

COMMENTARY

Rural healthcare provider recruitment: time to focus on opportunities rather than scarcity

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Introduction

Disparities in rural healthcare delivery and outcomes have been reported since at least the 1980s¹. Inadequate healthcare provider recruitment and retention is often cited as part of the cause for these disparities, with physicians, nurses, pharmacists, laboratory professionals, and others consistently falling short of projected need². Important strategies on how to recruit and retain healthcare workers from other regions to the rural setting range from generous compensation packages to increasing exposure of urban center students to rural sites³⁻⁵. These strategies often emphasize the scarcities that may be found in rural areas and look to solve staffing issues with episodic solutions rather than systematic changes.

Additional works have demonstrated an interest in recalling rural

residents to their hometowns after completing some portion of their training in larger academic centers, with a recent meta-analysis demonstrating an odds ratio of 2.71 for trainees returning to rural settings. These programs have had success in some settings but have not been able to adequately supply trainees for a variety of reasons, including practicing provider retirement rates outpacing the capacity of systems to produce new graduates and attrition of a small number of these graduates preferring to remain in environments similar to those larger academic centers^{6,7}. There are also examples of institutions seeking out trainees who prefer to practice in rural areas, funding their training in urban centers, and then requiring them to finish a service commitment near their originally preferred location⁸. In an analysis of one such program, 63% of healthcare providers who were trained in this model remained in a rural practice setting after their service commitment

was fulfilled. These models have seen some success globally but require substantial capital investment from institutions. While these methods have had some success, they often do not address the entirety of the training period required to produce an independently functioning healthcare provider.

Considering the issue

To address the critical shortage of the entire spectrum of healthcare professionals in rural areas, the cycle of training should be examined. Physicians are perhaps the most dramatic example. In the traditional model of physician training, a prospective rural doctor would leave their community for 4 years to earn a bachelor's degree, then an additional 4 years to complete initial medical training, and then another 3–7 years for a residency training, depending on their specialty of choice. This is not to mention additional years of fellowship training that one may pursue. In this training paradigm, a trainee may have to spend a minimum of 11 years away from their community before returning to it. During this time, not only has the trainee been forced to develop new support systems where they trained, but their rural community ties have also changed dramatically. Research into why transplanting new graduates into rural communities often points to lack of community integration as a culprit of failure to retain those individuals⁹.

Over the course of the decade that these physicians spend in training, the social and professional lives of those they were connected with have changed. The trainee has not been allowed to grow with their community; each has grown separately. To ask trainees to fully leave their communities and then hope that they seamlessly re-integrate after such an extended period of training is not a viable strategy – it ignores the rapid pace of life change during young professional development and the support needs of trainees during some of the most challenging times of their lives.

While it may be easier to conceptualize a trainee staying in or returning to their town of origin, this argument extends to those prospective trainees who would prefer to remain in the rural setting, but do not want to practice where they grew up. These individuals, in fact, may be even less likely to return to rural practice, as they have not only left the support system they developed in training, but also lack support from family or childhood friends that may exist in their hometown.

A further consideration in the current system of training deeply impacts Indigenous Peoples. Underrepresentation, decontextualized training, and colonial approaches to healthcare training and interventions contribute to the inequities in participation of Indigenous Peoples in various healthcare training models, despite demonstrated preference by some Indigenous patients for Indigenous healthcare providers^{10,11}.

Recognizing the flaws in this system, medical training institutions have taken steps to shorten the time rural trainees spend away from their preferred setting, designing shortened, intensive curricula at academic centers and then dispersing students to smaller, regional sites closer to their goal practice region^{8,12,13}. Other systems may have one single required rural rotation or may offer such clerkships or preceptorships as options for students. These types of programs present learners with potential obstacles, including housing concerns or time away from a significant other who may not have work flexibility to travel for 2–4 weeks. Recent additions to rural residency programs may also help to alleviate

some of the pressures currently faced by rural hospitals to recruit new physician trainees². These efforts are laudable and have had good results but are more limited in scope than is required to solve the current situation.

Looking forward

Now, more than ever, the decentralization of health professional education is possible, allowing for more rural trainees to stay in their desired practice location for significantly more of their training. This decentralization will allow rural communities to capitalize on the robust, intergenerational community ties that may be lost during the training period or forgotten when discussing rural resources. Leveraging these existing resources will be instrumental in transitioning the rural narrative from one of scarcity to that of abundance. A potential educational concept, rural training in place (RTP), could meet the needs of rural communities and must be intergenerational, multimodal, and interprofessional.

One of the overlooked resources rural communities must capitalize on is the deep connectedness between generations in small communities. The healthcare training model continues to be rooted in an apprenticeship model, with trainees learning from experienced clinicians who are actively working with patients¹⁴. To fully realize the potential of this teaching model in rural areas, existing clinicians must be leveraged. This may be challenging; historically, a false dichotomy of 'private practice' (clinical practice only) and 'academia' (clinical practice, research, and teaching, which are not necessarily related¹⁵) has been made, and many rural sites fall into the 'private practice' model¹⁶. Healthcare providers in a non-academic model may feel that they are disconnected from teaching, that it is not their responsibility, or that they are ill-equipped to train new students. In this model, however, new trainees do not have to be re-embedded into communities; they are likely connected to existing clinical structures and clinicians, which may improve the outlook of clinicians. Moreover, these rural providers are much better acquainted with the resources available in their own practices and have substantial experience in how to best solve problems in their unique environment.

While intergenerational connectedness will be invaluable in efforts to train healthcare providers to meet the needs of rural patients, the RTP concept must also leverage emerging multimodal technologies. A large body of evidence on distance, asynchronous, and virtual education was spurred by the COVID-19 pandemic¹⁷. Synchronous distance education (SDE), including those sessions utilizing the flipped classroom model, would work well for rural healthcare trainees and give them exposure to a variety of pathologies and clinical scenarios that may not present in the volumes that can be seen in academic centers. SDE has been shown to provide high student satisfaction, and may provide access to generalist, specialty, and subspecialty mentors who could also serve as group facilitators. To meet the growing demand for rural healthcare providers, new training paradigms may benefit from maximizing the use of these innovations, as well as incorporating experiential and service-learning components into their curricula.

One potential weakness of RTP may be lack of exposure to subspecialty training and care; this weakness can be partially mitigated by ensuring that students have access to these via digital

platforms or short experiences with these subspecialists. Telemedicine specialty consultation services, eICU care, and academic outreach clinic models are already being used^{18,19}; incorporating local students into these models not only allows for greater depth of learning but may also improve patient experience and awareness of local needs.

Service learning will also be an important part of this training paradigm; students will have experienced the needs of their communities by living in them and will be well poised to address them throughout their education. This will additionally continue to build on their already strong community ties and opportunities for leadership in the community, further reducing some of the potential causes of burnout in rural areas^{3,9,20}. These multimodal and service-learning components of the RTP concept are well suited for adaptation in interprofessional practice and education (IPE) models. IPE is increasingly being recognized to improve not only patient care, but also job satisfaction²¹. Another often unrecognized rural community resource is space; smaller cohorts of trainees from different professions will have the opportunity to learn about not only their own specialty, but also about the roles and responsibilities of other professionals by working within the same space. Rural training programs may choose to work together to develop university campus-like centers, where students can gather to study and develop social connections within and between their areas of expertise. These centers would have the added benefit of access to utilities like high-speed internet, conference rooms for virtual learning, and places for social activities.

In building mutual respect for other professionals and a robust interprofessional network during training, opportunities for continuing education and skill development led by one group for the others will develop, again mitigating some of the burnout concerns that may arise in the rural environment. Others have found that IPE may be even more important in the rural setting, as healthcare providers may have to be more flexible in their roles than in urban centers²². In fact, improvements in same-day access

to care with rural longitudinal providers has been reported by self-identified interprofessional teams when compared to their non-interprofessional counterparts²³.

Conclusion

Rural healthcare delivery has often focused on what rural communities lack when compared to urban centers. Recent innovations, spurred by the COVID-19 pandemic, provide the opportunity for these areas to enter the limelight as places to train and retain future healthcare providers. Addressing disparities in rural healthcare delivery may be more successful if existing intergenerational ties, multimodal technologies, and interprofessional practice and education are leveraged. These improvements, however, can only be maximized when the entire spectrum of education can occur in the preferred practice location and only with the engaged leadership of local, established healthcare providers and community leaders.

RTP is predicated on the voluntary participation of existing healthcare providers and systems, some of whom may have purposefully avoided positions that would require them to train new students. Additional obstacles may be created by large academic centers, which generate revenue and prestige by training students who could be otherwise shunted to the newly developed RTP programs. To overcome this, it may benefit such centers to begin working to develop novel training paradigms themselves, seeking to coordinate between colleges within a university to implement an RTP program throughout the adjacent rural areas. In this way, fully integrated training programs can be developed and will not directly compete against existing training pathways. RTP-type programs could complement existing regional campus locations, allowing for more student flexibility in how and where they learn, and may help to bolster existing rural rotation infrastructure as preceptors and health systems learn to work effectively with these academic centers. Moreover, while there will certainly be opportunities for innovative accreditation models, large academic centers with main campuses may provide some solutions to these barriers.

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