

DEVELOPING A PHYSICAL THERAPY PROGRAM WITH EMPHASIS ON INCREASING ACCESSIBILITY FOR RURAL AND UNDERSERVED COMMUNITIES

Peggy R. Trueblood, & Jennifer Fleckenstein

School of Physical Therapy, Pacific Northwest University of Health Sciences (USA)

Abstract

The lack of physical therapists (PTs) in rural areas is a significant concern facing the profession and the public. As rural populations experience higher rates of chronic disease, physical limitations, and injury, the need for physical therapy (PT) services has become critical. Although there is an expansion of Doctor of Physical Therapy (DPT) programs across the nation, few are focused on enhancing the supply of PTs in rural and underserved areas, where they are needed most. This has led to regional disparities with urban regions experiencing oversupply while rural areas continue to suffer from a shortage of PTs and other healthcare professionals. Most DPT programs focus on urban settings, making clinicians less prepared to practice in rural areas. The purpose of this paper is to describe the critical components of a DPT program developed at Pacific Northwest University of Health Sciences (PNWU) that intentionally focuses on educating future PTs to work in rural and underserved communities throughout the Northwest using a recruit-educate-return model. PNWU's founding belief was that students selected with an interest in rural and underserved care are likely to stay in the area where they are educated once they reach independent professional status. Students complete one of three full-time clinicals in a rural or medically underserved area. PT clinics located at two different federally qualified healthcare centers were also established for hands-on exposure. In addition, students participate in a community-based student-run pro-bono clinic established on campus to provide needed services for under or uninsured clients with neurological impairments.

Keywords: *Rural, medically underserved, doctor of physical therapy (DPT) programs.*

1. Introduction

Physical therapists (PTs) play a critical role in fall and injury prevention, management of injury and disease, and rehabilitation. People living in rural and medically underserved areas (MUAs) experience disproportionately poor health outcomes, including higher rates of chronic conditions, disability, obesity, musculoskeletal disorders, and fall rates (Rural Health Information Hub [RHIH], 2024; Tuttle, 2020; Weeks, 2023). Access to healthcare services, including physical therapy is limited by access to safe and affordable transportation, socioeconomic disparities, and workforce shortages (Graves, 2022). According to the Health Resources and Services Administration (HRSA, 2024), MUAs often lack sufficient primary and specialized care providers, with a provider-to-population ratio far below recommended levels (HRSA, 2024).

Therefore, the development of a Doctor of Physical Therapy (DPT) program to prepare students to work in rural and medically underserved communities was established at Pacific Northwest University of Health Sciences (PNWU) in Yakima County (a HRSA designated rural MUA). The mission at PNWU is to "train health care professionals emphasizing service among rural and medically underserved communities throughout the Northwest." PNWU was established to address a shortage of primary care providers (Bellamy, 2011) through a Doctor of Osteopathic Medicine program. People who live in rural areas and MUAs are thought to be more likely to return to those areas once they graduate. PNWU, therefore utilizes a recruit, educate, and return model to address shortages in these areas.

Three key challenges facing rural communities and physical therapy need, according to Felter (2022), are 1) the ability to recruit and retain rural physical therapy staff, 2) insufficient didactic education addressing cultural humility and cultural awareness, and 3) overlooking the rural practice challenges in contemporary PT education programs.

PNWU's DPT program seeks to address these challenges by recruiting students from rural and underserved backgrounds, educating them with a curriculum focused on cultural humility, social determinants of health, and rural health challenges as well as supporting their education to return to serve these communities upon graduation.

2. Key components of PNWU's DPT program

2.1. Curriculum development

The DPT program is a three-year (8 semester), 112 credit hour, year-round program admitting up to 50 students every fall semester. Didactic coursework in the School of Physical Therapy (SOPT) seeks to teach students about the social determinants of health and health disparities. Students engage in implicit bias training, principles and importance of therapeutic alliance, motivational interviewing, ethics of physical therapy access, advocacy, cultural humility, trauma-informed care, rural health considerations, telehealth, and the role of nutrition and reality of food insecurity.

Telehealth is one solution to improve access of physical therapy services to people in rural communities. The DPT students learn to do virtual assessments, online patient education, and create remote rehabilitation programs. Another key element unique to PNWU, is an emphasis on interdisciplinary training. PNWU created an interprofessional practice and education consortium called Northwest Interprofessional Health Collaborative (NIHC) partnering with nearby institutions. Physical therapy students engage in interprofessional healthcare education sessions with other health professions students including occupational therapy, osteopathic medicine, physician assistant, nursing, pharmacy, and dietetics. These sessions include error disclosure, learning about roles and responsibilities of the interprofessional team, and engaging in opioid reduction strategies.

Additionally, in clinical courses students role model how to talk to patients about pain, imaging and test results, the importance of physical activity, and educate on the role of nutrition and wellness to populations of socioeconomic and culturally diverse populations. Movement Science and clinical courses thread justice, diversity, equity, and inclusion including activities in which students role play, interact with community members, and access educational opportunities through standardized patients in the PNWU Simulation Center.

2.2. Rural-focused clinical education

The clinical education component of the DPT program emphasizes students working in rural and underserved settings. During 3 of the 8 semesters, students are off campus enrolled in full-time clinical experiences throughout the region. Students are required to complete at least one rural/MUA full-time clinic within three years. Developing these partnerships is critical in providing the type of patients and sites for students. In addition, all students participate in our rural integrated clinical experience that was developed at a local homeless shelter with a free medical clinic including physical therapy services. In addition, the program developed a physical therapy clinic at a federally qualified health center, where students provide physical therapy to a unique population that represents our mission of serving underserved patients. These rural clinics are specifically designed to expose students to the unique challenges of rural healthcare practice. They were intentionally structured to help students develop skills in managing diverse caseloads, working with limited resources, and providing care in geographically isolated areas.

Just as important to developing rural sites for students that provide services to the medically underserved populations is hiring faculty with experience working in rural and underserved areas. They serve as mentors and role models, demonstrating how to navigate the complexities of rural healthcare practice. Furthermore, these faculty members are valuable in developing curriculum and training materials that reflect the realities of rural practice.

2.3. Community service emphasis

Incorporating community engagement into the program can help students better understand the social determinants of health that affect rural populations. Examples of community engagement include community health fairs and outreach. These events provide free screenings, education, and preventive services to rural populations. Incorporated into the curriculum is a community wellness project, whereby students work in groups to design and implement a community-based wellness/prevention program that explores health and wellness across the lifespan in various community agencies in the Yakima Valley.

2.4. Student recruitment and support

To support students and create a sense of belonging, it is important to know who is in your program (Magee, 2024). As part of recruitment, we target applicants from rural and medically underserved communities in our region. Our students come from socioeconomically, culturally, ethnically, and gender diverse backgrounds. For many of our students, English is not their first language and for others, they have grown up speaking another language in their household. With an understanding of the individuals in each of the student cohorts we can better ensure inclusivity and equity for the layers of diversity and meet the needs of our students. PNWU offers a food pantry to address students experiencing food insecurity. The SOPT organizes a Big doc/Little doc program to provide mentoring from second-year students to first-year students. Orientation integrates students from multiple program years, faculty, and university resources to provide support and integration from day one. Workshops on learning, life skills, and how to be a graduate student serve to support students in their journey to becoming a PT. Our program is continuing to explore and make progress in offering recitation opportunities for challenging courses, closed captioning and universal design to ensure access for students of all different learning styles, and provide equity with accommodations according to the American Disabilities Act.

3. Conclusion

Starting a DPT program with an emphasis on rural and underserved practice is an innovative approach to addressing the healthcare disparities faced by these communities. By designing a curriculum that emphasizes rural health issues, creating clinical placements in underserved areas, building strong community partnerships, and offering support systems for graduates, DPT programs can play a key role in expanding access to physical therapy services in rural and underserved regions.

References

- Bellamy, G. R., Bolin, J. N., & Gamm, L. D. (2011). Rural Healthy People 2010, 2020, and beyond: the need goes on. *Fam Community Health, 34*(2), 182-188.
- Felter, C. E., Zalewski, K., Jermann, R., Palmer, P., Baier, A., & Falvey, J. (2022). Rural Health: The Dirt Road Less Traveled. *Physical Therapy, 102*(11). <https://doi.org/10.1093/ptj/pzac112>
- Graves, J. M., Abshire, D. A., & Alejandro, A. G. (2022). System- and Individual-Level Barriers to Accessing Medical Care Services Across the Rural-Urban Spectrum, Washington State. *Health Services Insights, 15*. doi:10.1177/11786329221104667
- Health Resources and Services Administration. (2024). *Health Workforce Shortage Areas*. Retrieved January 25, 2025, from: <https://data.hrsa.gov/topics/health-workforce/shortage-areas>
- Magee, J., Brown, D., Woods, L., & Portee, C. (2024). A Roadmap to Cultivating a Culture of Belonging for Learners in Physical Therapy Education. *Journal of Physical Therapy Education, 38*(2). doi: 10.1097/JTE.0000000000000354
- Rural Health Information Hub. (2024). *Need for Addressing Chronic Disease in Rural Areas*. Retrieved January 25, 2025, from: <https://www.ruralhealthinfo.org/toolkits/chronic-disease/1/rural-need>
- Rural Health Information Hub. (2024). *Social Determinants of Health for Rural People*. Retrieved January 25, 2025, from: <https://www.ruralhealthinfo.org/topics/social-determinants-of-health>
- Tuttle, C., Tanem, J., Lahr, M., Schroeder, J., Tuttle, M., & Henning-Smith, C. (2020). *Rural-Urban Differences Among Older Adults*. University of Minnesota Rural Health Research Center. Chartbook: Rural-Urban Differences among Older Adults, 2020.
- Weeks, W. B., Chang, J. E., Pagán, J. A., et al. (2023). Rural-urban disparities in health outcomes, clinical care, health behaviors, and social determinants of health and an action-oriented, dynamic tool for visualizing them. *PLOS Glob Public Health, 3*(10). doi: 10.1371/journal.pgph.0002420.