Challenges of Recruitment and Retention in Rural Areas

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There have long been rural health care workforce shortages; however, the urgency to find real solutions has increased with the changing health care landscape. The evidence makes a compelling case to be intentional in the candidates we support and to align educational resources across multiple systems. Programs need to continually evolve, utilizing workforce data, best practices, and new technological advances. This leads the Office of Rural Health (ORH) to secure funding for therapists practicing in integrated settings and to expand loan repayment to general surgeons and providers creating access through telehealth. While access is ORH’s core mission, North Carolina’s rural health plan reframed the discussion around creating healthy rural communities. This will require further refinement of the critical workforce definition, and it brings to the forefront the fact that a variety of new partnerships will be key to achieving the objective of healthy rural communities.

Maintaining an adequate health care workforce has been a long-standing national challenge, particularly for rural and underserved areas. The law that created the National Health Service Corps (NHSC) in the 1970s was designed to address communities’ inadequate provider workforce by boosting access to qualified health professionals [1]. Over the years, both state and federal agencies have increased efforts to address the shortage of certain types of health care professionals. At the same time, many new factors have exacerbated provider access problems in these areas. The changing health care landscape continues to highlight the problem, and it necessitates ongoing financial and policy adjustments essential to create the health care workforce all North Carolinians need.

Evidence shows that, to significantly improve the placement and retention of providers in underserved areas, we need to recruit students from the community, have them stay in state to receive their education and community-based residency training, and place these individuals into underserved areas [2]. The development of North Carolina’s health care workforce should be aligned to support North Carolina students as they move across the education continuum: high school, community college, university, medical school, and residency. This process will positively affect both placement and retention.

The Office of Rural Health (ORH) plays an important role in addressing the health care workforce needs of rural and underserved areas. This process begins with the documentation of health professional shortage areas (HPSAs). The definitions of HPSAs, types of HPSAs, and required documentation are based on federal guidelines. The focus of HPSAs is on 3 health care areas: primary care, mental health care, and dental care. HPSAs document physician shortages but do not take into account the midlevel providers who are an increasing part of the changing health care workforce.

There are different types of HPSAs, and nuances need to be considered when discussing them. Some HPSAs cover an entire population (geographic designation) or an underserved subpopulation within a geographic area (population designation). Other HPSAs cover public or nonprofit facilities located in an HPSA (or outside an HPSA that provide health care for residents in an adjoining HPSA), federally recognized tribes, federal and state correctional facilities, or state mental hospitals.

ORH prioritizes population designations. This type of designation tends to generate the highest HPSA score, which allows ORH to leverage NHSC federal loan repayment for providers going into underserved areas. During the past federal fiscal year, loan repayment totaled more than $5.6 million for North Carolina providers. Providers receiving federal and state loan repayment are required to serve low-income residents, including Medicaid and uninsured patients.

Population designations involve surveying all providers in an entire contiguous area and are therefore labor intensive. ORH only conducts these reviews upon a community’s request. ORH currently has at least 72 North Carolina counties with a primary care HPSA, 71 counties with a dental HPSA, and 37 counties with a mental health HPSA. It would be reasonable to anticipate that, if more reviews were performed, a substantial number of additional counties would qualify as mental health HPSAs and a handful would qualify as primary care and/or dental HPSAs.

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Much could be done upstream to improve the number of in-state providers who are prepared and interested in HPSA positions. Some efforts have focused on building North Carolina’s own workforce through the East Carolina University School of Medicine and the Area Health Education Centers’ residency. However, there is no comprehensive and coordinated statewide strategy. This has resulted in a loss of critical workforce at every step in the process. Of the 354 North Carolina medical school graduates in 2003, 59% began a residency in primary care, but only 34% were training or practicing in primary care by 2013. In addition, only 18% of these providers practiced in North Carolina, with only 3% in rural North Carolina [3].

Many communities continue to have persistent health care shortages, and an analysis by the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill suggests that this holds true across multiple health professional disciplines [4]. If North Carolina wants to improve this outcome, it must admit more rural students to North Carolina’s medical schools, keep them in state for residency, provide quality residency programs that are rural and community-based, and utilize incentive programs to place and support providers in rural communities [5].

In a growing trend, other states are increasing their efforts to build and keep their graduates close to home. Several states are reviewing their use of graduate medical education funds to increase accountability and to increase retention and placement in underserved areas [2, 6, 7]. If other states are successful in retaining their providers, it will become increasingly difficult for ORH to maintain the level of providers successfully placed in North Carolina’s underserved areas.

ORH also plays a role at the end of the pipeline after providers have completed their education and/or residency. ORH recruiters work with interested providers to identify compatible practices in underserved areas. ORH has historically worked with interested providers and practices to leverage federal loan repayment, state loan repayment, and North Carolina Medical Society Foundation loan repayment programs for primary care physicians, psychiatrists, dentists, nurse practitioners, and physician assistants. ORH works to ensure that a candidate’s priorities are taken into consideration and that the placement is a good fit for all involved parties. Over the past 5 years, ORH recruiters have successfully placed an average of 140 providers annually. However, many of the providers recruited are not native to North Carolina.

ORH seeks to continually improve its efforts to meet the new and ongoing health care workforce needs of the state. In particular, data show that North Carolina’s rural areas are experiencing a shortage of general surgeons, which has a negative effect on both small rural hospitals and local primary care providers [8, 9]. This specialty is not tracked by HRSA, nor are general surgeons eligible for NHSC loan repayment. However, with support from Governor Pat McCrory and the North Carolina General Assembly in 2015, ORH is now allowed to use state loan repayment for general surgeons placed in critical access hospitals (CAHs). ORH’s recruitment team has reached out to CAHs to offer its services. When a general surgeon makes a 4-year commitment to a CAH, he or she is now eligible for up to $100,000 in state loan repayment.

In addition, Governor McCrory and the General Assembly supported ORH’s request to use state loan repayment for telehealth services. Because it is particularly difficult to provide access to specialty services in rural communities, ORH is focusing on providing loan repayment to psychiatrists who use telepsychiatry to provide services to individuals residing in HPSAs. The amount of loan repayment is proportional to the percentage of time services are provided to residents in underserved areas. ORH is working closely with mental health agencies to explore this new option.

Rural Health Action Plan

With funding from the Kate B. Reynolds Charitable Trust and the North Carolina Institute of Medicine (NCIOM), the state developed its first rural health action plan in 2014, which focused on rural residents and included their feedback on priorities needed to improve their overall health. In addition, a group of leaders focused on improving rural health has met on a relatively informal basis for years to advance a rural health agenda. ORH has worked closely with the Foundation for Health Leadership and Innovation to formalize this group into the North Carolina Rural Health Leadership Alliance (NCRHLA), which has received recognition from the National Rural Health Association as North Carolina’s rural health association. This newly formed organization is supporting activities to further the recommendations of the North Carolina Rural Health Action Plan. This alliance also uses its membership to more purposefully educate and incorporate rural priorities into members’ advocacy efforts.

With input from rural communities, the North Carolina Rural Health Action Plan identified 6 priority strategies to improve the health of rural communities [10]. These areas extend beyond the boundaries of traditional health care and potentially have wide-reaching implications on the health care workforce. The NCRHLA is developing subgroups to advance each of the 6 priority strategies and their corresponding evidence-based recommendations. These 6 strategies fall into 3 main categories.

Community and Environment

One strategy in this area is to invest in small businesses and entrepreneurship to grow local and regional industries.

Another strategy mentioned in the rural health action plan is to increase support for high-quality childcare and education (ages 0–8 years) and to increase parenting support to improve school readiness.
**Health Behaviors**

One health behavior strategy is to work within the formal and informal education systems to support healthy eating and active living.

Another strategy is to use primary care and public health to screen for and, when appropriate, provide treatment for mental health and substance use disorders. The latter could include enhanced training for primary care providers, co-location of behavioral health specialists, integrated care, telepsychiatry consultations, or other models that expand access to behavioral health services within a primary care setting.

**Access to and Availability of Health Services**

The first strategy in this area is to educate the public about new health insurance options available under the Patient Protection and Affordable Care Act of 2010, the Medicaid expansion state option (in states where it has been adopted), and existing safety-net resources.

A second strategy is to increase access to and availability of health services by expanding efforts to recruit health professionals to rural and underserved areas.

**Next Steps**

Given changing health care workforce needs, the North Carolina Rural Health Action Plan's recommendations are shaping ORH’s work going forward. First, ORH secured funding from the Kate B. Reynolds Charitable Trust to pilot a new loan repayment program for therapists practicing in an integrated mental health or primary care setting. ORH is using the funding to match HRSA funds. Second, ORH now requires providers who receive state loan repayment to complete retention surveys. These data will allow ORH to understand the factors that contribute to providers leaving rural areas and will inform work with key partners to develop strategies for improving retention. Third, ORH is exploring ways that other funds can be leveraged to build team-based primary care, such as adding oral health or behavioral health services. Future efforts might include creating new positions such as care managers and community health workers. Finally, ORH has partnered with Pitt Community College to develop a curriculum for the new workforce that would support the adoption of health information technology.

NCRHLA members may collectively begin to focus on the fragmented education and residency pipeline system discussed here. Many of the North Carolina Rural Health Action Plan’s recommendations pertaining to the workforce are outside of the traditional health care system, but North Carolina’s strong community college system can play an expanded role in developing the workforce needed to support the recommendations around childcare, early childhood education, and healthy eating and active living. If the evidence shows that rural high school students who successfully complete both medical school and residency in state are more likely to return and remain in a rural community, might the same strategy work for commerce in the development of rural small business owners and entrepreneurs?

The NCRHLA offers its health care-focused members the opportunity to strategize with nontraditional partners on new ways to align resources and collaborate to improve the health of rural communities.

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