

# Virtual Mentor

American Medical Association Journal of Ethics  
May 2011, Volume 13, Number 5: 317-319.

## OP-ED

### **A Case for Special Programs to Expand the Ranks of Rural Physicians**

Doug Campos-Outcalt, MD, MPA

Geographic and specialty maldistribution of physicians continues to plague the United States health care system. Twenty-one percent of the American population lives in a rural area; 30 million people live in federally designated health professional shortage areas [1, 2]. Yet only 10 to 11 percent of physicians who graduated from medical school in the 1980s and '90s practice in rural America, and recent graduates appear to be following suit [3, 4]. On top of the fact that the ratio of physicians to patients is low in rural areas, rural Americans need more health care than their nonrural counterparts because they tend to be poorer and are more likely to be chronically ill [5].

A small minority of U.S. medical schools produce a large proportion of the physicians who practice in rural areas [3, 4]. While it has been demonstrated that medical schools can increase the number of their graduates who become rural physicians through an admissions process that seeks students from rural backgrounds and a curriculum that reinforces this career goal, few do so [6]. Rabinowitz and colleagues have pointed out that if every medical school developed such programs and graduated 10 students per year who entered into rural practice, we could more than double the number of rural physicians entering the workforce each year, which would have a significant impact over time on the rural physician shortage [6].

There are several reasons why U.S. medical schools in this country should be held responsible for addressing this. The public pays for a large proportion of the costs of medical education through state subsidies to medical schools, NIH research support, publicly funded insurance programs (Medicaid and Medicare), and Medicare graduate medical education funding. The public has the right to expect that these funds should be used to benefit all who contribute to them, including rural residents. The ethical principles of fairness, distributive justice, and beneficence all support working to ensure equitable access to health care. Modern educational institutions should be addressing and solving modern-day problems, and a shortage of rural physicians is one of the most pressing problems of our times. In short, it is the right thing to do.

Those who favor the status quo might make four arguments against rural medicine educational initiatives: (1) the costs of such programs; (2) the multifactorial nature of geographic practice choices; (3) the need to choose the best medical school candidates regardless of their career plans; and (4) the competing academic missions

of research and clinical care. But none of these concerns should prevent academic institutions from taking steps to address rural workforce issues.

No extra funds are needed at all to change admissions criteria. This requires leadership, not money. Rural medicine educational initiatives do require some additional resources, but the burden would be small in the overall scheme of the modern academic medical center. Interested and creative faculty can design and operate programs and seek funds from a variety of sources such as specially earmarked state funds, federal and foundational grants, and Area Health Education Centers. Faculty that have the support of their leadership will succeed.

Granted, many variables affect a physician's decision about where to practice. Solving this problem is not solely the responsibility of academic institutions. The state and federal governments also need to address it by creating incentives, and eliminating disincentives, for careers in rural medicine. Everyone needs to ante up.

The admissions concern is based on the assumption that the criteria we currently use for admission to medical school select the applicants most qualified to be good doctors. This assumption has been widely challenged [7] and most who have studied the issue admit that the academic criteria on which we base admissions decisions (MCAT scores and grade point averages) do little more than predict how a student will fare in the basic science years and on part 1 of the USMLE. Though they reflect education and economic advantages, these academic criteria have never been shown to predict long-term physician performance [7]. Most schools already consider nonacademic factors such as past volunteer work, educational disadvantages, and personal traits. The integrity of the admissions process will not be affected in any significant way by considering a candidate's likelihood of practicing in rural or other underserved areas. There is good evidence that students admitted through rural initiatives perform as well as other students on measures commonly used to assess academic achievement [8-10].

Finally, educational initiatives to increase the number of graduates who become rural physicians do not undermine or compete with other priorities at an academic medical center. Some of the most successful rural programs exist at distinguished medical schools known for their research and quality patient care [10-12]. Medical schools can and should address the shortage of rural physicians in this country. We know how to do it. It is not a matter of ability or resources. It is a matter of leadership and will.

## References

1. Economic Research Service. Measuring rurality: what is rural? <http://www.ers.usda.gov/briefing/rurality/whatisrural/>. Accessed January 27, 2011.
2. Health Resources and Services Administration. Shortage designation: HPSAs, MUAs & MUPs. <http://bhpr.hrsa.gov/shortage/>. Accessed January 27, 2011.

3. Chen F, Fordyce M, Andes S, Hart LG. Which medical schools produce rural physicians? A 15-year update. *Acad Med.* 2010;85(4):594-598.
4. Rosenblatt RA, Whitcomb ME, Cullen TJ, Lishner DM, Hart LG. Which medical schools produce rural physicians? *JAMA.* 1992;268(12):1559-1565.
5. Agency for Research and Quality. Health care disparities in rural areas: selected findings from the 2004 National Healthcare Disparities Report. <http://www.ahrq.gov/research/ruraldisp/ruraldispar.htm>. Accessed January 27, 2011.
6. Rabinowitz HK, Diamond JJ, Markham FW, Wortman JR. Medical school programs to increase the rural physician supply: A systematic review and projected impact of widespread replication. *Acad Med.* 2008;83(3):235-243.
7. Barr DA. *Questioning the Premedical Paradigm: Enhancing Diversity in the Medical Profession a Century After the Flexner Report.* Baltimore, MD: Johns Hopkins University Press; 2010.
8. Zink T, Power DV, Finstad D, Brooks KD. Is there equivalency between students in a longitudinal, rural clerkship and a traditional urban-based program? *Fam Med.* 2010;42(10):702-706.
9. Rabinowitz HK, Diamond JJ, Markham FW, Rabinowitz C. Long-term retention of graduates from a program to increase the supply of rural family physicians. *Acad Med.* 2005;80(8):728-732.
10. Smucny J, Beatty P, Grant W, Dennison T, Wolff LT. An evaluation of the Rural Medical Education Program of the State University of New York Upstate Medical University, 1990-2003. *Acad Med.* 2005;8(8):733-738.
11. Rabinowitz HK. Recruitment, retention, and follow-up of graduates of a program to increase the number of family physicians in rural and underserved areas. *N Engl J Med.* 1993;328(13):934-939.
12. Ramsey PG, Coombs JB, Hunt D, et al. From concept to culture: the WWAMI program at the University of Washington School of Medicine. *Acad Med.* 2001;76(8):765-775.

Doug Campos-Outcalt, MD, MPA, is the associate chair of the Department of Family and Community Medicine at the University of Arizona College of Medicine in Phoenix.

### **Related in VM**

[Federal and State Initiatives to Recruit Physicians to Rural Areas](#), May 2011

[Wisconsin Academy for Rural Medicine—An Initiative to Increase Physician Workforce in Rural Wisconsin](#), May 2011

*The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.*

Copyright 2011 American Medical Association. All rights reserved.