

# National Rural Health Association

## Issue Paper

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### Recruitment and Retention of a Quality Health Workforce in Rural Areas

A series of policy papers on The Rural Health Careers Pipeline  
Number 3: Pharmacists and Pharmacy Technicians

#### Introduction and Background

Prescription drug use is at an all-time high – an estimated three billion prescriptions were written in 2005 – and as baby boomers age, demand is expected to surge. This year's implementation of a new Medicare drug benefit is expected to increase the nation's demand for pharmacists, who already are in short supply. One out of five hospital pharmacist jobs is unfilled, and six percent of retail pharmacy positions are unfilled. The growing need for prescriptions, combined with a lack of pharmacists to fill them, has created demand for pharmacy programs with the appropriate faculty, facilities and resources to train pharmacists to safely dispense medications and monitor drug therapy.<sup>1</sup>

In addition, as is often the case, rural America gets fewer pharmacists than what might be considered its fair share. According to a study by the American Pharmacists Association, 20 percent of the nation's population lives in rural America but only 12 percent of its pharmacists practice there. Like other rural health care providers, pharmacists who wish to set up shop in the small towns and countryside face the obstacles that come from remoteness, isolation, and a higher percentage of lower-income clientele.<sup>2</sup>

#### Issues

The pharmacist shortage in rural communities also impacts the quality of care provided to patients in rural hospitals and Critical Access

Hospitals (CAHs). The following issues are based upon the practice and research experience of the authors, as well as comments abstracted from the American Society of Health-System Pharmacists (ASHP) "Small and Rural Hospital Group" list serve. Many rural hospitals have the service of a circuit-riding consultant pharmacist one day per week. Some hospitals may be staffed for as little as one hour per day by a local community pharmacist who literally stops by the hospital on his/her way to or from a full-time job at a community pharmacy in town. Community pharmacists tend to lack the clinical and administrative training necessary to meet the specialized pharmacy needs of hospital inpatients (e.g., establishing and running an anticoagulation monitoring service or bringing a hospital's IV compounding activities into compliance with USP 797 guidelines). ASHP is beginning to try to address these issues by identifying and developing educational programs targeting rural community pharmacists who also provide services to the local hospital. Then again, these pharmacists often cannot find relief help, making it difficult to get away to attend professional meetings to upgrade their knowledge and clinical skills.

Directors of rural pharmacies point out, however, that many of the difficulties they have in recruiting pharmacists are independent of training issues. Large urban hospitals and corporate chain pharmacies (in urban and larger rural communities) are able to offer pharmacist salaries against which smaller rural providers cannot even begin to compete. Pharmacists

decline rural hospital positions because they do not want to work nights and/or take call nights, weekends and holidays. Newly graduated pharmacists who have spent their final year participating exclusively in clinical rotations are reluctant to take a pharmacy position in small rural hospitals where pharmacists must usually engage in dispensing and administrative activities, as well as clinical activities.

### **Models that work**

Minnesota has a number of programs designed to recruit and retain pharmacists in rural practice. Efforts to this end are a result of the Minnesota AHEC, the University of Minnesota College of Pharmacy (COP), the Pharmacy Rural Education, Practice and Policy Institute (PREPP) and the State of Minnesota Rural Pharmacy Preservation Act of 2005.

The College of Pharmacy (COP) has two campuses, one in Minneapolis and the other in Duluth. The creation of the second campus in Duluth occurred in the fall of 2003, and was in part a result of increased demand for pharmacists in rural Minnesota. The COP has offered rural experiential opportunities to pharmacy students for many years. Participation has been voluntary. In response to an anticipated increased need for experiential education, the COP has dramatically expanded the number of rural Advanced Pharmacy Practice Experience (APPE) sites. Participation continues to be voluntary for most students; however, starting in 2006 a few students may be required to complete some of their clinical experiences in rural settings simply because of the limited number of urban APPEs. Duluth faculty is in the process of developing a rural emphasis for the Duluth program.

The increased enrollment capacity in the COP has resulted in a greater number of students admitted from rural Minnesota. Hopefully, this expanded program will attract more students to rural practice as has been seen in nursing and medicine.

Founded in 1995, the Pharmacy Rural Education, Practice and Policy Institute's (PREPP) mission is to improve access to pharmacist-provided services (pharmaceutical care)

in rural communities. To this end, faculty have developed rural APPE opportunities for students, helped pharmacists develop new practice opportunities and initiated a rural residency program. PREPP has worked to create inter-professional, service-based education, fellowships and classroom opportunities in rural communities for an array of health professions students. Approximately two-thirds of participants have pursued rural practice upon completion of their studies.

PREPP faculty and the COP residency program have partnered to create rural pharmacy residency training experiences. Paynesville Area Health Care System and Tyler Health Care System are two model rural resident training programs. The Paynesville residency is a free-standing program in a CAH accredited by the ASHP. The Tyler program is unique in that the resident provides care full-time to patients in Tyler, but the resident's preceptor has a full-time position 180 miles away in Minneapolis. Nearly 100 percent of the pharmacists completing these programs have remained in non-urban practice since residency's inception in 1996. There is hope to expand current efforts of this program to Critical Access Hospitals to meet the needs of pharmacist-provided care in much of Minnesota.

Due largely to the hard work of Minnesota pharmacists, the Minnesota Legislature passed the Minnesota Rural Pharmacy Preservation Act (MRPPA). This legislation provided two programs designed to help rural pharmacy. First, a Rural Pharmacist Loan Forgiveness Program was created, designed to provide loan forgiveness funds to young pharmacists who have chosen to practice in rural Minnesota. In 2005, eight pharmacists were chosen to receive \$40,000 in exchange for a four-year commitment to work in rural Minnesota. The program is competitive and participants are selected based on prior rural experience. The second program created by MRPPA is the Rural Pharmacy Transition Grant Program. This competitive grant program is designed to help communities increase access to prescription medications *and* pharmacist-services. The legislature devoted \$200,000 annually to this effort. Applicants can receive up to \$50,000 for projects meeting the program requirements.

A second model is West Virginia's Higher Education Policy Commission which established degree required rural rotations for all health science students in state supported schools in 1996. The Rural Health Initiative Act supports the program and provides roughly \$6 million per year to the state supported health sciences centers and local community network training sites. The program, the West Virginia Rural Health Education Partnership/AHEC, is based on strong partnership principles with local communities.

All disciplines complete rural rotations and 738 health professionals have been recruited into rural areas of WV since the early days of the program. Of this total, 150 are pharmacists who have completed these required three-month rotations and have gone into practice in rural underserved areas of the state. West Virginia's rural health curriculum requires all schools to teach rural content and for the students to spend a minimum of 20 percent of their time in community service learning, community based research, and/or interdisciplinary training. This is in addition to the required clinical objectives of each rotation. The content in their didactic course work includes

- Definitions of rural, Health Professionals Shortage Area and Medically Underserved Areas/Populations
- Client and provider challenges, barriers, and rewards
- Problems facing rural pharmacists
- Special populations and the issues related to serving these populations
- How urban and rural populations are similar as well as different.

### Schools of Pharmacy

Efforts to recruit and retain pharmacists in rural communities vary widely across the country. A recent survey showed that the majority of Schools and Colleges of Pharmacy offer some sort of educational/experiential opportunities for their students in rural practice.

A phone and e-mail survey was conducted in July 2005 where key informants of all schools of pharmacy were asked if their programs

offered rural experiences to their students, whether they required their students to have rural experiences, and if they knew of a program in their state that was designed to recruit and retain pharmacists in rural practice (Table 1). Of the 63 responding institutions, only ten acknowledged that they did not offer non-urban experiences. All of the 53 informants stating they did have rural opportunities for their students either offered clerkships, outreach clinic experience, or Area Health Education Center (AHEC)-associated offerings. Forty-three schools of pharmacy offer rural experiences as an option while ten indicated rural experience was required of all students.

Informants were less likely to identify a state sponsored program designed for recruitment and retention. Only five respondents cited a formal program and another five indicated there were currently efforts being undertaken to secure state support. Ten respondents did not know if their respective states had such a program.

**Table 1.**

Rural Education Programs in US Schools/Colleges of Pharmacy: Results of July 2005, Telephone and E-mail Survey conducted by the University of Minnesota

Colleges/Schools of Pharmacy at time of survey	88
Colleges/Schools of Pharmacy providing information	63
Mandatory Rural APPE*	10
Voluntary Rural APPE*	43
Informal or Periodic rural experiences	8
No Rural APPE*	11
APPEs* in conjunction with AHEC**	6
APPEs* without AHEC** participation	18
State Recruitment and Retention Program for Rural Pharmacy	5

\* Advanced Pharmacy Practice Experience (aka Clinical Clerkship Rotation)

\*\*Area Health Education Center

## Summary

The results of this survey suggest that opportunities exist for Schools/Colleges of Pharmacy to directly address the need for additional pharmacists in rural communities. The rural health literature suggests that in nursing and medicine, having students participate in rural clinical experiences increases the likelihood that graduates of these programs will choose to practice in rural communities.<sup>3</sup> Similar research among pharmacy students does not exist; however, we have every reason to suspect that this would be true of pharmacy students, as well.

In addition, the over-riding issue of financial sustainability of the low-volume rural pharmacy setting must be addressed if there is to be any expectation of success in recruitment and retention of future generations of pharmacists to our rural communities. If we build it, they will come.

## Recommendations

- The American Association of Colleges of Pharmacy should work with member schools to encourage development/utilization of appropriate rural APPE sites. The Accreditation Council for Pharmaceutical Education, given responsibility by the U.S. Department of Education to accredit schools and colleges of pharmacy, should ensure that rural APPEs are available to students from all schools and colleges.

- Congress should enact legislation such as the Rural Pharmacist Loan Forgiveness Program and the Rural Pharmacy Transition Grant Program designed to help rural pharmacy.
- NRHA strongly supports the designation of a special rural entity with enhanced reimbursement such as the Senate-proposed Critical Access Pharmacy or the House-proposed Sole Community Pharmacy to strengthen the financial sustainability and entrepreneurial viability of rural pharmacy practice.
- Schools/Colleges of Pharmacy should work with other organizations (including AHECs, SORHs, state pharmacist associations, hospital associations) to assist in placing students into rural APPEs, helping increase interest in rural practice among pharmacy graduates.
- AHECs and career tech schools should provide more pharmacy technician training and certification programs emphasizing opportunities and experiences in rural settings.
- Uniform national standards should be adopted for pharmacist certification in order to support tele-pharmacy opportunities across state lines that expand the delivery of pharmacy services and patient education in rural areas.

## References

<sup>1</sup> 2005 Knight Ridder/Tribune Business News/2005 The Washington Times

<sup>2</sup> *Future Uncertain for Rural Pharmacies*, T. Rowley, Rural Health News, Vol. 9, No. 2, Fall 2002

<sup>3</sup> Curran V and Rourke J. The role of medical education in the recruitment and retention of rural physicians. *Medical Teacher*. 2004; 26:265-72.

Gordon IT and Denton D. The relationship of rural clinical rotations to where registered nurses practice. *J Rural Health*. 1992;8:298-304.

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