telehealth, lack of technological support (especially broadband access), and challenges with reimbursement. Medicare telehealth coverage, including the ability to receive services from home at any U.S. location, has been significantly restricted after October. To address inadequacies in education and training, the Association of American Medical Colleges (AAMC) published "Telehealth Competencies Across the Learning Continuum" in March 2021, which is currently being revised to promote a more robust telehealth curriculum in medical schools (and in other healthcare disciplines).



Wide adoption of telehealth can definitely mitigate physician shortage, poor healthcare access and disparity of health care in rural areas but will need provider buy-in and education, infrastructural support with technology and broadband access, electronic health record interoperability, governmental support in regulations governing telehealth and reimbursement, and patient buy-in to the technology. With the development in artificial intelligence and technology, a comprehensive, value-based and personalized virtual health care will not be a remote possibility but the future standard of care in delivery of health care.

#### REFERENCES

- 1. Kruse CS, Krowski N, Rodriguez B, Tran L, Vela J, Brooks M. Telehealth and patient satisfaction: a systematic review and narrative analysis. BMJ Open. 2017 Aug 3;7(8):e016242. doi: 10.1136/ bmjopen-2017-016242. PMID: 28775188; PMCID: PMC5629741.
- 2. https://ciceroinstitute.org/research/texasphysician-shortage-facts/
- 3. Jafri SH, Gandhi S, Osei E. Physician deserts: navigating the Texas terrain of provider supply and demand with GIS mapping. Healthcare (Basel). 2024 Nov 29;12(23):2397. doi: 10.3390/ healthcare12232397. PMID: 39685019; PMCID: PMC11640980.
- 4. Ward MM, Merchant KAS, Carter KD, Zhu X, Ullrich F, Wittrock A, Bell A. Use of telemedicine for ED physician coverage in Critical Access Hospitals increased after CMS policy clarification. Health Aff (Millwood). 2018 Dec;37(12):2037-2044. doi: 10.1377/hlthaff.2018.05103. PMID: 30633684.
- 5. https://store.aamc.org/downloadable/ download/sample/sample\_id/412/

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## When Beds Are Full: Negotiating the Logistics of **Rural Emergency Department and Hospital Care**

by Kaitlyn Moseley, MD

My coffee is lukewarm, and the sound of a ventilator penetrates through the walls of my makeshift office. It's bleating punctuates the awful elevator music projecting through my phone while I wait on hold. The older male on the ventilator is stable, and I am waiting on transport to take him to a hospital with an ICU.

This is the third call I have made to find an accepting pediatric ICU for my patient in room 2. All of the facilities closest to us are full. When I speak with the PICU doctor of a facility 5 hours away, she lets me know that my patient is on the waitlist. She outlines what her care plan would be, in theory. She also quickly mentions that a competing hospital near her may have a bed. I thank her profusely. She can't give a formal consultation, but she has given me time and all of the information I need to take care of my patient while we wait. I make my fourth call and, sure enough, the second hospital has an open bed. I feel a deep sense of gratitude toward the PICU doctor, for doing the right thing by a patient in a system stretched thin.

This ER has six beds to serve the ten thousand people in the town. We have ten beds on the general ward, and, on a good day, we might be able to admit two patients (if discharges line up just right).

The gentleman in Room 3 broke his hip. He is comfortable and stable. He is third on the list for a ticket out of here so that he can get surgery tomorrow.

The woman in Room 4 has a urinary tract infection and has sustained a fall. We have her treated and stabilized, but she will need to be in the hospital for additional days of antibiotics. We don't have open beds in the general ward. She has been accepted by a larger hospital and her family will drive her to prevent the extra wait.

Only two rooms in the ER are not currently occupied with patients pending transfer. I hope silently that the rest of the night doesn't include any more patients that need to be admitted or transferred.

The phone rings at the empty nurse's station. That isn't a rare sight when we are running a quasi-ICU with two nurses. I answer the phone, and the front desk tells me that another patient is here.

While I speak to the patient from triage, I hear the familiar static and alarm from the dispatch radio with the robotic voice announcing, "respond to sick person" and the confirmation from EMS that they are en route to our ER with its one empty bed.

The next week, I arrive to my ward shift at a larger hospital. My coffee sits next to my full list. I have 6 new patients on my already-long roster--among them, a man who had emergency surgery overnight and a patient with a stroke.

I quickly see the most critical patients and assess their care. A patient in diabetic ketoacidosis requires another day of continuous insulin infusion. The patient who had a stroke is getting neuro exams every hour to ensure we are aware of any complications.

As I make my way through the floors, I'm asked about patients ready for discharge so that the daily game of "hospital bed shuffle" can be planned. My patient down the hall has been waiting for several days for an open bed in a larger medical center for a procedure. Others are stalled while for insurance approval to go to rehab or a skilled nursing facility. And it's Friday. If insurance doesn't approve their stay by the afternoon, they may all be stuck here until Monday. I silently curse the 8 to 5 schedules of insurance companies that are incompatible with a continuously running hospital.

I reach the last patient of the day: a woman who was sent from an outside hospital overnight for a UTI. I take a sip of my lukewarm coffee and rub the bridge of my nose in frustration. A UTI is so easily treated, and there is no reason for transfer. I abruptly curb that train of thought. Just a few days ago, the beds were full at my small-town hospital. I transferred a patient just like this, too-not because it was too difficult of a case. but because "full" happens fast in a place that small.

In moments like these, it is easy to only see the "inconvenience." The patients who "shouldn't' have been transferred, or who show up sicker than expected. The waitlists, the endless phone calls, the incompatible EMR systems, the stacks of patient records. We are all working to make the best calls we can with the limited space, staff, and time that we have. We have a shared struggle--a quiet camaraderie forged in the knowledge that we are all just trying to do what is right by our patients.

Kaitlyn Moseley is a recent graduate of the TTUSOM Family Medicine residency program and is now working as a hospitalist at Baptist/ St. Anthony's Hospital. She has been a member of the Panhandle Health editorial board for the past 3 years.



## **Hereford's Howard Johnson:** 60 years...and counting...of Rural General and Obstetric Practice

by Steve Urban, MD, MACP

There's longevity in medical practice... and then there's Howard Johnson. Howard came to Hereford right out of his internship in 1965 and today continues to see patients in the office and to deliver babies. He has seen a lot in those years—some changes for the better, some the worse—but the principles that he operates by haven't changed. His bywords have been honesty and fairness in his professional dealings. Howard's Christian faith enjoins him to treat all patients the same, regardless of ethnicity or financial status--he puts the golden rule to work in his everyday dealings. Looking back on these 60 years, Howard is proud of the care he has delivered—and I mean delivered, since almost 8500 newborn babies have him to thank for their safe passage into this world. Howard is proud that he and his colleagues in Hereford have done "a darned good job" in caring for their community. This paper is the product of a fascinating and wide-ranging interview with this remarkable and still-lively man.

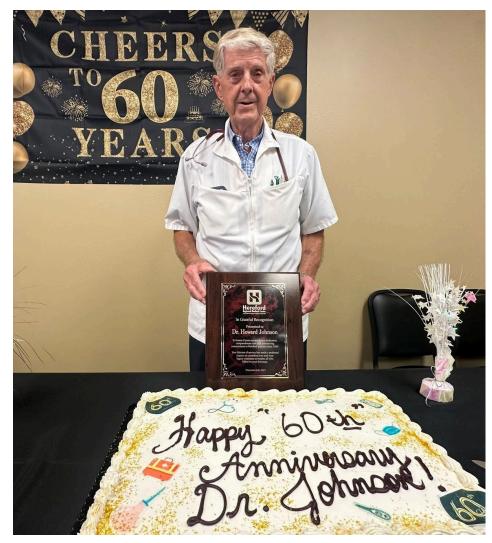
#### TRAINING AND EARLY PRACTICE IN HEREFORD

Howard Johnson was raised all over the place--in Nebraska, Illinois, and California -- as his family followed his Methodist minister father, who was eventually called to service in World War 2. After the war, the family settled in Chicage. Howard graduated from high school in Marissa, IL and later from the University of Tulsa. He attended medical school at the University of Oklahoma and completed his rotating internship at St. Anthony's Hospital in Oklahoma City in 1965. As his time to look for a job approached, a classmate pointed out an advertisement in The Oklahoma Medical Journal for an opening in Hereford, Texas. The friend liked the offer and persuaded Howard to have a look at the positionand one look was all it took. After visiting Hereford and meeting several members of the medical community, Howard was sold--he didn't look any further. He had found his practice home for the next 60 years.

What attracted Howard to Hereford? It was primarily the quality of doctors and the medical community that he found there. Hereford at that time was bustling; there were plenty of specialists to consult on complicated cases—including internists, 2 general surgeons (one with thoracic privileges), a pediatrician, and an on-site radiologist. His colleagues were more interested in providing care than striking it rich, and their collegiality—including their willingness to come out at night when they were needed—was remarkable. Howard comments that he had "lots of backup" as a young physician. Community spirit was strong and, more importantly, his fiancée Carolyn (now his wife of 60 years) liked the place.

#### **OBSTETRIC PRACTICE**

Obstetric care has represented an important part of Dr. Johnson's practice over the years. He is now delivering



babies to his third generation of Hereford women. Howard has delivered many a baby in the back of a car or in an ambulance. He laughs that he has probably delivered half of the current employees of the Hereford hospital! He remembers the days when fetal ultrasound and fetal monitors were nonexistent, when it was standard for a woman to spend three days in the hospital after an uncomplicated first delivery—situations almost unthinkable to the young obstetricians of today. But he appreciates the improved outcomes that many of these changes have brought about. He appreciates too the help that specialists in Amarillo have provided to his complicated OB patients and their babies. In the 60s and 70s he valued the care of pediatricians like Dr. Maurice Dyer, but Howard marvels at the transformation that came about in the late 1970s when Dr. Mubariz Naqvi brought modern neonatal intensive care to Northwest Texas Hospital. Having a modern Neonatal ICU represented a sea change in the management of these fragile babies.

Delivering over 8000 babies has not come without a cost—and not just the sleep lost running out to the hospital at midnight for a delivery. The demographic mix in Hereford has changed, and now Dr. Johnson acknowledges that he loses money on most deliveries. Howard jokes that he has delivered "a lot of free babies". He estimates that 30% of his OB patients now have no health insurance at all and that approximately 60% are on Medicaid. It is an unfortunate fact that Medicaid reimbursement for OB care doesn't cover the costs. Still, Dr. Johnson loves the satisfaction and happiness that attend the birth of the children he's delivered. Indeed, when I called him to speak about this interview, he had just returned from assisting with yet another delivery!

#### ADVANCES IN RURAL HEALTH CARE OVER THE PAST 60 YEARS

Sixty years is a long time to practice medicine, and it only stands to reason that Howard Johnson has seen many changes for the better. In the 60s and 70s, glucometers and pulse oximeters were research tools. It took hours for the lab to run simple chemistries, and managing diabetic ketoacidosis was a major logistic challenge (not the algorithm-driven routine process of today). There was no laparoscopic surgery. Just imagine the stress of an anesthesiologist who has to work without the help even of a pulse oximeter. Howard affirms that surgical care is so much safer today.

In the olden days, there were no modern ambulances and no EMTs. "Ambulances" were hearses owned by funeral homes and were only useful for transport, not for care (for an article about the important role of a modern EMT system for rural health care, see the article in this issue by Jeff Barnhart). Howard recalls accompanying a patient with a cervical fracture to Amarillo, riding in the in the back of a hearse and manually stabilizing the neck during the bumpy 50-mile ride to Amarillo! As mentioned above, modern obstetric and neonatal care have made the perilous peripartum time much safer for mother and child alike.

Although many of the subspecialists who were in Hereford in the 60's and 70's have moved on, Howard appreciates advances in cardiac and ICU care. He particularly appreciates surgeons and cardiologists who periodically drive to Hereford from Amarillo to deliver their specialized care locally.

#### CHALLENGES FACING THE RURAL PRACTITIONER OF TODAY

Despite the many positive advances in technical care. Howard criticizes some of the administrative and structural changes in the American health system. Although he appreciates the benefits of having Medicare and Medicaid to provide a safety net for the elderly and poor, he decries the bureaucracy that these systems engendered—bureaucracy that has now spread to privately-funded health care. Like most of us, he is dismayed by the time spent seeking prior authorization for obviously necessary care.

Rural hospitals are crucial to the survival of small towns, and bureaucratic requirements put stress on hospitals as well as office practice. New Medicare and Medicaid regulation require a burgeoning cadre of administrative personnel just to keep up with the changing requirements. The penalties for early readmissions have proven to be a particular burden for smaller hospitals. In this regard, Howard praises Hereford's innovative system of using EMT personnel to make early home visits to ensure compliance and to prevent bounce-backs (see the article by Hazlett and Florez in this issue). Howard feels that it has been very helpful in reducing the number of early readmissions.

The demands of the Electronic Medical Record have slowed down his practice as well; whereas he once could see 30-40 patients in an office day, the time spent with documentation has cut this down to 20-23. Howard still sees patients in the examination room without the interposition of a computer screen between them. He believes that a listening attitude and good eye contact make a difference--that the patient is less likely to disclose personal, private information with an impersonal computer (much less an AI scribe!) in the room. As a consequence, he has fewer appointment slots, and some patients have to resort to Urgent Care or Emergency Center care in Amarillo for problems once easily managed in the office.

Howard looks back on COVID time as an unsettling period for rural and community care. ICU beds were unavailable in Amarillo and often in Lubbock and Oklahoma City as well. The Hereford hospital had to keep ventilated patients in its own overwhelmed system. Howard remembers that stable hospitalized patients were housed in tents and that nursing care was often delivered by expensive and less committed "traveling nurses." Some Americans now forget how traumatic that time really was for rural practitioners and rural patients alike.

A perennial challenge for rural communities is recruiting and retaining physicians. Howard prizes the personal relationships and community values of small-town America. He has been very happy with his church life and with the quality of education that his 2 children received in Hereford schools. But, keeping the spouse—often a big-city man or woman-satisfied with small town life can be an uphill climb. Hereford's relative proximity to Amarillo, with its shopping and entertainment opportunities, helps somewhat, but it is obvious that the number of doctors-not just surgeons and specialists, but family doctors and obstetricians--has declined over the years.

## DEMOGRAPHIC AND BEHAVIORAL CHANGES IN THE PATIENT POPULATION

In terms of the Hereford patient population, Howard has noticed the increased prevalence of drug use in the rural population. He is distressed by the way that vaping has replaced cigarette smoking a vehicle for nicotine addiction. But Howard reserves most of his dismay for obesity, which has become rampant, especially in the Hispanic population. Whereas kids used to get outside to play baseball or basketball for recreation, now they stay inside, often keeping to themselves and playing video games all day long in the summer and after school.

The ubiquity of cell phone use also bothers Howard. This habit doesn't just affect the children, but also their parents. Howard says that it's a common occurrence for parents to bring their young children in for an office visit and then sit engrossed in their cell phones while he's trying to elicit a history and perform an exam. Howard suspects that the smartphone habit has affected interpersonal skills. He notes that his young patients—especially young men—seem taciturn, less likely to make eye contact, and often unable to communicate their symptoms or questions.

Another challenge facing rural practitioners in our area is difficulty accessing

mental health care especially psychiatric care—in our region. The prevalence of mental health issues is rising and, although an experienced primary care doctor like Howard can handle the common issues of mild to moderate depression and anxiety, it is hard to get more seriously ill patients into the system. For want of psychiatric beds in Amarillo, he some-

times has to admit seriously depressed patients to the hospital, with 24-hour attendants and suicide precautions on a regular ward, while awaiting inpatient transfer. This is an issue that is also addressed elsewhere in this issue (viz. the article on rural mental health by Coyne and Veeramachaneni).

## HOWARD JOHNSON REFLECTS ON HIS 60 YEARS IN HEREFORD

Despite the whirlwinds of change that he has witnessed, Howard is positive about his medical career and the impact he has had on the community of Hereford. Howard says that his Curistian faith has undergirded his practice since day one. He says that his priorities are: Jesus first, others second, and self third. He values honesty in all his interactions, especially in his interactions with patients. He can tell the hard truth with empathy and humility. In his professional interactions he values collegiality and teamwork. Although a few bad apples have come through Hereford in his 60 years, Howard tells me that the vast majority of his colleagues have been hard-working and dedicated to their patients. Despite the challenges mentioned above, Howard is proud of the quality of care that he and his colleagues have delivered. He is proud too that some of the high school students that he has mentored—he mentions Drs. Teresa Baker and Brian Eades, in particu-



lar--have gone into medicine. Perhaps his professionalism in the delivery suite (they are both Ob/Gyns) has had an effect on their careers. Finally, Howard cherishes his family, his community, his God-given health and stamina, and his church as critical factors contributing to his longevity in service to the people of Hereford.

When the Panhandle Health editorial board was searching for topics and authors for our fall issue on Rural Health, we consulted family physician Dr. Trevor Rohm, who is actively engaged in the rural Family Medicine rotation for TTUHSC in Amarillo. Trevor gave us great advice regarding topics and potential authors. Then, at the end of our session, Trevor said that any issue on rural medicine needed to give honor to his colleague Dr. Howard Johnson. Trevor described Howard a model physician, hard-working even into his mid-80's, ethical in practice and humane in his dealings with patients. We took him up on this idea, as you can see. In my 40 years in Amarillo, I have known Howard by reputation only. When I got to meet him for this interview, his still-acute intellect and warm heart came through almost immediately. I can see why Trevor considered Dr. Johnson to be a paragon of rural practitioners. The Panhandle as a whole and Hereford in particular have been blessed to have this hard-working and upright physician in our midst for these 60 years.

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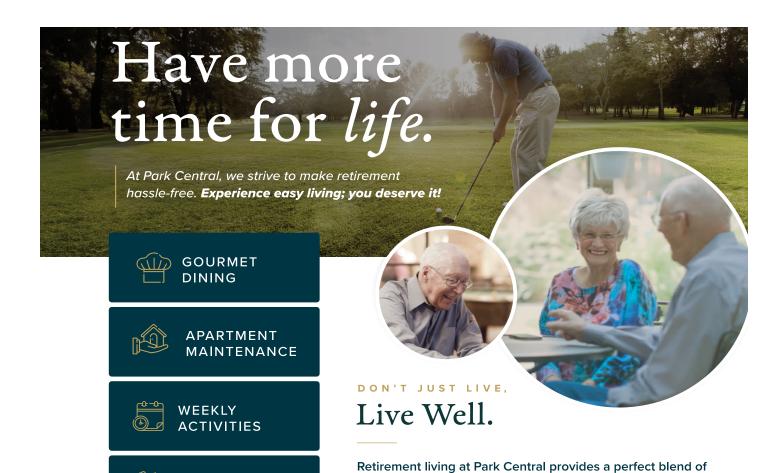
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