

HB 906: Rural physician grant program



Executive Summary

Missouri counties with the greatest healthcare needs (i.e., areas with the highest prevalence of health conditions and a relatively low abundance of providers) are predominantly rural and located south of the Missouri River. Recruitment and retention of physicians in these areas can be difficult; in response to ongoing and projected physician shortages, several programs, including student training grants and loan repayment, have been enacted to promote healthcare workforce development. HB 906 would establish a rural primary care physician grant program, which would pay \$10,000/year to primary care physicians who agree to practice in underserved rural areas for five years.

Highlights

- Over the past decade, **the number of physicians in rural areas of Missouri** has declined by 7%, and **is estimated to further decrease 20% by 2030**.
- **Physicians in areas with smaller populations, fewer physicians, and fewer hospitals are more likely to migrate away from rural areas** than their non-rural counterparts.
- Several types of physician incentive programs help recruit and retain rural physicians (medical student scholarships, service-option loans, student loan repayment, direct payments to physicians, and medical resident support). **Over 90% of physicians receiving direct payments, loan repayment, and resident support complete the term of service required by the incentive program.**
- **Other program designs may be slightly less effective**, as 66% of scholarship recipients and 45% of service-option loan recipients complete their terms, respectively.

Limitations

- There is a lack of comparative studies analyzing how the size of incentive payments offered to physicians affects recruitment and retention.
- The number of physicians and healthcare facilities in a county may not be perfect indicators of health needs, as telehealth options may provide additional healthcare resources.

Research Background

Physician shortages in rural communities

The number of healthcare professionals and facilities varies between rural and non-rural areas of Missouri. Over the past decade, the number of physicians per capita in rural areas of the state has decreased by about 7%, and 10 rural hospitals have closed since 2014.¹ Nationally, the number of rural physicians is projected to decrease by about 20% by 2030, as the number of retiring

This science note was prepared by MOST Policy Initiative, Inc. a nonprofit organization aimed to improve the health, sustainability, and economic growth of Missouri communities by providing objective, non-partisan information to Missouri's decisionmakers. For more information, contact Dr. Joshua Mueller, Health & Mental Health Fellow – josh@mostpolicyinitiative.org. This was prepared 4/29/21.

physicians in these areas is expected to exceed the number of physicians recruited to replace them.^{2,3}

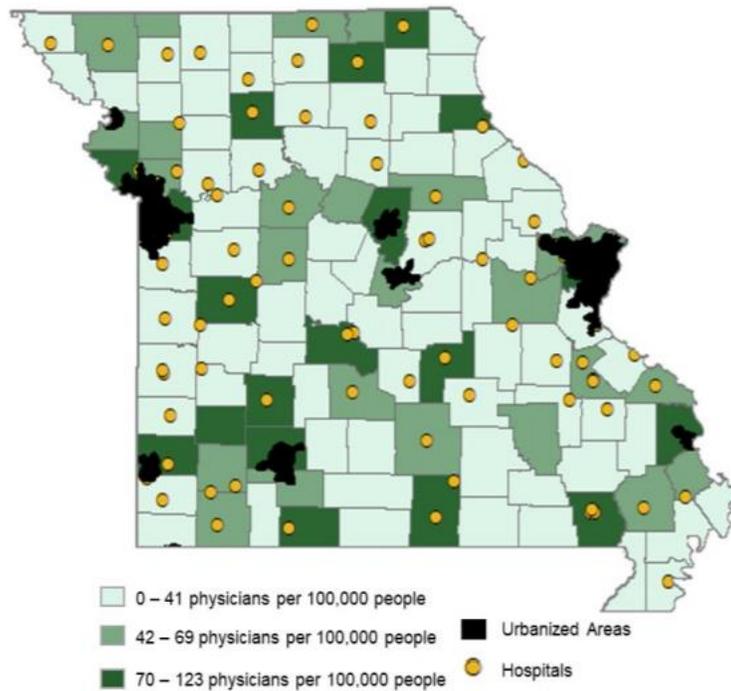


Figure 1. Map of Rural Missouri Physicians and Hospital Locations. Shown is a heat map of physicians per 100,000 people by county as of April 2021. The color code indicates the number of physicians in each county. Yellow circles show the locations of rural hospitals. As demonstrated by this map, many counties in the southern half of the state have few physicians residing there, and no hospitals, indicating a healthcare shortage. Map reproduced from Missouri Economy Indicators: Missouri Rural Health Care Access.¹

rural areas, where residents are more likely to be older, poorer, and uninsured than non-rural residents.² A 2015 report by the Missouri Department of Health and Senior Services found that 10 of the 11 Missouri counties with the greatest need for primary care (as determined by the health status of residents and their current access to care) are predominantly rural.⁴ Other research has found that physicians in areas with smaller populations, fewer physicians, and fewer hospitals are more likely to migrate elsewhere than their non-rural counterparts indicating rural physician retention may also be a problem.⁵ Several programs have been proposed to increase the supply of primary care physicians in rural areas.

Strategies for rural physician recruitment and retention

Across the country, five common types of rural physician recruitment and retention programs have been implemented: medical student scholarships, service-option loans (student loans that can be repaid by service as a physician), student loan repayment, direct payments to physicians, and resident support (additional payments or loan forgiveness for medical residents).⁶ In many

The Health Resources and Services Administration (HRSA), a federal agency under the U.S. Department of Health and Senior Services, compiles healthcare workforce data and identifies areas experiencing shortages. Health Professional Shortage Areas (HPSAs) are geographic areas, demographic populations, or healthcare facilities designated by HRSA as having an insufficient number of healthcare personnel. A 2018 report from HRSA estimates that approximately 65% of primary care and mental health HPSAs were located in rural or partially rural areas of the United States.² As of April 2021, there are 265 primary care HPSAs and 207 mental health HPSAs in rural or partially rural areas of Missouri.

These shortages present a risk of exacerbating health disparities in

cases, these financial incentives come with obligations of medical practice for a term of several years in an underserved area.

Generally, physicians with service obligations practice in areas with worse overall health status, more Medicaid enrollees, and more uninsured residents than areas served by non-obligated physicians. A combined 93% of physicians receiving loan repayments, direct payments, and resident support complete the term of service required by their incentive program. One national study indicates that 65% of physicians receiving direct incentive payments remain in their service area for over five years.³

Other program designs are slightly less effective, as 66% of scholarship recipients and 45% of service-option loan recipients complete their terms, respectively. In addition, about 70% of physicians with service obligations are family physicians, which are particularly important to rural communities for general care, as specialists are more likely to be located in non-rural areas. Across 69 state programs surveyed in 1996, physicians received an average of \$14,000/year in incentives for their obligated service.³ More recently, South Dakota launched a recruitment assistance program that supplements new rural physicians' incomes by \$80,000/year for three years of service. To date, there is not a comparative study of how the size of the incentive payments offered to physicians affects recruitment and retention.

Missouri Recruitment and Retention Strategies

Missouri currently operates several programs to place physicians in rural areas. The Health Professional Student Loan Repayment Program (SLRP) provides federal funds to repay student loans of physicians, psychiatrists, and dentists who practice in areas with healthcare worker shortages. The Primary Care Resource Initiative for Missouri (PRIMO) program provides state scholarship funds to Missouri medical students who go on to practice as a primary care physician, dentist, dental hygienist, or psychiatrist in a designated underserved area in Missouri. HB 906 would establish a rural primary care physician grant program, which would provide \$10,000/year to primary care physicians who agree to practice in an underserved rural area for five years. The bill also authorizes the state to reclaim any grant payments to physicians who do not complete the five-year term.

References

1. Kuhns, M. (2021) Missouri Rural Health Care Access. *Missouri Economy Indicators*, 2(7): https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/ExCEED/Docs/MissouriEconomy_RuralHealthcare_v2i7_12Apr21.pdf
2. Skinner, L., Staiger, D.O., Auerbach, D.I., Buerhaus, P.I. (2019) Implications of an Aging Rural Physician Workforce. *NEJM*, 381(4): 299-301.
3. Pathman, D.E., Konrad, T.R., Dann, R., Koch, G. (2004) Retention of Primary Care Physicians in Rural Health Professional Shortage Areas. *American Journal of Public Health*, 94(10): 1723-1729.
4. Missouri Department of Health and Senior Services, Office of Primary Care and Rural Health. (2015) Missouri Primary Care Needs Assessment. <https://health.mo.gov/living/families/primarycare/pdf/PrimaryCareNeedsAssessment.pdf>

5. McGrail, M.R., Wingrove, P.M., Petterson, S.M., Bazemore, A.W. (2017) Mobility of US Rural Primary Care Physicians During 2000-2014. *Annals of Family Medicine*, 15(4): 322-328.
6. Pathman, D.E. et al. (2000) State Scholarship, Loan Forgiveness, and Related Programs: The Unheralded Safety Net. *JAMA*, 284(16): 2084-2092.