WORKFORCE

Dunbar PJ, Mayer JD, Fordyce MA, Lishner DM, Hagopian A, Spanton K, Hart GL. Availability of anesthesia personnel in rural Washington and Montana. *Anesthesiology* 1998;88(3):800-808.

The purpose of this survey was to provide basic information about who performs anesthesia in rural areas and how much is performed. The authors hypothesized that inadequate availability of anesthesia services inhibits surgery and obstetric care in rural hospitals. Survey results showed that hospital administrators were primarily concerned with the economic problems associated with providing surgical services and with the perception of a deficit of surgeons in rural areas. There appeared to be no overall shortage of anesthesia providers in the two-state area examined in this study and shortages of surgeons and other professionals ranked as much more pressing concerns.

Gates R, Walker JT, Denning DA. Workforce patterns of rural surgeons in West Virginia. *The American Surgeon* 2003;69(5):367-371.

The purpose of this survey was to examine the workforce patterns of rural surgeons in West Virginia. The survey findings showed that the workforce of general surgeons in small communities is decreasing and may reach a critically low level in the next five years. The variety and volume of cases performed by general surgeons in smaller communities appeared to be greater than those in urban settings. The authors suggest that resident surgeons planning to pursue a career in rural general surgery should broaden their operative and general medical experiences to meet community needs.

Roos N, Black C, Wade J, Decker K. How many general surgeons do you need in rural areas? Three approaches to physician resource planning in southern Manitoba. *Canadian Medical Association Journal* 1996;155(4):395-401.

The purpose of this article was to critically assess three different approaches (ratio, repatriation, and population-needs-based) to planning for the number of general surgeons in rural areas. The authors determined that the ratio approach could be useful in grounding the planning effort, particularly when comparisons are made with other areas since this approach focuses on who is delivering services rather than on what services a population receives. The needs-based and repatriation approaches, grounded in the reality of the surgical services

currently received by area residents, may be the best tools for planning purposes.

Stevermer J, Supattanasiri GJ, Williamson H. A survey of general surgeons in rural Missouri: Potential for rapid decrease in workforce. *The Journal of Rural Health* 2001;17(1):59-62.

The purpose of this survey was to better understand rural surgeons' perceptions of workforce issues, practice patterns, lifestyle, income, competition, isolation, and training issues. The survey findings suggest that if present trends continue the next 10 years will see a substantial reduction in the number of general surgeons in rural Missouri. According to the authors communities hoping to attract surgeons may wish to identify local and regional trainees and appeal to their sense of community. Rural training tracks focusing on the special circumstances of rural surgery would probably increase the numbers of these important providers.

Thompson M, Lynge DC, Larson EH, Tachawachira P, Hart LG. Characterizing the general surgery workforce in rural America. *Archives of Surgery* 2005;140:74-79.

The purpose of this project was to report on the current state of the general surgery workforce in the US with particular emphasis on the characteristics and distribution of surgeons in rural areas. The authors concluded that the number of general surgeons in the most rural areas of the US will decline further because they are older than urban surgeons and fewer women choose rural practice despite the fact that they make up an increasing percentage of medical school students. Residents of small/isolated rural areas have less immediate access to general surgical care than do residents of urban and large rural areas.