

Special Series: Rural Residency Tracks

One-two Rural Residency Tracks in Family Practice: Are They Getting the Job Done?

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Background: *In the 1990s, the Residency Review Committee for Family Practice (RRCFP) and the American Board of Family Practice used the development of rural training programs as a strategy to bridge training experiences across urban referral centers and rural community hospitals. These programs are relatively small and attract trainees who are predisposed to rural practice. Aggregating data from several programs yields insight about their challenges and their ability to produce graduates who enter rural practice. Methods:* This descriptive analysis is based on self-reported data from a 1996 survey mailed to the residency program directors of rural training programs, identified by the RRCFP office as one-two programs. **Results:** *More than half of the rural training programs surveyed were located in health professions shortage areas, most in communities with little urban influence. These programs are equally likely to be sponsored by university- or community-based residency programs. Most (75%) placed two or fewer residents per year in the rural site; minorities accounted for 4% of placements. Thirty percent of programs report unfilled positions. Seventy-five percent use televideo communications and find experiences in surgery and obstetrics relatively easy to arrange but dermatology and critical care difficult. Seventy-six percent of graduates enter rural practice after graduation. Conclusions:* This survey suggests that family practice rural one-two residencies are meeting the goal of providing trainees with a rural immersion experience, in anticipation of selecting rural practice after graduation.

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Not only do residents choose a practice location during residency training, but they also tend to practice in the region where they trained.¹⁻⁴ Since the 1990s, the Residency Review Committee for Family Practice (RRCFP) and the American Board of Family Practice (ABFP) used the development of rural training programs or tracks (RTTs) as a method to bridge training experiences between urban referral centers and rural community hospitals.⁵⁻⁸ Because each program is relatively small and attracts trainees who are predisposed to rural practice, it is difficult to assess the effectiveness of any single RTT program. Using data obtained in a 1996 survey of all one-two rural programs listed by the RRC, this report describes their structure and their graduate outcomes.

Background

The rural training programs surveyed were family practice residencies organized in the one-two format. In a one-two residency, the first residency year is completed in an urban center. The second and third years are completed in a distant rural community, where the primary faculty are members of a rural family practice group. Inpatient experience during the second and third years is provided by community hospitals that offer obstetrics, emergency care, and first-line critical care. Residents' training is supplemented by specialty faculty practicing in the rural community. The curricula are structured and evaluated to assure training experiences of uniform quality. The RRCFP requires each site to be visited by a "specialist" experienced in rural issues and resident education prior to approval or reaccreditation. The rural residency programs are approved by the RRCFP as distinct programs with their own ACGME identification number, separate from their affiliated urban program. These programs have acquired the common name of

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RTTs since being piloted by the Spokane Family Medicine Program (affiliated with the University of Washington). The RRCFP, however, does not recognize the RTT as a specific designation or type of program. Financial support for RTTs comes from state-specific initiatives, hospital reimbursement, hospital recruitment budgets, area health education centers, graduate medical education reimbursement, and patient care revenues.⁵

Methods

This descriptive analysis is based on self-reported data from a survey mailed in 1996 to the residency program directors for RTTs, identified by the RRCFP office as one-two programs. Those programs that failed to respond to the survey in 1 month were called and asked to return their survey if they had not already done so. As a result, the response rate was 100%. Follow-up phone calls were used to confirm accuracy of responses on selected questions.

Results

The survey was mailed to 13 program directors. One program, however, had not yet enrolled residents and, therefore, was dropped from the study. Some residencies sponsored more than one rural site. Three programs returned descriptions on three rural sites, and two programs reported on two sites. One rural training site was started in 1986 and another in 1988. Six sites opened in 1992, three in 1993, but six programs became operational as late as 1995 and 1996. Completed surveys were returned for 17 rural training sites (Figure 1).

Fifty-five percent of the rural training sites were in federally designated health profession shortage areas (HPSAs). Thirty-five percent of the rural sites were judged to be rural with some urban influence. More than half (55%) were rural with little urban influence. Ten percent were described as frontier. Twenty-five percent of the rural office sites were located within or on the campus of a rural hospital. Those not on a hospital campus were an average of 2 miles away; the greatest distance was 35 miles. The family practice offices used for the rural-based ambulatory training have an average of 10.5 exam rooms.

Program Structure

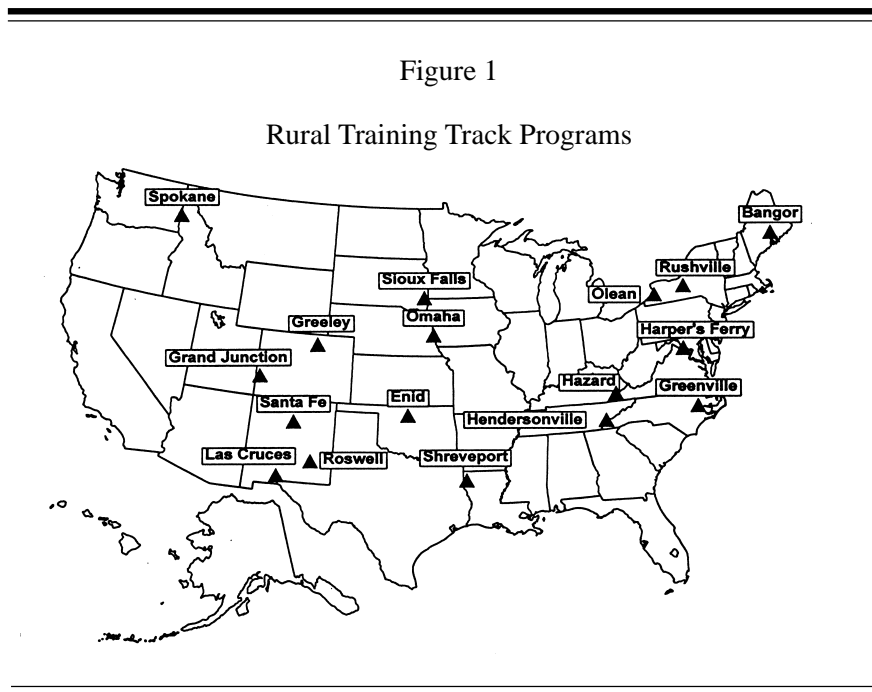
Six sites were sponsored by university-administered programs and the rest by community hospital-administered family practice residencies. The urban hospital for first-year training averaged 427 beds, and the rural hospital averaged 173 beds; the range was from 14 to 308. An average of three faculty (range one to seven, with one site reporting 18 physicians) worked full-time in the rural family practice office. Half of the rural training programs were approved for two residents in each of the second and third years of residency (total of six in the track, counting the two in the first year at the urban location), 25% were approved at four per year, and the remainder (25%) had only one trainee per residency year in the rural program.

Program Enrollment

A total of 74 residents were enrolled in the second and third years in fall of 1996. The average number of residents enrolled in a rural training track was six. Thirty percent of programs had unfilled positions in their second-year slot. Thirty-seven percent of second- and third-year residents were women, and three residents (4%) were from underrepresented minorities.

Practice Sites

A total of 99 residents have completed a one-two rural training program and graduated. Seventy-six percent entered practice in a rural community after graduation, and 16% were practicing within 50 miles of the rural training site.



Curriculum Issues

Fourteen programs (75%) used televideo technology as an educational strategy. In spite of this technology, 85% of programs required residents to return to the urban site to meet at least some portion of the core training requirements. This ranged from attending peer-group functions and didactics to 2 months of block rotations. Seventy-five percent of the programs reported that arranging a required surgery rotation was relatively easy in the rural community. Half of the programs had little trouble arranging obstetrical experience. Dermatology was most often reported to be difficult to arrange (40%), and 30% reported neurology, cardiopulmonary, and intensive care rotations to be difficult to organize in the rural community.

One third of the rural training tracks require both obstetrics and surgery rotations beyond minimum RRCFP guidelines. All programs reported that graduates will get enough experience within the 3 years of training to be certified to perform colposcopies, 90% to first assist at surgery, and 50% to perform cesarean sections.

Discussion

This survey suggests that family practice one-two rural training tracks are meeting the goal of providing trainees with a rural immersion experience in anticipation of rural practice upon graduation. Most sites are in HPSAs or in communities with little urban influence, and 76% of graduates entered rural practice, compared with 30% of all 1996 family practice residency graduates.⁹ Only 4% of residents in these rural programs represented minority groups, versus 28% of all family practice residents. Women comprised 37% of residents in RTTs, versus 42% of all family practice residents.^{9,10}

Recruitment to RTTs may be problematic, since 30% of programs reported empty positions. Nationally, only 2.2% of family practice residency positions were unfilled in July 1996.¹¹ The difference in fill rates between RTTs and other programs may be explained by 1) the difficulty recruiting to relatively new RTT programs that are still establishing their reputation, 2) the possibility that the rural training market is saturated, or 3) the need for the sponsoring urban programs to better sell applicants on a distant rural experience.

As expected, many RTTs rely on telecommunications for part of their teaching and require some continued experience at the urban-based program to complete high-technology rotations such as critical care. Areas of self-reported curricular strength included obstetrics, surgery, and procedures.

An important limitation of the results is that they represent self-reported data from a mailed survey and, as such, may couch individual bias by professionals committed to the RTT concept. However, the high response rate and concordance on selected questions during targeted phone follow-up indicate little possi-

bility of response bias. Another limitation the reader must guard against is overinterpretation of the data, since RTT trainees are self-selected, and primary care career decisions are driven by many issues other than training.¹² Finally, the results of this study represent only a snapshot in time, and it is unknown if the excellent rate of postgraduate retention in rural communities will be sustained. Previous work suggests that 30% of physicians relocate every 2 years, and about 33% of rural physicians eventually move to urban locations.^{5,13}

The five major elements of successful rural training programs are 1) an academically sound urban residency program or department, 2) a supportive urban medical center, 3) a financially viable rural hospital, 4) a modern rural practice unit, and 5) a robust rural community. The parent urban residency program must commit faculty and staff to a rural training experience and support rural faculty who assure quality education beyond a preceptorship experience. Urban medical centers frequently secure a rural hospital as part of a regional referral market and support training programs to assure primary care providers throughout the network.^{14,15} Alternatively, a rural hospital may network with an urban institution to assure tertiary care and find that training programs integrated with urban academic centers stabilize their primary care base with well-trained and experienced family physicians.¹⁶ American Hospital Association data support the impression that rural hospitals (independent of size) with residency programs are more successful at recruiting and retaining physician staff than are hospitals without training programs.^{4,17,18} A residency provides a pool of new staff with a confirmed interest in a rural lifestyle and skills for a rural health care system. The Association of American Medical Colleges calls to expand the ranges of settings for medical education programs have further encouraged academic interest.^{19,20} RTTs would seem to address these issues.

Physicians in the rural practice site may find resident education professionally stimulating and economically productive. It has been suggested that rural practice sites employ three to seven physicians and care for a community from a population-based perspective.²¹ While there is considerable variation among the RTTs, site selection factors include available exam rooms, cost of expansion or rebuilding, opportunities for enhanced obstetrics and surgical training, number of procedures available in a rural practice, strategies for obtaining hard-to-get rotations such as dermatology, and access to televideo technology. Communities should be evaluated for their degree of rurality to assure that they meet the project's goals. Ideally, the RTT community will typify rural communities in the state. Economic viability of the project service component is important and may be enhanced by federal or state initiatives for rural underserved areas.^{5,22}

While new models of graduate education are exciting, and academic performance can be estimated by in-training exams and board scores, the ultimate success of RTT programs depends on graduates practicing in rural communities. The placement of 76% of graduates into rural practice suggests that the model works. These programs also encourage urban-based residents to consider rural practice by exchange rotations and interaction with rural-based faculty. But, these exposures come at a price. Inevitably, a rural training experience is more diffuse than urban academic centers and requires more diligence from faculty to monitor the quality of community-based experiences. Opportunities for lapses in quality are greater when a community-based specialist hosts a trainee only once or twice a year, versus a rotation that is exercised monthly.

The number of one-two rural training programs have increased markedly in the past few years. The revised 1997 RRCFP family practice guidelines will require each program to accommodate at least two residents, at least one in each of the second and third years. The guidelines also require a faculty physician to be designated and immediately available to supervise when a resident is seeing patients. If only one resident is seeing patients, that physician may engage in other activities in the family practice center to a maximum of 50%.

The one-two programs seem to successfully address the goals of training in truly rural communities, employ modern technology for education, recruit local specialists for required rotations, provide enhanced experiences in obstetrics and gynecology, and graduate physicians who enter rural practice. A fairly high number of programs have unfilled positions and attract few minorities. Questions remain regarding how many more programs should be encouraged and whether trainee need or community need should be most highly regarded. RTTs have provided communities with a focus for external grant funding, care models for special populations, and stability of health care access.^{6,23} Decentralizing resident education should add value to the education experience by assuring residents more community-relevant experiences and modeling the generalist-specialist relationship appropriately.²⁴ At a time when the United States finds itself with an adequate supply of physicians, the distribution of health care and access remains acutely problematic.¹¹ Rural training tracks may offer another model of family practice education that addresses the country's needs.

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