ScientificScholar®
Knowledge is power
Publisher of Scientific Journals

https://ijmsweb.com

Indian Journal of Medical Sciences

Article in Press

Short Communication

Rural health: Scope for improvement in return on investment

Rebecca Pratiti[1]

[1]Department of Medicine, TeamHealth Lutheran Main Hospital, Fort Wayne, Indiana, United States.

ABSTRACT

A significant proportion of the U.S. population live in rural areas with lower population density. Although rural residents tend to be older with more chronic diseases requiring specialists and nursing home care, they have less access to healthcare services. More than half of non-metropolitan counties are considered Primary Care Health Professional Shortage Areas (HPSAs). Although Federally Qualified Health Centers (FQHCs) with government funding mostly provide primary care services in underserved areas, they operate under a narrow profit margin, leading to difficulty in recruiting and retaining healthcare providers. Furthermore, lower population density in rural areas leads to a lower total number of visits in rural clinics. Physician shortage is increasing; doctors have preferentially moved toward cities for better career opportunities, higher pay, and urban amenities. FQHC funding, creating a rural track in medical education, and student loan repayment programs have facilitated improving the physician shortage in HPSA regions. Studies have suggested that these programs support physicians working in rural regions. Still, a significant care gap exists between rural and urban health. Further policy changes should be inculcated for care gap closure. To decrease healthcare provider attrition, part of the funds may be directly invested at primary provider levels by providing tax credits for those who work part-time in rural HPSAs, which would indirectly translate to better salaries without affecting access to urban amenities. Policy changes could support providers to remain in the role for a longer period and motivate older physicians to remain in practice part-time, especially during semi-retirement. In addition, providing telemedicine specialist services to patients from rural HPSA regions could be incentivized by adding a modifier for rural regions that could nearly bring the reimbursement to the cost of in-person visits. Subsequently, this has allowed more specialist clinics to pursue telemedicine to cover rural areas. National medical organizations could provide additional training and support for rural providers through dedicated rural medicine-based conferences and continuing medical education programs. This two-pronged approach to increase primary provider part-time out-migration to rural communities and to increase specialist telehealth access may improve rural health.

Keywords: Health policy, Health providers, Rural health centers, Rural population, Telemedicine

INTRODUCTION

A total of 46 million U.S. residents living in rural areas in 2020 made up 14% of the U.S. population, with a typical rural county containing 23,000 people as compared to 245,000 people in an urban county.[1] Residents living in smaller and more isolated rural settings often face greater difficulties accessing provisions and services, including healthcare services. Trends in U.S. rural and urban populations over the past decade suggest more urban migration.[1] Fifteen percent of rural residents are over age 65, compared to 12% in urban areas, suggesting that rural residents tend to be older and thus require more chronic disease management, specialist care, and nursing home care.[2] According to 2018 data, there are approximately 2.9 doctors/1,000 inhabitants in the U.S.[3] Furthermore, the generalist-to-population ratio is lower in rural regions: 1:1,282 in urban areas versus 1:1,754 in rural areas.[2] More than 50% of non-metropolitan counties are consequently considered Primary Care Health Professional Shortage Areas (HPSAs), while parts of the rest of the non-metropolitan counties are HPSAs. [2]

NEED FOR ENHANCING RURAL TRACK IN MEDICAL EDUCATION AND FEDERALLY QUALIFIED HEALTH CENTERS

A measure taken to mitigate physician shortage in rural areas is the development of a rural track in medical education. Rural-based training is strongly associated with providers continuing in rural practice, with the additional benefit of preparing physicians for problems specific to the rural regions.[2] In addition, Federally Qualified Health Centers (FQHCs) are Health Center Program Award Recipients providing primary care services in underserved areas.[4] FQHCs play a major role in providing healthcare in underserved areas comprising certain rural regions. In

***Corresponding author:** Rebecca Pratiti, Department of Medicine, TeamHealth Lutheran Main Hospital, Fort Wayne, Indiana, United States.
rebeccapratiti@gmail.com

Received: 01 May 2025 **Accepted:** 15 May 2025 **Epub ahead of print:** 26 May 2025 **Published:** XXXXXXX **DOI:** 10.25259/IJMS_134_2025

2019, there were 252,000 full-time FQHC providers and staff providing care to 30 million people, including 3.5 million low-income patients and 1 million agricultural workers.[4] According to the 2018 Uniform Data Set, 56% of these health centers had operating margins of less than 2.5% and 43% had negative margins.[5] A recent aggregate financial and operational profile of rural FQHCs clearly suggests that rural FQHCs generate less revenue for the number of centers, even with a comparatively better payer mix (i.e., less Medicaid, more private insurance). All types of patient visits (medical, mental, and dental) are lower for rural FQHC, in part due to low population density in rural areas. Rural FQHCs had a downward trend in operating margins from 2016 to 2019 because of an increased ratio of personnel-related expenses as a percentage of total operating revenue.[6] The report indicated that personnel-related expenses are the primary component of the operating budget due to the high cost of recruitment and retention of providers.[6]

POLICY CHANGE REQUIRED TO ATTRACT MORE PHYSICIANS TO RURAL AREAS

Physician shortage is increasing, and doctors have preferentially moved toward cities for better career opportunities, higher pay, and urban amenities. Only 10% of physicians now live in rural areas, compared to 20% of the overall U.S. population.[7] Other contributing factors include urban versus rural education and class divide.[7] Rural physicians tend to be older.[8] Most younger physicians stay in rural areas to qualify for loan repayment from the federal or state government for a certain amount of time. In the context of these findings, policy change is required for better physician and non-physician provider staffing for a longer time in rural areas to maintain the continuity of care amidst decreased access to amenities, specialized health infrastructure, isolation, and low health literacy. The approach should be two-pronged: One to increase the out-migration to rural communities, either part-time or full-time, and another to increase telehealth access.

Practicing in a rural community could be incentivized. Although federal and state grants are provided for FQHC operations, organizational goals may not be the same as healthcare provider goals. FQHCs compete with for-profit or non-profit healthcare organizations for physician salaries while operating under a low profit margin. To decrease healthcare provider attrition, part of the funds may be directly invested at provider levels by providing tax credits for those who work in rural HPSAs, which would indirectly translate to better salaries. For example, if a provider covers an HPSA area for at least 10–20 h every week during the tax year, they may be eligible for $10,000–$20,000 in tax credits, depending upon the HPSA severity. This situation would only lead to revenue losses in the form of the income tax received from these providers. Certain providers may be willing to travel twice a week to an HPSA region to provide care on a regular basis without the additional stress of social isolation or access to amenities, which may support them to remain in the HPSA provider role for a longer period of time. This may also allow older physicians to remain in at least part-time practice during semi-retirement. Another policy to encourage more older physicians to consider moving to rural communities could be increasing the 401(k) limits for those who work in HPSA regions since physicians in rural communities tend to be older. Similar previous initiatives of loan repayment work obligations have been successful at improving health provider coverage in rural areas, with surveys suggesting that loan repayment is a motivator to stay in rural regions.[9] Finally, providing telemedicine services to patients from rural HPSA regions could be incentivized by adding a modifier for rural regions that could bring the reimbursement to almost the cost of in-person visits. This strategy may allow the health centers to increase their rural coverage, especially specialty clinics based in non-metropolitan areas. National medical organizations (e.g., the American College of Physicians and the American Medical Association) could create a separate suborganization or a new organization with the goal of supporting and empowering rural providers providing care for rural populations. More Continuing Medical Education (CME) programs or webinars on rural health may be provided.

CONCLUSION

In summary rural residents have higher mortality, chronic disease morbidity, and lower access and use of preventive services. The physician shortage gap between rural and urban regions requires focus and policy changes. Policy changes to invest at the provider level by supporting more providers to remain part-time providers for rural communities for longer periods of time and increasing specialty telehealth access to the rural population should be adopted. In addition to supporting rural track residency, national medical organizations could provide training with a rural track focus or CME programs.

Editor's comments

This article is an eye opener for healthcare policy makers in India and other Low and Middle-Income Countries (LMIC). We used to think that our problems were unique to less-developed regions. We now realize that identical challenges exist in the USA! The logical solution is for all of us to learn from each other, especially regarding solutions that have been proven to be effective.

Ethical approval: Institutional Review Board approval is not required.

Declaration of patient consent: Patient's consent not required as there are no patients in this study.
Financial support and sponsorship: Nil.
Conflicts of interest: There are no conflicts of interest.
Use of artificial intelligence (AI)-assisted technology for manuscript preparation: The author confirms that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

REFERENCES

1. Dobis EA, Krumel TP, Cromartie J, Conley KL, Sanders A, Ortiz R. Rural America at a glance: 2021 edition; 2021. Available from: https://www.ers.usda.gov/publications/pub-details?pubid=102575 [Last accessed on 2025 Mar 02].
2. Larson E, Norris T. Rural demography and the health workforce: Interstate comparisons. State of the health workforce in rural America: Profiles and comparisons. Seattle, WA: WWAMI Rural Health Research Center; 2003. Available from: https://depts.washington.edu/uwrhrc/uploads/ruralch4comparisons.pdf [Last accessed on 2025 Mar 02].
3. McCarthy N. The countries with the highest density of doctors; 2020. Available from: https://www.statista.com/chart/21168/doctors/per/1000/inhabitants/in/selected/countries [Last accessed on 2022 Aug 16].
4. Health center program award recipients. Available from: https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fqhc [Last accessed 2022 Aug 18].
5. Shin P, Morris R, Velasquez M, Rosenbaum S, Somodevilla A. Keeping community health centers strong during the coronavirus pandemic is essential to public health. Health Affairs Blog; 2020. Available from: https://hpmmatters.publichealth.gwu.edu/archive [Last accessed on 2023 Nov 11].
6. Rural federally qualified health centers financial and operational performance analysis 2016-2019; 2021. Available from: https://caplink.org/images/rural_financial_and_operational_trends_report_2021.pdf [Last accessed on 2022 Feb 18].
7. Snow D. The coming crisis: Exploring the U.S. Physician Shortage; 2019. Available from: https://dfsnow.github.io/ama_viz/exploratory_plots.html [Last accessed on 2024 Jul 7].
8. Chen X, Orom H, Hay JL, Waters EA, Schofield E, Li Y, *et al*. Differences in rural and Urban health information access and use. J Rural Health 2019;35:405-17.
9. Renner DM, Westfall JM, Wilroy LA, Ginde AA. The influence of loan repayment on rural healthcare provider recruitment and retention in Colorado. Rural Remote Health 2010;10:1605.

How to cite this article: Pratiti R. Rural health: Scope for improvement in return on investment. Indian J Med Sci. doi: 10.25259/IJMS_134_2025