



Rural Health Care Workforce: Opportunities to Improve Care Delivery

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Rural America faces a critical shortage of primary care providers. Primary care is defined by the Institute of Medicine (IOM) as the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.⁷ This shortage jeopardizes the nation's ability to meet the health care needs of the rural population. Primary care providers offer routine primary care, health promotion and disease prevention, and treat chronic health care conditions—all of which are fundamental needs of the rural population. Rural residents are consistently found to have higher incidence of chronic illnesses such as arthritis, asthma, heart disease and mental disorders than urban residents.³

The primary care workforce is composed of physicians as well as other clinicians such as nurse practitioners, physician assistants, and certified nurse midwives. Registered nurses also play an important role in primary care. Shortages exist in all areas of this workforce, and none of the listed providers are able to adequately care for the rural population alone. Reversing the shortage of health care providers is a complex problem with no short term solution. These health care providers impact the availability of health care to rural residents. This paper will describe causes of the primary care provider shortage; explain the importance of nurses (including advanced practice nurses) in rural health care; and discuss how health care reform presents opportunities for nurses to improve access to and quality of health care for rural residents.

Overview of Primary Care Physician Shortage

The shortage of primary care physicians has reached a critical level. Over 20 percent of the U.S. population lives in rural areas, yet they are served by only nine percent of the nation's physicians.²³ This discrepancy is expected to increase in coming years as medical school enrollment continues to fall and fewer medical students choose primary care because of the greater income opportunity associated with surgical and high-tech specializations.¹⁰ Another factor that contributes to the shortage of rural health care providers is that an increasing number of medical students come from urban areas, with no ties to or appreciation of rural life. These individuals are reluctant to pursue positions in rural areas because of what they perceive as excessive isolation and concerns about lower insurance and public program reimbursement rates creating less income potential. This decreased income level is due in large part to current reimbursement policies which reward volume rather than quality. In sum, perceived isolation, lack of residency preparedness, complexity of primary care, and lower reimbursement levels are key challenges related to rural physician recruitment.²⁰

Many rural health policy experts have identified policy options that could be effective at increasing rural physician supply. These policy initiatives are necessary and merit legislative consideration and subsequent funding. For example, primary care providers practicing in rural areas are significantly more likely to have grown up in rural areas.⁴ Therefore, rural high school students with an interest in health care warrant special attention; one recruitment approach is to develop and enhance funding for programs that facilitate their pursuit of health care careers, such as Area Health Education Centers (AHECs). AHECs work to adapt national initiatives to address local and regional healthcare issues. They also use community-based training programs to recruit, train, and retain a health care workforce committed to underserved populations.¹⁸ These students must be able to access substantial educational financial aid to offset the average medical school debt load of \$140,000.²¹ In order for this to happen, new and existing financial aid programs must be fully funded and available to students with documented financial need. Medical students also need to participate in significant rural clinical experiences early in their course of study in order to familiarize students with the unique challenges providers face in meeting the health care needs of the rural population.⁸ Due to the declining number of general practitioners, however it is unlikely that physicians alone

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will be able to meet the demands of caring for the rural population. Thus, it is important that educational programs for mid-level providers, such as nurse practitioners, be accessible and affordable for students interested in rural health careers.

Importance of Nurse Practitioners as Rural Primary Care Providers

Nurse practitioners are excellent choices to provide patient-centered primary care. The first nurse practitioner program was established in Colorado in 1965 to meet the primary care needs of children in the face of a physician shortage. Over 45 years later, there are approximately 140,000 nurse practitioners licensed in the United States.² Many researchers have compared outcomes of nurse practitioner-led care to physician-led care and found no significant difference.^{5, 14, 17, 22} Research also indicates that nurse practitioners in small private practices, not constrained by billing expectations or productivity requirements, have better outcomes than physicians or other clinicians practicing in large centers.¹¹

Nurse education, when compared to other health care disciplines, has traditionally involved greater focus on care coordination and on the patient as an individual with many internal factors working to shape a person's responses to illness and disease.¹ Nurse practitioners are the only primary care providers scientifically trained to impart this type of health care.¹⁶ Health status can be influenced by their environment, lifestyle choices, external stressors, and genetics. None of these factors can be ignored by primary care providers, and nurse practitioners are well prepared to look at them in concert. In rural areas the role played by the environment and external stressors appears to be magnified. Choosing a provider that is prepared to consider all factors in their treatment plan is extremely important.

Rural residents require care for chronic conditions such as diabetes and heart disease in greater numbers per capita than urban residents. Successful management of chronic conditions includes prevention of illness and ongoing health promotion. It also requires effective patient and family education in areas such as nutrition, exercise, medication management, and emotional support. A health care delivery model that supports this type of care is the health care home (also known as medical home). In its report *Primary Care: America's health in a new era*, the Institute of Medicine defined a health care home as a place where patients can receive integrated, "accessible health care services by clinicians who are accountable for addressing a large majority of health care needs, developing a sustained partnership with patients, and practicing in the context of family and community."⁶

The IOM points out, the clinician role should not be limited to physicians. It can be filled by physicians, nurse practitioners, physician assistants, or other practitioners with the scientific knowledge and authority to direct the delivery of health care to patients. There is consistent support for a broad, holistic approach to care coordination, including health care homes that utilize a team of health care providers.^{1, 6, 13, 19} The National Rural Health Association also supports the development of health care homes that provide care for the whole person at all stages of life.²⁰

Health care homes can improve the continuity of care for rural residents by serving as the central hub of a person's health care services and records. Rural residents travel to distant communities to receive care from many different specialists, frequently leading to fragmented and inefficient care related to poor communication and compartmentalized treatments. Health care homes located in rural communities would not eliminate the need for residents to travel to see specialists but would serve as a home base for the patient's healthcare needs. It may help to visualize the current system of care as throwing a softball—the ball (patient) leaves the pitcher's hand (rural area, point of care and their health records). The health care home model would look more like a boomerang—the person leaves for a specific treatment, but the follow-up care and health records returns to the health care home.

Quick and easy solutions are rarely found for endemic problems and impacting the availability of adequate rural primary care is no different. Nurse practitioners are an excellent choice to lead rural health care homes. In order to more efficiently utilize nurse practitioners, health care reform must challenge the status quo of care delivery and public perception regarding these clinicians. Nurse practitioners and other clinicians face misconceptions about their education, responsibilities, and scope of practice.¹⁵ Some physicians, third-party payers such as insurance companies, and the public minimize the role that nurse practitioners are prepared to play in primary care.

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Physicians need to be willing to accept nurse practitioners practicing in their area of expertise as partners working to meet patients' health care needs. Payers need to include nurse practitioners on their panels in order to facilitate equitable payment for the care they provide. In conjunction with health care reform, there needs to be a concerted effort to educate the public about the positive outcomes associated with these practitioners. The general public needs to understand the similarities and differences in care delivery between physicians and nurse practitioners, highlighting nursing's focus on illness prevention and health promotion as well their ability to provide comprehensive care for illness within their areas of expertise.

Specifically, nurse practitioners are prepared to provide aspects of medical care in their specialty area. This includes diagnosing and treating illness, writing prescriptions, ordering lab tests and interpreting results, admitting patients to hospitals, and offering other treatments as needed. Nurse practitioners practice within their scope of practice, including referring patients they cannot manage to a physician. Nurse practitioners differ from physicians in that they focus on holistic care that integrates patients' physical, emotional, behavioral, and other aspects of care. They are especially well-prepared to handle psycho-social issues, patient and family education, and coordination of care for complex patients. The latter might encompass patients from low socioeconomic backgrounds, cultural minorities, as well as those who do not speak English or lack coverage. Increasing the number of nurse practitioners practicing in rural areas, especially in health care homes can provide a high quality point of access to the health care system for a vulnerable population. In the current health care system rural residents often delay care until their health status is critical, and frequently utilize emergency services as their primary access point to health care.⁹ Both of these instances increase the cost and worsen outcomes of care.

Variations across states in nurse practitioner scope of practice and reimbursement practices create barriers to nurse practitioner care, including health care homes. Reimbursement rates vary by payer—i.e., Medicaid, Medicare, and private insurance. Typically, reimbursement rates are set as a percentage of physician rates (which include a number of factors, including a geographic factor which is generally significantly lower for rural providers). Health care reform initiatives could enhance access to nurse practitioners by providing statutory credentialing for them as primary care providers and authorize reimbursement at 100 percent for all primary care practices. Statutory credentialing would give all nationally licensed nurse practitioners the legal authority to practice as independent primary care providers.

National health reform legislation could encourage third party payers to reimburse nurse practitioners at 100 percent under “any willing provider” guidelines. “Any willing provider” laws prevent health insurers from discriminating against health care providers that are willing to meet the insurance network's criteria and fee terms. Increasing and standardizing reimbursement and the scope of practice will pave the way for nurse practitioner-led primary care and also facilitate additional recruitment of nurse practitioners.

Opportunities for Nursing

Policymakers will measure the success of health care reform efforts by their long-term ability to reduce national health care expenditures while improving health care access, availability and quality. Essentially this requires our system's movement from a “sick care system” to a health care system.¹² It is much less expensive to keep a person healthy through illness prevention and wellness education, than to treat someone who has become seriously ill. Staying healthy is influenced by many factors, including biology, behaviors, physical and social environments, and policies that support family and community health. Health care reform initiatives can support the development of policies that support these factors, including the development of health care homes and other rural practice models. Nurses' focus on caring for, and nurturing the whole-person, as well as illness prevention and effective health promotion can aid in developing an effective “health” care system. With rural people suffering higher instances of every chronic and preventable disease and condition, creating a “true health care” system is crucial for rural people. Registered nurses can serve as educators and patient advocates, and nurse practitioners can coordinate care to facilitate health for rural residents.

In order to improve availability of rural health care, programs that are unique to rural areas might also be developed. Building from the health care home model described in the Institute of Medicine's report, a system that utilizes improvements in health information technology and telehealth could improve the availability of primary

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health care to rural residents. Using telehealth to connect rural primary care clinics in small communities to primary care providers in larger communities could provide access for routine wellness care, prevention, and education. It is within the scope of practice of registered nurses (RN) to be the care coordinators of these rural clinics, if they were to be supervised by a physician or nurse practitioner in the delivery of care. North Dakota uses this model to enable pharmacy technicians to dispense prescriptions from rural pharmacies where no pharmacist is available.²⁴ Nurse education has traditionally involved greater focus on care coordination and on the patient as an individual with psychological, social, and functional dimensions that shape a person's responses to illness and disease.¹

Registered nurses possess the skills necessary to address rural health disparities caused by a scant provider network and difficulty accessing high-quality care. Nurses have been identified as key providers of health information. Nurses are already positioned in jobs as health educators, helping patients understand and manage their disease processes in places such as schools and through public health departments to conduct prevention and wellness education. For example, diabetes care is a key disparity found in rural populations, and one that a nurse-led health care home would be well qualified to address. The U.S. Department of Health and Human Services report, *National Healthcare Disparities*, finds that rural residents are significantly less likely than urban residents to receive the services recommended for management of diabetes.²³ Many of these services could be managed via a telehealth care home. A patient with diabetes could come to the rural site to receive the recommended services and education, and have their status entered in their electronic medical record to facilitate continuity of care.

Legislation Facilitating Increased Nurse Practice

As Congress develops health care reform legislation, policy addressing issues related to rural health care workforce shortages is absolutely necessary for the health and economic vitality of rural communities. While issues related to insurance coverage are critical for rural residents, coverage does not equal access. Without access to health care providers and services, even the best health insurance is not as worthy.

An encouraging bill in the U.S. Senate that seeks to increase the supply of rural health care professionals—including nurses and nurse practitioners—is SB 790, the “Health Access and Health Professionals Supply Act of 2009” introduced by Senator Bingaman of New Mexico. The bill employs a variety of measures to provide opportunities, financial assistance, and incentives for health care practice in rural areas. Among the provisions of SB 790 are:

- Creation of a permanent National Health Workforce Commission to design, coordinate, and implement federal grants and regulations aimed at providing quality health care access to all areas of the country.
- Grants to create a “pipeline” of middle and high school students interested in studying health care-related fields, with a priority to schools in health professional shortage areas, and creation of the infrastructure for partnerships between schools, medical professionals, medical associations and non-profits. This is similar to the AHEC model discussed previously.
- Increased funding for the National Health Service Corps to provide additional scholarships and loan repayments for students in rural, frontier, and urban underserved areas.
- Clarification of existing law to ensure that participants in the corps and other federal loan-repayment programs for health professions can have their loans repaid without tax consequences.
- Creation of a U.S. Public Health Sciences Track at selected universities across the nation to train health care professionals, including nurses, physician assistants, dentists, pharmacists and mental health providers. Priority would be given to applications of students from rural areas. Students in this program would receive scholarship funds for each two-year commitment he or she agreed to serve rural communities in the new Commissioned Corps of the Public Health Service. Grants would be provided to schools to build capacity for the additional students (including developing curriculum, faculty recruitment, training and retention, and student financial assistance).

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- Expansion of the Medicare medical home demonstration project to include a pilot program of 1,000 medical home primary care providers working in interdisciplinary teams.
- Loans and grants to help hospitals in underserved rural areas start community-based training for health care professionals in high need.

As Congress develops health care reform legislation they should include SB 790 or similar provisions for the benefit of rural people and rural communities.

Conclusion

Multifaceted and multidisciplinary strategies are crucial to meet the needs of rural residents and to deliver health care that has the greatest potential to enhance wellness. Nurse practitioners and registered nurses can play a primary role in this type of care delivery. Nurse education focuses on the care of the person in the context of their environment, and places a high priority on wellness and health maintenance. Nurses have traditionally served as patient educators and advocates. These roles are central to safe, effective primary care, and serve as a natural bridge for increased rural practice.

While it is clear that the supply of rural primary care providers of all classifications need to be increased, it is equally essential that health care reform creates a framework for innovative ways of meeting the health care needs of rural residents. Nurse practitioner-led primary care, including health care homes is one option. Another is built from the health care home model described by the Institute of Medicine to develop telehealth care homes in rural and remote areas. Building a framework and funding for these care delivery methods into health care reform can positively impact the availability of primary health care in rural areas while potentially improving the health of rural residents and rural communities.

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About the Center

Established in 1973, the Center for Rural Affairs is a private, nonprofit organization with a mission to establish strong rural communities, social and economic justice, environmental stewardship, and genuine opportunity for all while engaging people in decisions that affect the quality of their lives and the future of their communities.

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