

Rural Health Workforce Adaptive Strategies in Kansas

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Purpose of the study

The maldistribution of physicians across the United States is a perennial problem. While large rural areas have a physician to population ratio of 146.9, isolated, small rural areas have a ratio of 52.3. Kansas has many isolated, small rural areas. The federal government designates sixty-eight of Kansas's 105 counties as rural or frontier. Physicians, hospitals, and community health care systems have adopted a number of strategies to mitigate the shortages of physicians. Although many studies have focused on one or more aspects of these adaptive strategies (for example, the use of midlevel providers in rural practices) no study that has come to our attention has sought to catalog the range of adaptive strategies. Creating a better understanding of the strategies used and how they complement each other may open the way to future studies that explore the range of services provided and their effectiveness. Worsening workforce predictions for Kansas makes understanding most effective adaptive strategies critical to the future of our rural health care.

Methods

Using a convenience sample drawn from providers in 87 rural Kansas counties, we collected information about strategies employed by physicians and hospitals to adapt to workforce shortages of primary care physicians (PCP). An extensive survey was administered to one PCP and one hospital administrator in each county by first-year medical student investigators participating in a summer research program. Twenty-nine students were placed in rural community medical practices for a six-week period. Surveys focused on provider and practice characteristics, and the use of physician substitutes, team approaches to care, and locum tenens in the practice; and supply in the community of alternatives to private primary care medical practice. Respondents for the surveys gave their informed consent to participate before survey questions were asked. The study protocol was approved by our Institutional Review Board as an exempt study.

Key findings

The students completed PCP interviews from 77% of the target counties and hospital interviews from 87% of a total of 87 rural/frontier counties. Drawn from quantitative and qualitative analyses, a description of adaptive strategies utilized in these counties will be provided in the presentation.

Implications

Rural health care systems in Kansas employ many strategies to address the challenges of limited physician availability. Several physicians surveyed are working past retirement age by necessity and have no plans to retire. Presence of alternative providers is more common in densely settled rural and rural counties and rare in frontier counties. Mid-level providers were more common in the rural and frontier counties. APRNs were more common in rural designated counties and PA's were more common in the frontier. Building upon the study findings of high variability in adaptive strategies, the team will describe next steps in developing a measure of adaptability and resiliency in these health care systems. This will guide development of best practices with which to address the predicted workforce crisis in rural Kansas and other underserved settings.

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