

**American Academy of Family Physicians  
Rural Recruitment and Retention Position Paper**

# **Keeping Physicians in Rural Practice**

**Submitted and Authored by the Committee on Rural Health**

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**September 2002**

## Overview

Access to high quality health care services for rural Americans continues to be dependent upon an adequate supply of rural physicians. Despite efforts to meet shortages in rural areas, there continues to be a shortage of physicians for rural areas. Studies, whether they be based on the demand to hire physicians by hospitals/physician groups or based on the number of individuals per physician in a rural area, all indicate a need for additional physicians in rural areas. A balanced and cooperative effort among those involved in medical education is needed to promote rural practice. This includes actively teaching at the academic medical center and the community level as well as those providing funding for medical education on the federal, state and private level. All need to work together to provide support for training future rural physicians.<sup>1</sup>

Family physicians comprise just 20 percent of the U.S. outpatient physician work force, yet they perform about 199 million of the approximately 822 million visits that Americans make to their physicians each year.<sup>2</sup> In rural areas, an even greater proportion of these visits are to family physician offices. Possessing a broad range of skills, family physicians provide comprehensive and irreplaceable care to small rural communities (Figure 1). A recent study from the Robert Graham Center for Policy Studies in Family Practice and Primary Care indicated that, if family physicians were removed from the 1,548 rural U.S. counties that are *not* Primary Care Health Personnel Shortage Areas (PCHPSAs), 67.8 percent of those counties would become PCHPSAs. On the other hand, removing all general internists would make only 2.1 percent of the counties PCHPSAs, and only 0.5 percent would become PCHPSAs without pediatricians or without ob/gyns.<sup>3</sup>

Despite the enormous contributions that family physicians make to rural populations, and despite a reported surplus of physicians in the United States, the country's rural areas have been medically underserved for decades.<sup>4,5</sup> While about 20 percent of the U.S. population lives in rural areas, rural physicians comprise only about 10 percent of the total number of working physicians in the country.<sup>6</sup> In rural communities of fewer than 10,000 inhabitants, there are about 90 physicians per 100,000 persons. In major metropolitan areas, the ratio is about 300 physicians to every 100,000 persons (Figure 2). In rural cities with populations of more than 10,000 persons, there are about 170 physicians per 100,000 persons.<sup>6</sup> Sparse population, extreme poverty, high proportions of racial and ethnic minorities, and lack of physical and cultural amenities characterize rural communities most likely to suffer from a shortage of physicians.<sup>7</sup> This persistent, intractable shortage of physicians in rural communities means that many communities struggle continuously to recruit and retain physicians.

Although recruitment and retention of rural physicians are often discussed in tandem, the factors that make a physician likely to choose rural practice are actually quite different from those that make a physician likely to stay in such a practice setting. Even a successful recruitment effort may not result in the addition of a family physician because the physician may have such a hard time adjusting to rural life that he or she leaves soon after arriving. Thus, it is important to deal with each issue separately.

## Recruitment

Two of the strongest predictors that a physician will choose rural practice are specialty and background: Family physicians are more likely than those with less general training to go into rural practice, and physicians with rural backgrounds are more likely to locate in rural areas than those with urban backgrounds.<sup>11</sup> Other factors associated with increased likelihood that a physician will choose rural practice include the following:

- *Training at a medical school with a mission to train rural physicians.* Such schools are more likely to graduate students who go into rural practice than schools that do not have a rural mission.<sup>8</sup> (There is, however, evidence that physicians who go into rural practice after having been trained at a school that does not have a rural mission tend to stay in rural practice longer.<sup>9</sup>)
- *Osteopathic training.* Osteopathic medical schools have a long tradition in rural communities, and physicians who are trained in osteopathic medicine are more likely to select family practice as a specialty than those trained in allopathic medicine (46 percent vs 11 percent) and to practice in rural areas (18.1 percent vs 11.5 percent).
- *Training that includes rural components.* Rural rotations and other rural curricular elements in medical school and residency training are critical to keeping students who have an interest in rural practice from looking elsewhere.<sup>10,11,12,13,14,15</sup>

Of course, many factors influence the resident's initial choice of practice site, rural or otherwise. Table 1, from a 1996 study of 1,012 residents, suggests some of the most important ones. And while none of them intrinsically favor rural sites, some suggest possibilities for giving physicians incentives to choose rural practice.

Unfortunately, data from recent years show that medical student interest in both family practice and rural practice is actually declining.<sup>16</sup> And although many physicians clearly enjoy rural practice, the majority do not. Some have argued that rural practice is so inherently unappealing that the only way to solve the problem of rural recruitment is to expand pay-back programs such as the National Health Service Corps.<sup>17</sup> Certainly, state and federal loan pay-back and scholarship programs provide much-needed physician manpower for many rural, isolated communities.<sup>18</sup>

An increasing number of International Medical Graduates (IMGs) have been choosing rural practice locations in recent years. While these physicians provide a valuable service to communities in great need, there are concerns that increasing the number of IMGs settling in the United States aggravates the physician surplus in our country and deprives the countries the IMGs come from of needed rural physicians.<sup>6,19,20,21</sup>

Finally, the recent increase in the number of women graduating from U.S. medical schools could further diminish the supply of rural physicians, since women have historically been much less likely to go into rural practice than men, although it does appear that a higher proportion of

recent women family practice residency graduates are going into rural practice.<sup>22</sup> One explanation for the historically low percentage of women in rural practice is the difficulty of meeting the needs of male spouses of physicians in rural areas. It is possible that a higher percentage of two-physician and other nontraditional partnerships may account for the recent increase in rural female physicians,<sup>10</sup> although two-physician couples can have difficulty fitting into small call groups in isolated areas because both prefer to be off-call at the same time. Women physicians may be particularly desirable to rural communities,<sup>23,24,25</sup> making this a positive development in many ways.

## Retention

Considerable research has been done regarding the reasons physicians stay in rural practice once they have started. While having a rural background may make a physician more likely to take up practice in a rural community, it does not seem to affect his or her decision to stay in such a community.

Research suggests that the ability to adapt to rural practice and, especially, rural life is the key determinant of retention. Pathman's prospective study of 456 randomly selected, non-obligated rural physicians<sup>26</sup> found that those who indicated that they felt better prepared both medically and socially for practice in a rural area stayed longer than those who felt unprepared or who were initially unaware of the special characteristics of rural practice. Being prepared for rural life in the social sense seems more important in this regard than being medically trained for rural practice. Those who felt prepared for small-town living were over twice as likely as others to remain in a rural area for at least six years.

In 1997, Cutchin published a paper based on in-depth interviews of 17 rural physicians in Kentucky. This study underscores the importance of a sense of place for physicians who practice in a rural setting.<sup>27</sup> Physicians attributed this feeling of "security, freedom and identity" to a number of factors, which are listed in Table 3. Cutchin's papers<sup>26,27</sup> help flesh out the concepts validated by Pathman in his more quantitative studies.<sup>14,25,29</sup>

Besides feeling that they "belong" to their rural community, family physicians who practice in remote and sparsely populated areas require special training in procedures, emergencies, obstetrical care and surgical care to feel confident in their abilities to handle situations without assistance. Fortunately, there are several rural-based and rural-track residency programs that offer this sort of training. It is less clear, however, whether medical schools and residencies are teaching the social skills family physicians need to succeed in rural practice. For example, the rural family physician may be called on to be a community leader and to represent the community's interest in public health emergencies. Additionally, the rural family physician tends to encounter his patients more often during the course of everyday life (e.g., at the grocery store). Being comfortable with this degree of closeness may or may not be part of the family physician's personality and social skill set. Medical school curricula that include classes on community development<sup>30</sup> and even Community-Oriented Primary Care (COPC)<sup>31</sup> can also have the eventual effect of promoting retention of family physicians who practice in rural areas. However,

current medical school curricula, by the emphasis on tertiary care and lack of respect for generalists, may subvert successful adjustment to rural practice.<sup>32</sup>

Programs that help rural family physicians become successful and stay satisfied with their choice have been developed.<sup>33</sup> Ideally, rural-based family practice residencies or departments with an emphasis on training physicians for rural practice could work with area health education cooperatives (AHECs) or other community-based groups to help communities develop such programs.<sup>34</sup> Community physician preceptors can serve as role models for residents and as links to rural communities.<sup>35</sup>

Finally, although a complete review of these issues is beyond the scope of this paper, welfare reform and changes in Medicare and Medicaid payment policies that result in more equitable payments to rural hospitals and physicians would likely have a positive effect on retention of family physicians.

## **Conclusions**

Rural communities in America need more physicians. The best way to fill this need is to increase the number of students from rural areas and other students committed to rural and family practice who are enrolled in medical schools. Physicians and community organizations from rural areas need to urge their state medical schools to give priority to students from rural backgrounds. Family medicine faculty members should be part of medical school admissions committees, so they can advocate for the admission of these students.

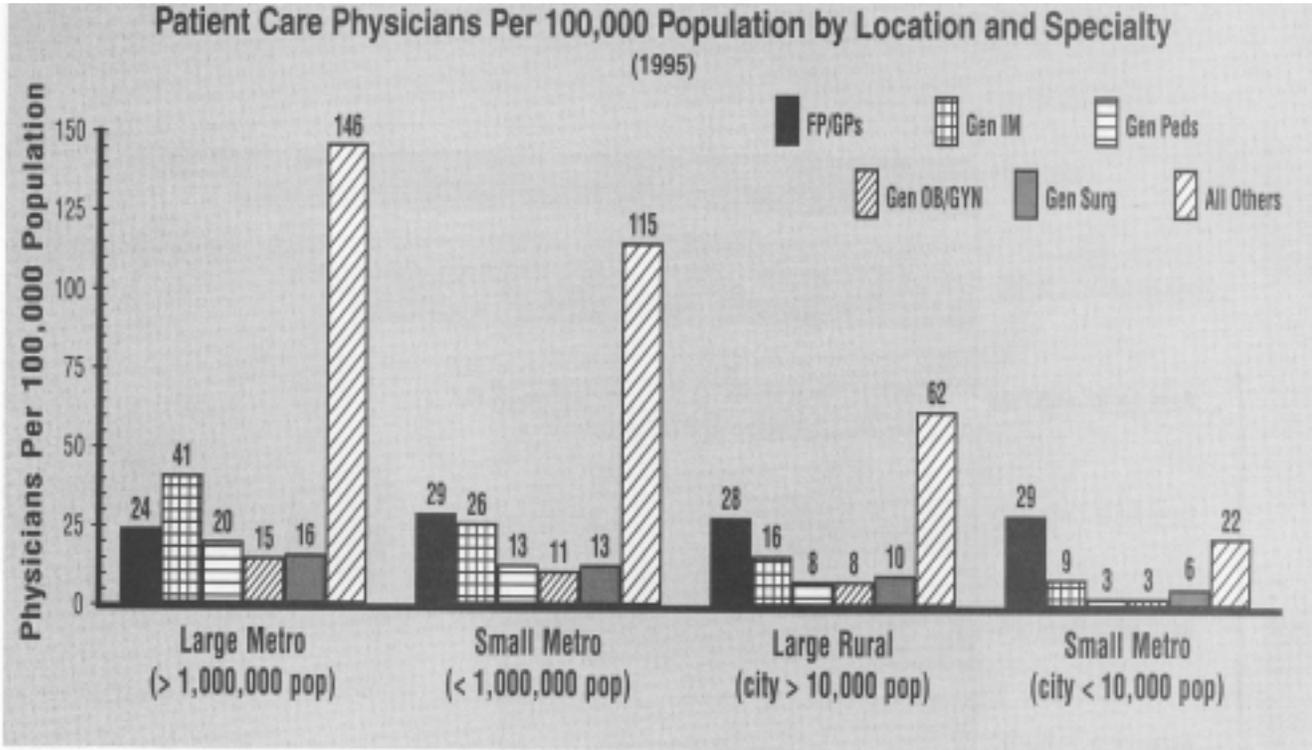
But increasing the number of rural-oriented students who enter medical school is not enough in itself, nor is simply increasing the number of physicians who begin rural practice. To support the students in their commitment and to promote retention of rural physicians, we need strong family medicine departments and rural-based curriculum elements in all medical schools. We need residency programs designed to teach the clinical, social, interpersonal and management skills needed for successful rural practice.

And these residency programs themselves need support. Groups such as the Accreditation Council on Graduate Medical Education (ACGME) and the Residency Review Committee (RRC) need to make special accommodation for rural-based programs. Barriers to accreditation for rural programs persist in spite of the demonstrated success of these programs in getting physicians into rural practice.

More, rural health care services are still under-reimbursed, threatening the viability of rural training programs as well as physician recruitment and retention. Government action is needed. Federal and state agencies that fund medical services could more actively support rural physicians and add to the attractiveness of rural practice in many ways (see Table 4).

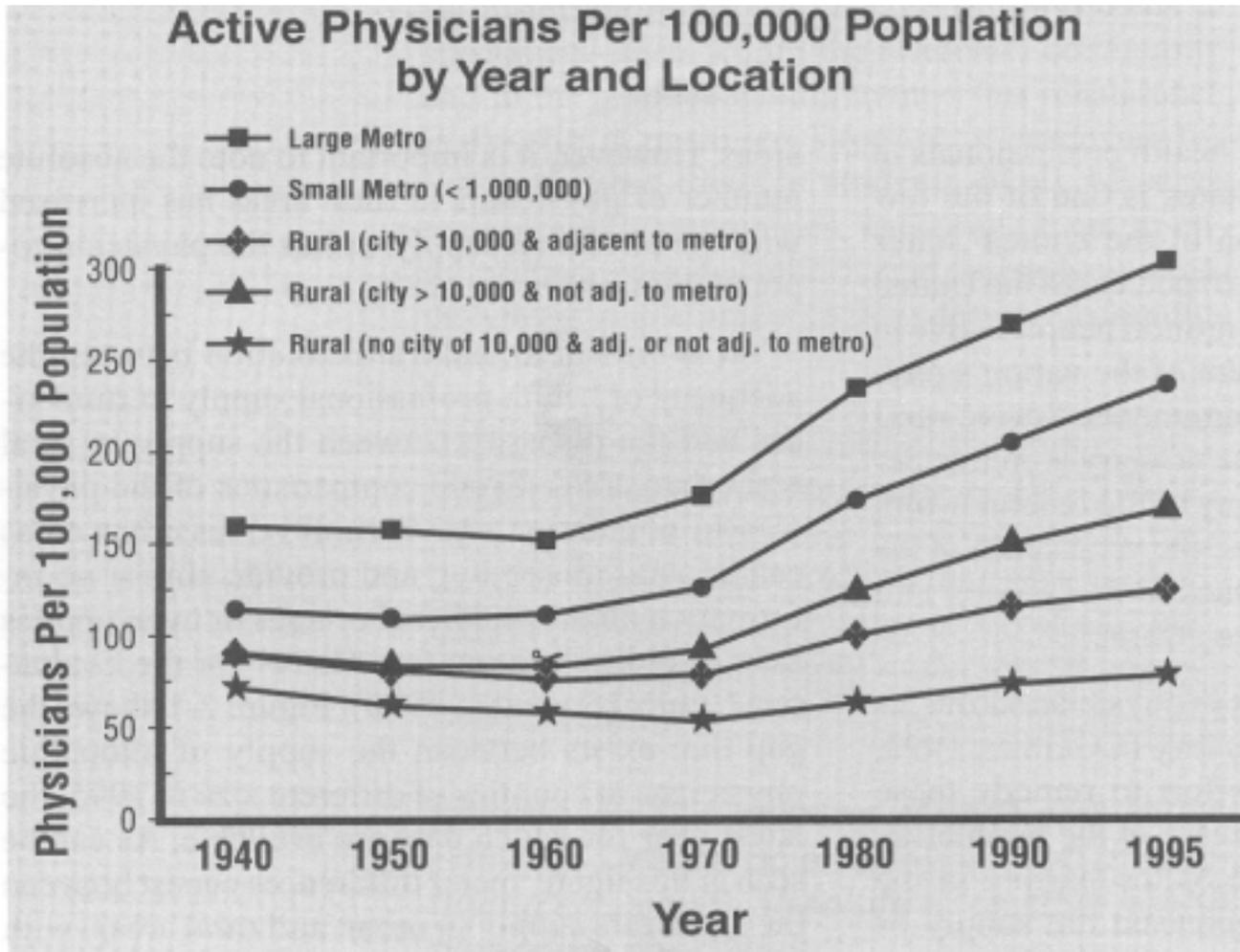
Finally, family physicians should actively support the AAFP, the National Rural Health Association (NRHA), and other groups that advocate for rural physicians.

**Figure 1**



Source: AMA from BHP's ARF data, 1997.

Figure 2



Source: AMA from BHPr's ARF data, 1997.

**Table 1: Factors Important to Graduating Family Practice Residents in Choosing Their First Practice Site**

Factor	Rank
Significant other's wishes	1
Medical community friendly to family physicians	2
Recreation/culture	3
Proximity to family/friends	4
Significant other's employment	5
Schools for children	6
Size of community	7
Initial income guarantee	8
Benefits plan	9
Proximity to spouse's family/friends	10
Weather/geography	11
Need for physicians	12
Significant other's school opportunities	13
Maximum potential income	14
Familiar with physicians in area	15
Community service commitment	16
Affordable housing	17
Opportunity to teach	18
Familiar with hospital	19
Loan pay-back plan	20
Signing bonus	21
Residency nearby	22
Medical school nearby	23
Military service commitment	24

**Costa AJ, Schrop SL, McCord G, et al: To stay or not to stay: factors influencing family practice residents' choice of initial practice location. *Family Medicine* 1996;28:214-219. Reprinted with permission of *Family Medicine*, published by the Society of Teachers of Family Medicine.**

## **Table 2: Factors that Influence Retention** <sup>9,25,36</sup>

Physicians who feel better prepared to handle emergencies, tough medical situations and busy outpatient practices without consultants or high-level technology are more likely to stay in rural practice.

Physicians who receive part of their residency training in rural areas stay longer in rural practice.

Physicians in rural communities are no more likely to leave their practices than are their urban counterparts.

Urban-raised physicians who enter rural practice stay in rural practice longer than physicians who were raised in rural areas.

Length of stay in rural practice is not associated with attending a public vs. private medical school or with training in a community-based vs. medical school-based residency.

Physicians whose spouses are from urban areas stay in practice as long as those whose spouses are from rural areas.

Physicians involved in teaching remain in rural practice longer than those who are not involved.

For obligated National Health Service Corps scholars, students from private schools are more likely to stay in a rural pay-back site after they have fulfilled their obligation period than are those from public medical schools.

Although many urban physicians assume otherwise, rural physicians do not necessarily view professional isolation and an inability to access medical information as drawbacks to rural practice.

Lack of quality of rural school systems, perceived or real, is related to length of stay for physicians in a rural practice.

**Table 3: Security, Freedom and Identity: How Rural Family Physicians Define These Concepts**

**Security**

- Confidence in medical abilities.
- Commitment to goals.
- Ability to meet needs of family.
- Comfort with local medical community and hospital.
- Not too much call.
- Social networks available.
- Respect by community at large and by the medical community.

**Freedom**

- Challenge and diversity in medical work.
- Ability to spend time with patients.
- Cooperation from medical community and larger community.
- Power in medical system.
- Ability to develop health care delivery system.
- Involvement in the community.
- Personal and family activities.
- Developed sense of self and place.

**Identity**

- Loss of anonymity.
- Like-minded practice group.
- Responsible role in hospital and community.
- Respect.
- Fulfilling aspirations for job.
- Seeing self as belonging in the community.
- Awareness of self in time and place.
- Creation of future goals without needing to relocate.

**Reprinted from Health & Place, 3(1), Cutchin, MP. Physician retention in rural communities: the perspective of experiential place integration, Pages 25-41, 1997, with permission from Elsevier Science.**

#### **Table 4: Key Legislative and Governmental Issues**

- Expand the Medicare Incentive bonus program, which pays a bonus to physicians for services rendered to residents of designated shortage areas, to include practices in remote small towns regardless of HPSA designation.
- Renew and expand Title 7 funding, which provides funds for family practice training, and link Title 7 funding to rural medical education.
- Reform Medicare regulation of graduate medical education to support rural-based medical education.
- Revise Medicare regulations, including the Medicare Incentive bonus program and the Area Wage Index of the Medicare Inpatient Hospital Prospective Payment System.
- Write legislation to support rural hospitals, which may include strengthening the Critical Access Hospital system and other special arrangements for rural health care funding.
- Changes the Personal Responsibility and Work Opportunity Reconciliation Act, which may improve rural economies and improve government support for rural populations.

## **Table 5: Resources for Information About Rural Health**

### **Web sites**

American Academy of Family Physicians ([www.aafp.org](http://www.aafp.org)).

Rural Policy Research Institute ([www.rupri.org](http://www.rupri.org))

Rural Medical Educators Home Page ([www.unmc.edu/Community/ruralmeded/](http://www.unmc.edu/Community/ruralmeded/))

National Rural Health Association ([www.nrharural.org](http://www.nrharural.org))

North Carolina Rural Health Research and Policy Analysis Center  
([www.shepscenter.unc.edu/research\\_programs/Rural\\_Program/rhp.html](http://www.shepscenter.unc.edu/research_programs/Rural_Program/rhp.html))

Federal office of Rural Health Policy ([ruralhealth.hrsa.gov/](http://ruralhealth.hrsa.gov/))

### **Articles and Books**

Council on Graduate Medical Education: Tenth Report: Physician distribution and health care challenges in rural and inner-city areas. Rockville, Maryland: U.S. Department of Health and Human Services, U.S. Public Health Service. 1998: 11-22.

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Medicare Payment Advisory Commission: Report to the congress: Medicare in rural America. Medpac, Washington, DC. June 2001 ([www.medpac.gov](http://www.medpac.gov)). (Note: this document has some useful information, although it has been criticized as being extremely timid in its conclusions).

Urban and Rural Chartbook, DHHS, 2001.

Pathman DE, Steiner BD, Jones BD, et al: Preparing and retaining rural physicians through medical education. *Acad Med* 1999;74:810-820.

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