



KY STEM Brief from the Kentucky Academy of Science

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Science and technology are ever-changing, and new developments require sound legislation. The Kentucky Academy of Science (KAS) is a local resource for scientific knowledge. Each month we'll send updates to you about scientific developments affecting our state. We are committed to providing non-partisan insights that translate science into actionable policy, with the goal of supporting informed legislative action. When senators and representatives need expert scientific advice, our policy group is here for you.

Improving Healthcare Disparities and Access in Rural Kentucky

Residents of rural Kentucky face unique health challenges due to healthcare disparities caused by infrastructural, geographic, economic, and sociocultural barriers. They are disproportionately disadvantaged due to persistent gaps in access to primary and specialty health care, which translate into poorer outcomes, higher preventable morbidity and mortality, and local economic strain. Kentucky ranks low in primary care availability, with dozens of rural hospitals, and maternity services at financial risk. Contributing factors include a shortage of primary care providers, struggling rural hospitals operating on thin margins, geographic barriers, and socioeconomic disparities in historically underserved communities. To protect health and strengthen rural economies, state legislators can address the multifaceted nature of healthcare access issues in rural Kentucky, to improve public health outcomes and enhance economic development. Policies can address the healthcare provider shortage by expanding the rural health workforce through targeted incentives and training pipelines, improving transportation and telehealth infrastructure, providing mobile clinics, and stabilizing rural hospitals through targeted finance reforms.

Problem Description

Rural Kentucky bears a disproportionate burden of chronic diseases such as cardiovascular disease, diabetes, adverse maternal-child outcomes, and substance use disorders. Poverty, low educational attainment, and food insecurity interact with limited health resources to widen disparities. Rural residents live far away from healthcare facilities and are underserved by a fragmented health system. These barriers contribute to health disparities.



Rural Areas Have Fewer Health Care Providers

Providers by the numbers (per 10,000 people):

Total Physicians

13 in rural vs. 33 in urban



Obstetricians



6% of the nation's OB-GYNs work in rural areas

Primary Care Providers



Many rural communities have lost their hospitals:



<https://nihcm.org/publications/rural-areas-have-fewer-health-care-providers>

1. **Healthcare Provider Shortages:** The Health Resources and Services Administration (HRSA) designates large portions of Appalachia as Health Professional Shortage Areas (HPSAs). The Bureau of Health Workforce's 2025 report shows persistent shortages of primary care providers, mental health professionals, and dental practitioners. The healthcare workforce problem is not simply a supply issue but also a distribution problem (Cronin, 2023). Providers are concentrated in urban centers, leaving rural populations underserved.
2. **Geographic Barriers and Infrastructure Limitations:** Rural residents face longer travel distances to reach primary, specialty care, or emergency services. Limited public transit, long distances, and high out-of-pocket travel costs pose practical access barrier. Simultaneously, uneven broadband coverage for reliable telehealth services, which could otherwise mitigate provider shortages, further complicates access and limits care continuity.
3. **Rural Hospital Financial Fragility and Service Loss:** Small rural hospitals operate with very narrow financial margins and rely heavily on Medicaid and Medicare reimbursement. Recent reporting indicates that a large share of Kentucky's rural inpatient hospitals operate at negative margins, and many are at risk of closure (Lane



Report, 2024). Approximately 25% of Kentucky's rural hospitals are at risk of closure, and 6% are at immediate risk of closure within the next two to three years (Becker's Hospital Review, 2025). Hospital closures and service downgrades increase travel times for urgent and obstetric care, raising maternal and neonatal risk, and decreasing timely access to emergency care. Closures also lead to the loss of local healthcare access, economic decline due to job losses, and a reduction in emergency response capacity in already underserved rural communities.

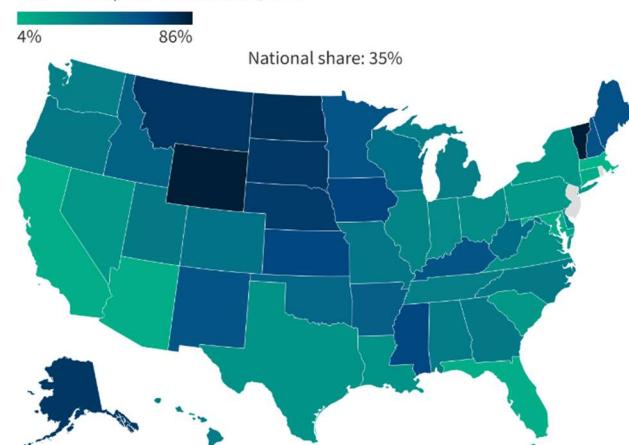
4. **Medicaid Reliance and Coverage Dynamics:** Recent analyses emphasize that changes to Medicaid funding or eligibility could put dozens of rural facilities at immediate financial risk. Kentucky's 2014 Medicaid expansion significantly extended coverage to low-income adults and materially improved access for many rural residents. However, Medicaid enrollment volatility, administrative barriers, or any cuts to Medicaid funding would disproportionately harm rural hospitals and low-income patients who rely on public coverage.

The federal government has taken steps to support rural health, including the Centers for Medicare and Medicaid Services' 2023 announcement of 200 new Medicare-funded residency slots for underserved areas. However, the distribution of these slots remains skewed toward urban institutions, limiting their potential impact on rural workforce development (United States Government Accountability Office (GAO), 2017).

<https://www.kff.org/health-costs/10-things-to-know-about-rural-hospitals/>

Rural Hospitals Account for 35% of All Community Hospitals Nationwide and at Least a Third of All Hospitals in Most States

Share of hospitals in rural areas, 2023



Policy Recommendations

State legislators can adopt these actions to reduce rural healthcare disparities and strengthen access:

1. **Expand, Incentivize, and Diversify the Rural Health Workforce:** Evidence suggests that *medical residents are more likely to practice in areas where they complete their training*. Fund scholarships, loan-repayment, and residency rotations targeted at students from rural Kentucky and underserved backgrounds who commit to three to five-year rural service agreements. Create a provisional licensing pathway for experienced international medical graduates with extensive foreign practice who secure a supervisory agreement to address physician shortages in rural areas. Increase funding and regulatory flexibility for nurse practitioners (NPs), physician assistants (PAs), and community health workers in rural clinics.



2. ***Improve Transportation, Broadband expansion, and Telehealth Infrastructure:*** Pilot Medicaid-funded non-emergency medical transportation (NEMT) innovations like ride shares or volunteer driver programs tied to primary care and prenatal appointments to reduce missed appointments and increase preventive care. Currently, broadband services cost more in rural areas compared to those in urban America. Tax incentives should be provided to companies that offer internet services to facilitate broadband expansion and ensure the availability of affordable broadband services to rural residents, clinics, and healthcare anchor institutions. Telehealth services cannot reach their full potential without such support.
3. ***Fund Mobile Clinics and Stabilize Rural Hospitals through Targeted Finance Reforms:*** Provide funding for Mobile clinics to serve isolated communities. Community education programs and preventive services, such as screenings, can help reduce healthcare costs. Create a *rural hospital stabilization fund* that provides time-limited bridge funding for essential hospitals meeting defined community service criteria, such as maternity care, emergency department services, and inpatient care. This can prevent sudden closures while longer-term restructuring occurs. Implement a one-time appropriation with matched federal funds where possible. Fund local care navigators and community health workers to help patients enroll in benefits, schedule appointments, and access social support, reducing no-shows and improving chronic disease management outcomes.

Conclusion

Health disparities in rural Kentucky can be addressed by targeting investments that stabilize essential services and build sustainable capacity. By expanding access to care, investing in infrastructure, and supporting the recruitment and retention of healthcare professionals, we can ensure that the residents of our rural communities receive the quality healthcare they deserve. Kentucky policymakers can lead by crafting policies that are practical and centered on rural community needs by blending workforce development, hospital stabilization, transportation solutions, telehealth/broadband expansion, and the provision of mobile clinics. Access to quality healthcare is critical to protecting the lives of Kentuckians and preserving our rural economy.

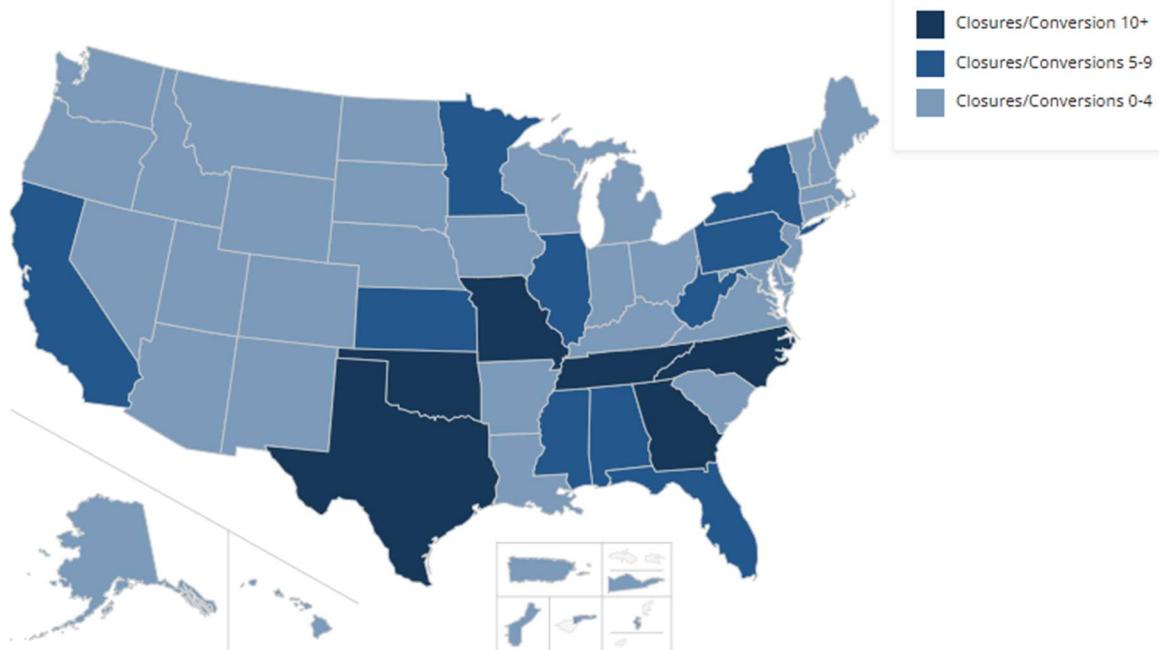
RESOURCE OF THE MONTH

 [Map](#) of rural hospital closures/conversions by state, 2005-2023



Rural hospital closures/conversions by state, 2005–present

[Switch View ▾](#)



Source: National Conference of State Legislators, August 2023

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