

What Do Family Medicine Residency Graduates Do?

Physician workforce policy is a challenging arena, littered over the years with various mispronouncements. At the moment, there seems to be agreement that the United States has a surplus of physicians and too many specialist physicians.¹ There is less certainty about the primary care physician supply, with some suggesting serious shortages and others suggesting we already have about the right number.² Regardless of whether we have the right number of primary care physicians, we know we have not solved distribution problems of the existing workforce, specifically neglecting some populations such as rural communities.¹ Family physicians are unequivocally trained to be primary care clinicians and as a group represent a highly versatile physician capacity, deployable in behalf of improved health care for people of all ages, in all walks of life, and in all types of communities. To plan for balanced health care systems that are more effective than we now have, we need to know more about what family physicians actually do after they complete their training.

One quarter of a century after establishing family medicine residencies, it has become possible to describe and analyze at least the first portions of the careers of residency-trained family physicians in the United States. The report in this issue of the *Journal* by West et al³ uses the 1991 University of Washington Family Practice Residency Network Graduate Follow-up Survey to describe the careers of 358 civilian family physicians who completed residency training between 1973 and 1990. Achieving an adjusted response rate of 84 percent, this report is based not on conjecture, but on 4 to 18 years of experience after graduation from family practice training. It is an important contribution to our understanding of the family physician workforce.

Submitted 1 November 1995.

From the Department of Family Medicine, University of Colorado, Denver. Address reprint requests to Larry Green, MD, Department of Family Medicine, 1180 Clermont Street, Denver, CO 80220.

In this cohort of family physicians, 98 percent were practicing medicine at the time of the survey, with approximately 92 percent in family practice. One third of the respondents initially entered practice in rural communities. Practice location was relatively stable over time with almost 6 percent of respondents practicing in only one community. Once these family physicians were in practice at a location for approximately 6 years, they were unlikely to change their geographic practice locations. Few switched between urban and rural locations, and of those who did, it was much more likely that the switch was from rural to urban rather than from urban to rural. The proportion of graduates who were women doubled in the most recent cohort when compared with the cohort graduating 12 or more years prior to the survey, and women were less likely than men to enter rural practice as their initial practice. Almost 80 percent of the family physicians in the middle cohort who initiated rural practice continued in rural practice after 4 years, contrasting with slightly more than one half in the most recent cohort.

It is widely known that the University of Washington has adopted a regional perspective in its educational programs and provided important leadership in family medicine and specifically in rural medicine. The results from a regional experience are always subject to dispute in terms of its generalizability, and this report is not immune to this potentially legitimate limitation. Nevertheless, there is considerable face validity to this report, and it is congruent in some ways with other experience. For example, the retention data reported at 6 years in this report are consistent with a partially comparable analysis of physicians in rural Colorado.⁴ The rate of retention of physicians who were not actively involved in preceptorships of the University of Colorado School of Medicine and who were practicing in nonresort, rural towns of less than 10,000 population from 1986 to 1992 was 62 percent, virtually the same as observed for the University of Washington graduates after 6 years. At the very least, this report

represents an important benchmark of what is possible, even if not actually achieved by training efforts elsewhere in the country. As such, it is intriguing to consider what some of the implications would be if this experience were applicable across the country. If the University of Washington's past experience predicted the country's future, the story line for family practice graduates would go something like this:

A large majority of graduates of family medicine residencies will actually engage in family practice. A large minority will elect to enter rural practice, but the proportion of graduates interested in initiating practice in a rural setting will probably decline, possibly as a function of more women entering the family physician workforce. It will be more likely than not that family physicians will remain in the community in which they first enter practice; therefore, the best shot at attracting a family physician will be right out of training. It will be unlikely that a family physician will relocate after 5 or 6 years of practice in a community, but there will be a persistent rate of relocation among family physicians. Such relocation will probably work overall to the advantage of urban communities at the expense of rural communities.

Readers of this report will no doubt recognize some experiences in their state or region that differ from the University of Washington experience. For example, the experience of the St. Mary's Family Practice Residency in Grand Junction, Colo, during the past 7 years does not corroborate a relative disinterest of women graduates in rural practice. In fact, compared with men graduates, the women graduates from this program have tended to practice in more remote areas. Of course, this experience comes from a program that assumes that the residency experience can be a strong determinant of where graduates practice, achieving since 1988 a rural placement rate of 90 percent. Specifically, this program interviews medical students in a manner that communicates the expectation that they will prepare for rural practice, provides early and ongoing exposure to rural practice for all of its residents, and provides the residents with successful rural practice role models throughout training. This example and the experiences in other programs certainly argue for prudence in overgeneralizing the University of Washington experience, but more

importantly they suggest that modifications in family practice training programs could alter the career trajectories of future family physicians in a way that could respond to still unmet needs.

The report by West et al is also interesting because of its methods. The authors of this paper developed a valuable analytic construct: the career trajectory. Typically we settle for point-in-time measures to estimate the response of physicians to various objectives, such as ameliorating the problem of medical underservice. Such measures are used because they can often be derived from the analysis of a single data set, and they are easy to derive and understand. The chronological profile of practice location represented by a career trajectory, however, enriches our understanding by depicting stability of family physicians as assets of the communities they serve. Different notions can emerge. For example, given that the initial practice site of family physicians is not usually just the first of many, longer term assessments seem plausible, and deliberate planning for replacements or adjustments in the composition of the local family physician workforce seems possible. Because it maintains the element of practice location, this creative device also could be useful in addressing previously elusive issues and moving evaluations beyond general statements of efficacy, for example: How long is the effect of a decentralized medical education experience sustained? What level of family physician continuity is probable in rural or urban communities?

This report also reminds us of the need for further development of methods to assess the adequacy of the primary care workforce by estimating the differential impact of family physicians and other primary care clinicians. Presently in workforce analyses primary care clinicians are usually aggregated by and their workforce denominator is usually determined according to the population of a county or other sensible demographic unit. This basic index is generally not adjusted for special characteristics of the population to be served. The perceptions of policy makers and the public about accessibility of health care are often shaped largely by the consideration of such crude measures and their variability with time. Yet, in Colorado, for example, these indicators have not correlated strongly with time in transit to a physician's office, in-office waiting

time to see the physician, number of days patients wait for an appointment, and the public's impression of adequacy of their access to care.⁵ In brief, we need to improve our measurements of access and our analyses to discriminate among different types of primary care clinicians, because populations vary in their needs, and all primary care clinicians are not created equal.

On balance, this report seems to be mostly good news, but it also reminds us of unsolved problems and alerts us to potentially new ones. We would emphasize that family medicine's legacy of service to rural America exceeds that of most if not all other medical specialties. Family physicians have historically distributed themselves proportionately to the population and thus made up a cornerstone of the health care delivery system of isolated, sparsely settled rural regions. They have been willing to serve in environments that might not be equipment intensive, often distant from their colleagues. They have expanded their procedural skills to cope with the requirements of practice in relative isolation. This commitment, not necessarily an inevitability, must be extended because the needs of rural America remain unmet. In Colorado 22 of the 53 counties outside metropolitan areas are now wholly designated primary care health professional shortage areas. General pediatricians and internists deliver care in 15 of these 53 counties, and family physicians

serve in 45.⁶ Primary care clinicians must work together to meet the needs of all our communities, but rural residents remain heavily reliant on family physicians for primary care services. Family medicine must never forget rural America.

Larry A. Green, MD
George E. Fryer, PhD
Daniel R. Dill, MD
Denver

References

1. Recommendations to improve access to health care through physician workforce reform. Fourth report. Rockville, Md: Council on Graduate Medical Education, 1994.
2. Weiner JP. Forecasting the effects of health reform on US physician workforce requirement: evidence from HMO staffing patterns. *JAMA* 1994;272:222-30.
3. West PA, Norris TE, Gore EJ, Baldwin LM, Hart LG. The geographic and temporal patterns of residency-trained family physicians: University of Washington Family Practice Residency Network. *J Am Board Fam Pract* 1996;00-00.
4. Fryer GE, Stine C, Krugman RD, Miyoshi TJ. Geographic benefit from decentralized medical education: student and preceptor practice patterns. *J Rural Health* 1994;10:193-8.
5. Humphrey T, Genevie LE. Health care in Colorado: a survey of Colorado residents. New York: Louis Harris and Associates, 1988.
6. Colorado counties primary care needs assessment. Denver: Colorado Department of Health, 1993.