

# The U.S. Rural Physician Workforce: Analysis of Medical School Graduates from 1988-1997

## Background

The ability to provide rural residents with high-quality health care is contingent upon an adequate supply of local providers. However, the shortage and maldistribution of physicians persists in rural America, despite ongoing federal and state efforts to increase the supply of physicians practicing in rural locations. This study describes the training of the rural physician workforce and examines variations in the production of rural physicians by medical schools and residencies across the United States.

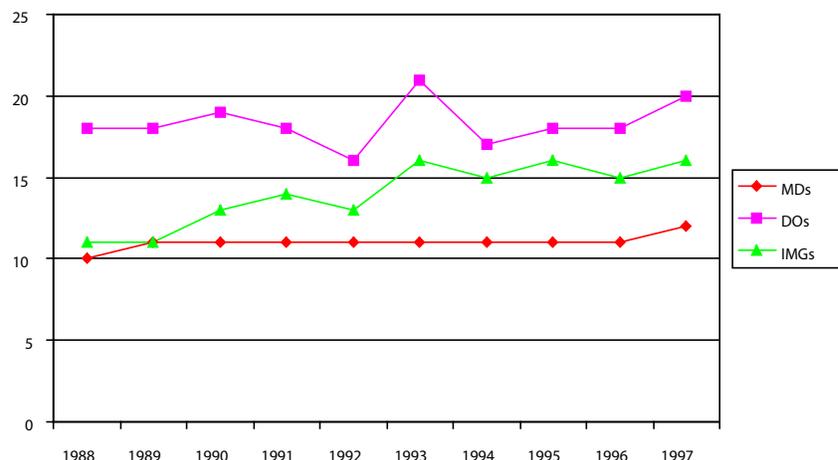
## Study Design

We examined a ten-year cohort of clinically-active, allopathic (164, 385) and osteopathic (11,264) physicians who graduated from medical school 1988 through 1997 and completed residency training. We performed a national cross-sectional analysis of the 2005 American Medical Association and American Osteopathic Association Masterfile physician data, and identified the medical school of graduation. We determined the practice location of each physician by ZIP code and mapped these to Rural-Urban Commuting Areas.

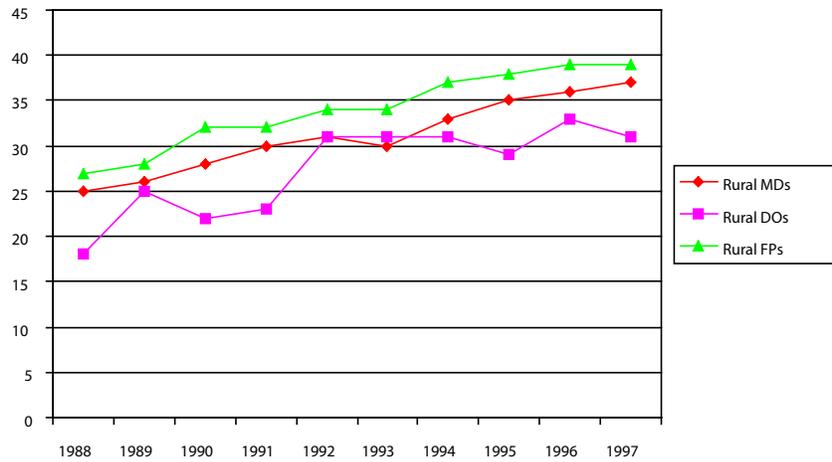
## Major Findings

- Eleven percent of the total cohort was currently practicing in a rural area in 2005. Among osteopathic physicians, 18% practice in rural areas.
- The highest percentage of physicians currently practicing in a rural location was family physician graduates (23%), followed by general surgeons (16%), internists (11%), and pediatricians (9%).
- Increases in the number and proportion of graduating physicians practicing in rural areas over the ten-year study period were found for family physicians (from 10.03% to 11.6%) and osteopathic physicians (from 18.1% to 19.6%), as well as for female physicians (from 7.8% to 9.8% for MDs, 12.2% to 17.7% for DOs) (Figures 1 and 2).
- Physicians trained in rural residencies were over three times more likely to practice in rural areas, yet rural residencies accounted for only 5% of MDs and 10% of DOs practicing in rural locations.

**Figure 1: Percent Physicians Practicing in a Rural Area in 2005, by Physician Type and Year of Graduation**



**Figure 2: Percent of Female Rural Physicians in 2005, by Physician Categories and Year of Graduation**



### Conclusion

Those most likely to practice in rural areas were osteopathic and primary care physicians. Slight declines in the percentage of recent medical school graduates entering rural practice were found, though the decline was somewhat less than found in an earlier study. Only a small number of medical schools and residency programs accounted for the training of the majority of rural physicians.

### Policy Implications

This study supports the valuable contribution of a small number of rural residency programs in producing rural physicians. Recent calls to expand medical school production may help support the pipeline for rural physician training. These data do not reflect the declining interest in primary care among U.S. medical students over the past ten years.

This research was supported by a grant from the federal Office of Rural Health Policy. Findings are more fully described in WWAMI RHRC Final Report #113: Chen FM, Fordyce MA, Andes S, Hart LG. The U.S. Rural Physician Workforce: Analysis of Medical School Graduates from 1988-1997. October 2008.



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