Rural Health Workforce Adaptive Strategies in Kansas

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Introduction

The reallocation of physicians across the United States is a perennial problem. In Kansas, the reallocation of family physicians is active at 2.2 per 100,000, a rate that remains comparable to a peer of other states. The Kansas population density is much lower than the national average, leading to a draining of physicians out of rural and frontier practice location. Rural medical providers and systems have adopted a number of strategies to mitigate these stresses. “Adaptive strategies” is a term that has been applied to evolutionary biology, sociology, and business concepts, but to our knowledge has not been used to discuss factors determining resiliency in rural physicians and health care systems. Furthermore, many studies have examined individual characteristics of physicians and other factors, but we found no study that has cataloged the range of adaptive strategies conferring resiliency. Today, many of the rural frontier counties in Kansas face the issue of physician shortages, including in obstetrics and gynecology (OB-GYN) practices. This work seeks to answer this question: what have rural and frontier physicians done that physicians in urban areas have not to maintain or improve their health care systems. We have used a survey methodology to ask about the demographic characteristics and the adaptive strategies employed to address them. The paper describes the demographics matched those of all rural Kansas physicians.

Methods

• An extensive survey regarding adaptive strategies used by PCPs was distributed to medical schools.
• A hospital-based survey was administered by medical students at 87 rural Kansas counties.
• Typical rural practice settings were identified and the survey was designed to ask about the strategies and the adaptive strategies employed to address them.
• Survey questions:
  - Provider and practice characteristics
  - Non-physician health care providers
  - Team approach
  - Community health care providers
  - Alternative to primary care practices

The protocol was approved by the KUMC Institutional Review Board.

Results

Interviews from 67 PCPs in mostly rural counties and 10 hospitals were completed during the summer of 2013. Physicians had predominantly (32/67) completed their medical school training within the last 35 years and our data did not show a significant age discrepancy between regions.

42% of physicians in frontier counties (11/26) are planning retirement within 5 years compared to 34% (21/61) in rural counties. It is very concerning that 20% of those surveyed in frontier counties are planning retirement within 5 years and our data did not show a significant age discrepancy between regions.

Rural and frontier physicians provide “full service” OB care more often than their counterparts but it is still a challenge. Physicians in frontier counties have the heaviest call burden and utilize more LT, APRN and PAs for call.

Most OOC Satellite clinics are provided by the physicians with the highest workload stress. Rural and frontier practices employ the most APRNs and PAs. Physicians in frontier counties have increased work hours vs other regions, despite increased utilization of APRNs and PAs.

Conclusions and Discussion

• Demographics of the survey participants reflect that of rural Kansas physicians in general.
• Physicians in frontier counties have increased work hours vs other regions, despite increased utilization of APRNs and PAs.
• Diversity of services and types of health care providers are decreased in rural and frontier areas.
• Most OOC Satellite clinics are provided by the physicians with the highest workload stress.
• Rural and frontier practices employ the most APRNs and PAs. Physicians in frontier counties have increased work hours vs other regions, despite increased utilization of APRNs and PAs.
• Rural and frontier physicians provide “full service” OB care more often than their counterparts but it is still a challenge. Physicians in frontier counties have the heaviest call burden and utilize more LT, APRN and PAs for call.
• In our survey, rural and frontier physicians are actively recruiting and have plans to retire in the next 5 years. We expect these positions to attract students as recruiting tool, but they expect less than expected. A consideration is that preceptor students may be too resources intensive.
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Further analysis of adaptability as it applies to resiliency may be useful in defining the characteristics that are determinants of the ability to withstand the stresses of rural and frontier practice. Subsequently, these factors can help to identify individuals with these characteristics and possibly could be used towards a skill set of adaptive strategies that would increase success in rural recruitment and retention. This work will be the subject of future study.

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