



Rural workforce recruitment and retention factors

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Introduction

The United States continues to grapple with a severe and worsening shortage of health care professionals, particularly in rural areas.¹ The Health Resources and Services Administration (HRSA) reported that as of September 2023, approximately one-third of the nation's population lived in a primary care health professional shortage area (HPSA), 77 million lived in a dental health HPSA, and almost half lived in a mental health HPSA.² Workforce shortages in rural areas strain local economies, with primary care physicians contributing significantly to economic stability.³

The burden of health care shortages is disproportionately placed on rural communities and their health care facilities.³ HRSA data shows that there were 23,664 HPSAs in September 2023, of which 56.67 percent were in rural areas and 3.83 percent in partially rural areas. For primary care, dental, and mental health HPSAs, the percentages designated as rural were 66.32, 66.75, and 61.87, respectively.² These shortages exacerbate inequities in health care access, straining local economies and reducing service availability.⁴

The maldistribution of health care workers is stark: while 20 percent of the U.S. population lives in rural areas,³ only 10 percent of physicians practice in these communities.^{4,5} This disparity aligns with broader patterns seen in rural areas, where health care workforce maldistribution creates medical deserts — areas with insufficient health care access due to geographic, social, or economic barriers.⁶ This maldistribution exacerbates inequities in access, resulting in longer wait times, reduced service complexity, and fewer health care resources overall.⁵ Targeted policies are needed to address these disparities, particularly in areas classified as medical deserts.⁶

Despite various programs aimed at addressing these shortages, their effectiveness has been limited, suggesting the need for additional strategies.^{5,6,7} This policy brief delves into factors that influence the recruitment and retention of both clinical and non-clinical health care professionals in rural settings.⁸

Non-institutional factors, part of the social determinants of health framework, are critical to workforce retention.⁹ This brief examines four key non-institutional factors affecting rural health care workforce recruitment and retention.⁹⁻¹⁰ Each of these factors presents unique challenges that can significantly impact health care professionals' decisions to live and work in rural areas.^{9,10,12}

1. Economic stability
2. Neighborhood and built environment
3. Social and community context
4. Education access and quality

ⁱ A 2022 study by the Rural Health Research Center found that for every dollar invested in rural physician recruitment and retention programs, there was a return on investment of \$3.50 in terms of health care savings and economic impact.¹¹



Analysis

The shortage of health care professionals in rural areas has been a persistent and growing challenge for decades, extending beyond physicians.¹³ The U.S. Bureau of Health Workforce projects a shortage of 29,400 nurse practitioners by 2025 and a shortage of 95,000 nursing assistants by 2030 across the nation.¹⁴ Additional analysis reveals that over 50 percent of rural physicians are aged 50 or older, highlighting the potential impact of impending retirements on already strained health care systems.¹⁴ This shortage forces many rural facilities to rely on expensive locum tenens providers and face increased costs due to avoidable hospitalizations.¹³

Rural residents have to travel an average of 17 minutes longer than urban residents to reach the nearest hospital offering definitive care.¹⁵ The increased travel time has significant consequences, increasing mortality risks in emergency situations and complicating the management of chronic conditions.¹⁶ Moreover, the financial stability of rural health care facilities is precarious, with workforce shortages and recruitment challenges placing additional stress on already vulnerable systems.¹⁶ A study evaluating rural residency training programs found mixed success in addressing workforce shortages, highlighting the importance of community support and broader strategies to improve retention.¹⁷

Institutional strategies

To address rural workforce retention challenges, various institutional strategies have been implemented including:

- Internal recruitment and leveraging best-fit job placement strategies¹⁸
- Culturally safe human resources practices¹⁸
- Governance and culture improvements¹⁸
- Financial incentives (e.g., moving/relocation bonuses, student loan forgiveness)¹⁹
- Scope of practice adjustments²⁰
- Participation in loan repayment programs²¹

While these strategies have had some success, their effectiveness varies widely depending on local context and implementation.⁵ For example, loan repayment programs have shown promise, but their long-term impact on retention is mixed, as they often fail to address systemic barriers such as childcare and spousal employment.^{9,20} In contrast, rural training programs have demonstrated more consistent success, showing that physicians who complete rural residencies are two to three times more likely to practice in rural areas long-term.²⁰ These programs often succeed because they emphasize community integration and tailored support, which are critical for retention.¹⁸

Non-institutional factors

Non-institutional factors are those outside of an individual health care organization's control and may not require organizational participation for health care workers to experience them, including:²²

1. **Economic stability:** The economic challenges in rural areas are significant. Research has shown that economic barriers in rural areas create a complex cycle where limited health care access and economic instability reinforce each other, affecting health care workers and the communities they serve.^{33,34} While the median home value in rural areas is \$167,400 compared to \$256,700 in urban areas as of 2022, lower salaries in rural areas often offset this difference.³⁵ Furthermore, a recent review identified that 20 percent of rural health care workers cited affordable housing as a significant barrier to retention.³⁶ Spousal employment opportunities, another critical factor, rank among the top three reasons influencing workforce decisions to stay in rural practice.^{9,37} Economic stability is influenced by both institutional

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factors, such as financial incentives and governance, and non-institutional factors, such as community integration and quality of life.³¹

Institutional factors

- Equitable compensation and benefits packages¹⁰
- Regular market salary compensation analysis³⁸
- Living wage for hourly workers³⁹⁻⁴¹
- Bonuses or stipends to offset moving, temporary housing, or childcare costs^{24,42}

Non-institutional factors

- Cost of living³⁵
- Educational attainment and job type⁴³⁻⁴⁴
- Access to alternative job opportunities for dual-income households (spousal satisfaction)²²
- Availability, access to, and affordability of childcare⁴⁵⁻⁴⁶

2. **Neighborhood and built environment:** This element includes the availability, quality, type of, access to, and affordability of housing; geographic location; distance from amenities and built environment infrastructure; and living conditions. Housing has become a significant focus in recent years due to unprecedented price increases and rising interest rates. Nearly 1 in 5 rural renters spend more than 50 percent of their income on housing.⁵⁰ The Housing Assistance Council's research shows that 24 percent of rural renters were cost-burdened in 2022, spending more than 30 percent of their income on housing.²³ This financial strain can deter health care professionals from choosing to work in rural areas.

Rural communities also face significant housing supply challenges. Limited housing stock, combined with aging inventory, creates barriers to attracting new residents, including health care workers. High construction costs, limited access to building materials, and a shortage of skilled labor further impede the development of new housing.⁵¹ The lack of short-term and rental housing for locum tenens providers and traveling health care workers further exacerbates recruitment challenges. Many locums are forced to rely on costly hotel accommodations, making rural assignments less desirable. Addressing these gaps through targeted incentives and public-private housing partnerships can alleviate these barriers and improve workforce sustainability in rural health care systems.^{24,52-53}

3. **Social and community context:** Quality of life, social cohesion, discrimination, and civic participation all influence recruitment of health care workers. Staffing rural areas may be perceived as unattractive^{40,43} due to isolation, limited resources, and fewer professional opportunities.^{6,54}

While nearly 20 percent of the rural population identify as non-white, only 10.8 percent of rural physicians are from underrepresented minority groups.⁵⁵ Racial concordance between health care providers and patients improves communication and patient satisfaction, highlighting the need for increased diversity in the rural health care workforce.⁵⁵⁻⁵⁶

Successful models of community-based recruitment and retention programs for health care workers in rural areas include:

- The Framework for Remote Rural Workforce Stability, which encompasses nine key strategic elements grouped into three main tasks (plan, recruit, and retain), has been identified as an effective strategy for improving workforce retention in rural areas.⁵⁷ By integrating targeted interventions and community collaboration, it creates sustainable workforce stability.⁵⁸
- Community-based participatory research⁵⁹⁻⁶⁴ has proven effective for increasing recruitment and retention of health care workforce in rural health initiatives, particularly for cancer prevention studies by establishing co-learning opportunities, participatory procedures, and community capacity-building initiatives.



- Evidence suggests that health care professionals from rural backgrounds are more than twice as likely to remain in rural practice, highlighting the importance of recruiting individuals with rural ties.^{9,58,65}

4. **Education access and quality:** Access to higher education and professional development opportunities; quality of local schools for health care professionals' families; community engagement hubs; and workforce pipelines are all critical factors to rural recruitment and retention.

Health care professionals are more likely to move to and stay in rural areas if they know their children will have access to good schools.⁵⁶ Recent data demonstrates that rural 8th grade students scored an average of 7 points lower in reading and 5 points lower in math compared to their urban counterparts.⁶⁶ Rural areas are disproportionately affected by childcare shortages, with 58 percent of rural populations residing in childcare deserts compared to 44 percent in urban areas.¹³⁻¹⁴

Further, access to professional development and continuing education opportunities help health care workers stay updated with the latest medical practices and advancements.^{22,56,67} The increased prevalence of remote work has improved rural recruitment and retention in health care through several mechanisms:^{9,68}

- Providing flexibility and work-life balance
- Offering alternative options for balancing work and childcare responsibilities
- Reducing geographic barriers and expanding the candidate pool
- Enabling access to specialists and executive-level leadership
- Supporting dual-career households through spousal remote work opportunities

Policy recommendations

NRHA proposes the following evidence-based policy recommendations, which emphasize the importance of integrated approaches combining educational, regulatory, financial, and professional support strategies.⁵⁶

1. **Develop a comprehensive rural health care workforce index.** Create a new metric that incorporates both institutional and non-institutional factors affecting recruitment and retention. Task HRSA with developing and maintaining this index, in collaboration with the US Department of Agriculture (USDA) and the Bureau of Labor Statistics. The index will provide a more nuanced understanding of rural workforce challenges and help target interventions more effectively.^{9,56,70}
2. **Expand USDA Rural Development Community Facilities Program.** Addressing housing and childcare shortages will significantly improve recruitment and retention efforts by targeting key non-institutional factors. NRHA recommends restoring funding for the USDA Rural Development Community Facilities Program to 2023 levels (\$2.8 million) and plan for incremental increases of up to 25 percent over a three-year period, with a specific focus on expanded programs for health care worker housing and childcare facilities in the next Farm Bill authority.^{24,71}
3. **Create tax incentives for rural health care organizations.** Establish a new tax credit for rural health care organizations that invest in community infrastructure, including housing, childcare, and educational facilities.⁷²
4. **Establish a federal rural health care workforce task force.** The Administration, in partnership with the US Department of Health and Human Services and USDA, should release an executive order to create an interagency task force to coordinate rural health care workforce initiatives across federal agencies.⁷³
5. **Enhance rural education initiatives.** Amend the Higher Education Act to expand the Teacher Education Assistance for College and Higher Education (TEACH) Grant Program to include a specific rural health care focus.⁷⁴



6. **Expand subsidies for rural childcare programs.** Addresses the critical non-institutional factor of childcare availability and affordability by increased funding for childcare programs in rural areas through USDA Rural Development initiatives.²⁴
7. **Create greater flexibility for rural health care facilities to invest in workforce housing.** Directly addresses the housing challenges faced by rural health care workers by allowing rural health care facilities to lease or purchase housing units for workers without adverse impacts on cost reports or reimbursement.⁷⁵
8. **Establish CME grants for rural health care professionals.** Addresses the educational access and quality factor, potentially reducing burnout and improving retention by creating specific continuing education and professional development grants for rural health care professionals.³²

It is anticipated that the policy recommendations in this brief could realistically achieve a 30 percent reduction in rural HPSA designations within five years, with sufficient and sustained funding.⁸⁰ Moreover, these initiatives could generate an estimated \$2.5 billion in annual rural economic activity. Research shows that a single rural primary care physician supports 26.3 jobs and generates nearly \$1.4 million in labor income within their local community.⁸¹ Critical access hospitals also contribute significantly, producing an average of \$7.1 million in total wages and \$1.8 million in taxable retail sales annually.⁸² Overall, investments in rural health care workforce programs have demonstrated a return on investment of \$3.50 for every dollar spent through health care savings and broader economic impacts.⁸³⁻⁸⁴ The multiplier effect of each health care job created in rural areas can support an additional one to two jobs in the local economy.⁸⁵

Conclusion

The recommendations outlined in this brief have the potential to significantly improve rural health care access. The persistent shortage of health care professionals in rural America requires a multifaceted approach that addresses both institutional and non-institutional factors. By implementing these comprehensive, evidence-based recommendations that address economic stability, the built environment, social and community contexts, and education access, we can build a stronger, more resilient rural health care system that serves all Americans, regardless of where they live.^{9,56} As we implement these recommendations, it will be crucial to continue researching and understanding the complex interplay of factors that influence rural health care workforce dynamics. By doing so, we can create sustainable solutions that will attract and retain health care professionals in rural areas for generations to come.^{57,86}



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