

The objectives of this chartbook are multifaceted: to 1) determine the amount of rural allopathic family medicine training taking place within the United States; 2) depict the geographic distribution of that training; 3) describe the types of rural training provided; and 4) establish a baseline from which to measure future changes in the nature and location of rural family medicine training. The tables, figures and maps in this chartbook provide extensive information addressing these objectives, including the documentation of a year 2000 baseline for these data.

This information is provided to clearly describe the nation's rural family medicine residency training in an unbiased fashion. This chartbook ends with a brief and general summary of the significance and implications of the overall study findings.

Family medicine is currently facing several challenges that will affect the future of the specialty. The past several years witnessed a troubling decline in U.S. medical student interest in family medicine in particular, and primary care in general. Consequently, over half of all family medicine residency positions are now being filled by international medical graduates (IMGs). This trend has prompted family medicine to reconsider its position, values, and organization. In 2004, the AAFP's "Future of Family Medicine" report (Future of Family Medicine Project Leadership, 2004) called for changes to current practice including an electronic medical record, innovations in care delivery, and fundamental changes in family medicine residency training. Although family medicine has already put considerable effort into implementing the "Future of Family Medicine" recommendations, the specialty continues to struggle within a health care system that is fragmented and hostile to primary care.

The increasing numbers of IMGs in family medicine residency programs has policy implications as well. IMGs are less likely to practice in isolated small rural

communities (WWAMI CHWS, 2005). As a result, the impact of this trend upon access to primary care, especially in underserved areas, remains unclear.

The national debate around tort reform and medical liability also has implications for family medicine. In many rural communities, family physicians are reconsidering their obstetric practices because of rising malpractice insurance premiums. Whether the proposed liability caps on damages will result in lower insurance premiums is open to debate. In addition, the



cost of liability is a major financial problem for the residencies themselves. The larger issue of inadequate reimbursement for primary care services remains unaddressed. As states continue to lower Medicaid reimbursement rates, many family physicians are finding it difficult to cover their practice expenses while continuing to see Medicaid and, in some cases, Medicare patients. As the number of uninsured patients increases, the problem of adequate reimbursement is further exacerbated. While urban physicians can simply choose not to see patients, knowing they will get care "somewhere", these options may not exist in rural places. Because more patients in rural areas are uninsured or dependent on Medicaid, the financial viability of rural sites spirals downward.

As reimbursement rates decline and practice costs increase, family medicine's position as the safety net provider in small rural and underserved communities will continue to be threatened.

This underlines the importance of motivating and preparing family physicians to address the challenges of rural practice. Consistent with our findings as shown in the tables and figures in this chartbook, Rosenblatt and colleagues (2002a and b) concluded that very little family medicine training in the United States occurs in rural areas. As described in a WWAMI Rural Health Research Center Working Paper, although 40.9 percent of all the family medicine programs in the country list training rural physicians as central to their missions, only 7.4 percent of the programs are actually located in rural areas, and only 7.5 percent of residents' total training experiences occur in rural areas. To the extent that actual rural training is one of the critical determinants of future practice location, the paucity of rural training experiences may help to explain why only nine percent of the nation's physicians are located in rural areas (COGME, 1998; Denton et al, 1989; Dorner et al, 1991).

Rosenblatt and colleagues (2002a) suggest that this situation is even worse for other disciplines of medicine. With the exception of family medicine, very few other allopathic residency programs are located in rural areas at all. Residency training tends to be an urban-centered activity, with nearly all of the training resources located in our nation's cities. However, one of the visions of family medicine has been to base a greater proportion of training in rural places, using such innovative educational vehicles as the rural residency track. Although this model has proved to be effective in predicting future rural practice, the tiny number of residents engaged in such training means that it has had little influence on the larger problem of physician maldistribution (Rosenthal et al, 2000; Rosenthal, 2000).

While the survey reported here was aimed at family medicine allopathic residencies, it is important to note the contribution of osteopathic physicians (DOs). In 2000, there were nearly 45,000 osteopathic physicians (about 6% of the nation's total physicians) (Health Resources and Services Administration, United States Health Personnel Factbook, 2003). DOs are more likely than allopathic physicians to be family physicians and more likely to practice in rural areas (COGME, 1998; AOA, 2001). In 2000, DOs represented about 20 percent of the nation's family medicine and general practice physicians. DOs vary dramatically by state regarding their medical school

production and practice locations (Figure 1-11, AOA, 2001). DOs are often residents in allopathic family medicine residencies. Clearly, a baseline for DO residencies is essential to developing a more complete picture of family medicine training within rural areas.

According to Rosenblatt and colleagues (2002a), these data suggest that we have largely failed to move residency training out of the urban centers, a result very similar to that found in an earlier study conducted by Bowman (Bowman and Penrod, 1998). Although a large proportion of family medicine training occurs in the community hospital setting, these community hospitals are predominantly in urban areas. Decentralized training—including rural training tracks, block rotations, and decentralized continuity clinics—account for a very small proportion of all residency training (Saver et al, 1998). As the economic vitality of smaller hospitals is threatened by changes in the reimbursement system, increasing numbers of uninsured people and other factors, even these small contributions to rural training may disappear.

Even though the vast majority of family medicine training programs are located in urban areas, some urban-based programs have a rural emphasis. For example, the majority of programs with a rural training track have their home base within an urban area. While most urban programs do not have a rural mission, most programs with a rural mission are located in urban areas, simply because the preponderance of family practice residency programs are located in urban areas. Perhaps more important than the location of the parent program or its stated mission is where the training actually occurs.

Rosenblatt and colleagues (2002a) determined the actual training locations of virtually all the residents in training reported by the 435 programs that responded to our survey. Their results support the conclusion that slightly more training occurs in rural areas than would be apparent from the location of the parent programs; 7.5 percent of the time the residents spent in training took place in rural areas, even though only 5.4 percent of the residents who were in training in July of 1999 attended programs that were located in rural areas. A substantial amount of all rural training—28.9 percent of all training that took place in rural areas—can be attributed to rural training experiences of residents coming from urban parent programs. While urban parent programs produce only 12 percent of the training in large urban areas, they account for 66 percent of the training in small rural areas and 81 percent in isolated small rural areas. Nevertheless, most rural training experiences in the United States

(71.1%) derive from the 33 parent programs that are located within rural areas.

The most dramatic difference in the extent of rural training is between programs located in urban areas as compared to those located in rural areas. Rosenblatt and colleagues (2002a) report that the actual proportion of time that urban residents spend in rural training locations is miniscule—2.3 percent (212.9 FTEs) of their total experience. Those rural experiences are split fairly evenly between rural training tracks—which apply to only a few residents out of a much larger group—and other residents who are taking block rotations in rural areas. By the same token, residents from programs based in rural areas train exclusively in rural settings (.006% in urban). Most of that training is in their model family practice center, but a total of 14.5 percent (76.3 FTEs) of their training occurs in either rural training tracks, block rural rotations, or rural outpatient clinics.

The results presented in this chartbook and the associated published articles and WWAMI Rural Health Research Center working papers represent the first precise quantification of the extent of rural family medicine residency training in the United States and establish a year 2000 baseline from which to measure future trends. To the extent that physicians trained in rural settings are more prepared to practice rural medicine, one must be concerned about the quality, scope of practice, and cultural competence of future rural practice. Rosenblatt and colleagues (2002a) contend that the portrait is ominous for those concerned about the future of rural medical care. Since 1988, there has been a steady decrease (8.4%) in the residency positions filled in family medicine, from 3,575 in 1998 to 3,275 in 2004 (July match figures, AAFP 2005). In addition, the percentage of slots filled by U.S. medical school graduates has been decreasing. There are many reasons for the declining interest of medical students in family medicine, and these have been described elsewhere (COGME, 1998; Geyman et al, 2000; Hart et al, 2002). The reasons range from specialty differences in income to rural professional isolation, Family Medicine Residency Review Committee (RRC) rules, small hospitals and other factors. Given decreasing numbers of graduating medical students entering family medicine, the financial difficulties of some rural health systems, and the small amount of rural residency training, physician maldistribution is likely to increase (Mohr et al, 1999; Medicare Payment Advisory Commission, 2001; Pugno et al, 2001; Pugno et al, 2000).

What can be done to address this problem? This study demonstrates that very little rural family practice

residency training is taking place in the United States. Very few programs are located in rural areas, in part because rural hospitals themselves have neither the educational nor the financial resources to support complex and expensive residency training programs (Geyman et al, 2000; Ellis, 2000). Only 3.1 percent of rural hospitals even receive Graduate Medical Education (GME) payments from Medicare (Slifkin, 1999). The passage of the Balanced Budget Act of 1997 (BBA) exacerbated the situation, establishing caps on the number of residents in training and further eroding the financial stability of small hospitals (Frenzen, 1997). The amendments of the Balanced Budget Refinement Act of 1999, Medicare Benefits and Improvement Act and other regulatory changes mitigated the influence of the BBA somewhat, but rural hospital finances remain tenuous and are not likely to become a significantly larger source of training for future rural physicians (Iglehart, 1999; Lewin Group, 2000). Since the 2000 survey, three of the 33 rural-based parent residencies have closed (Rosenblatt, in press).

Rosenblatt and colleagues (2002a) indicate that urban hospitals with a rural training mission remain a promising source of future rural physicians. Nearly a quarter of them state that their main mission is training rural physicians, and urban hospitals already account for 28.9 percent of the family practice residency training that occurs in rural areas. Changes in federal funding formulas both through Medicare reimbursement and through educational grants (Title VII) might be effective in moving more training into rural areas. Rural training tracks, in particular, have proven to be extremely effective tools, and urban hospitals have demonstrated the capacity to initiate and support successful rural training tracks (Rosenthal et al, 2000; Rosenthal, 2000; Malatay, 2000; Crittenden, 1999). Despite this potential, it is clear from this study that we have not yet been successful in moving family medicine residency training into rural areas.

It is important to carefully and regularly monitor changes (such as decreases) in the amount and nature of rural allopathic family medicine residency training. The data and results presented in this chartbook establish a baseline from which to assess future change. Likewise, monitoring of osteopathic family medicine training is also critical. While there are many policy options to tweak the current system, the effectiveness of training family physicians within rural areas and preparing and motivating them for rural practice ultimately depends on the creation and maintenance of a practice environment that is both professionally and financially rewarding.

