CCRP California Center for Rural Policy

Research Brief

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California's Rural North: Public Health Workforce Recruitment and Retention

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Public Health (PH) workforce challenges that have persisted over the past two decades continue to be prevalent in the field today. They highlight the critical significance of recruitment and retention efforts, particularly in the aftermath of the COVID-19 pandemic. The situation is especially dire in rural areas, where staff shortages exceed those in metropolitan areas. This brief aims to identify the root causes of public health workforce attrition and provide evidence-based strategies to address workforce loss in rural areas.

Causes of Public Health Workforce Loss and High Attrition

Overall challenges

Recruitment and retention challenges within the public health workforce reflect broader issues affecting both rural and urban areas. To ensure the effective functioning of the public health workforce, it is crucial to understand the origins of these challenges. These underlying causes have developed gradually over time, creating a compounding effect where each factor exacerbates the challenges posed by the others, making it harder to maintain a strong and functional public health workforce.

Loss of substantial workforce, who never returned. Since the 1970s, there has been a notable reduction in the size of the public health workforce. According to Leider et al. (2023), in the last twenty years the PH workforce lost more than forty thousand staff positions with no subsequent staff acquisition.

Expanding mission from clinical services to prevention of communicable diseases. The focus of the public health workforce has undergone a notable shift over time, transitioning from delivering direct clinical services to providing a more robust population-based prevention, inspection, and regulation of communicable diseases. This shift led to an increase in demand for the public health workforce.

Faster aging workforce causing loss of institutional knowledge. The public health workforce is aging at a faster rate compared to

the general workforce, leading to a notable increase in the retirement of older, experienced professionals. This trend has highlighted a significant gap in leadership within the field (Hilliard & Boulton, 2012) and asked for increased demand for succession planning efforts to transfer institutional knowledge (Leider et al., 2023).

Fragmented and broad nature of public health profession. Due to the broad and fragmented nature of the public health workforce, research on enumeration and composition has been scarce. Occupational classifications are too diverse. Community Health Workers, environmentalists, disease intervention specialists, nurses, nutritionists, social workers and others working as aides, administrators, or clerical staff all account for the public health workforce (Leider at al., 2023). It was not until 2004 that the first academic publication addressing enumeration and composition challenges in the public health workforce emerged (Tilson & Gebbie, 2004).

Other sectors such as healthcare "stealing" workforce from government public health positions. The private and nonprofit sectors are increasingly drawing talent away from the government sector within the public health workforce, primarily due to the allure of better compensation packages (Sellers et al., 2019).

Burnout and moral injury as a result of the COVID-19 pandemic. The pandemic served as the proverbial last straw for many within the workforce, exacerbating existing challenges and adding considerable strain. Beyond the immediate health crisis, burnout and moral injury have emerged as significant issues impacting the public health workforce (Bork, 2022). In public health, moral injury can arise when professionals witness or are forced to participate in decisions or actions that conflict with their values, such as rationing of care, compromising patient safety, or inequitable distribution of resources. This can lead to feelings of guilt, shame, anger, and distress, and may result in long-term psychological consequences such as burnout, compassion fatigue, and decreased job satisfaction (Xue et al., 2022).

Rural specific challenges

In addition to the broad array of challenges confronting the public health workforce on a broader scale, rural areas contend with distinct issues aggravating the recruitment and retention struggles already prevalent in the sector. Research underscores a stark imbalance in the distribution of public health professionals between urban and rural areas. This discrepancy is fueled by various factors presented below:

Low compensation of rural workforce at local levels. State and federal governments typically offer more competitive salaries compared to local public health agencies, presenting a significant challenge for the latter in attracting and retaining skilled professionals (Hajat et al., 2003). Local public health agencies struggle not only with staff compensation but overall funding as well. For example, local public health agencies in non-metropolitan areas reported funding as their primary challenge, compared to metropolitan agencies where this figure was half as much (Quiram et al., 2010).

High need for in-service and formal degree training. Surveys focusing on the rural public health workforce consistently reveal a concerning trend: a significant portion of individuals within this sector lack formal training in public health. This deficiency in formal education often translates into challenges in leadership and limited organizational capacity within rural public health agencies (Berkowitz et al., 2002). For example, although public health nurses are the primary providers of care in rural areas, the majority of these nurses received their training from two-year associate degree programs that lacked public health content in their curriculum (Quiram et al., 2010). According to Odahowski et al. (2021), rural areas have lower percentage of nurses who hold Bachelor of Science in Nursing degrees compared to urban areas. Nurses and health educators have identified a significant need for training across a range of crucial health services including informing, educating, and empowering individuals about healthcare issues, mobilizing community partnerships, and developing policies and plans that bolster health initiatives.

Public health workforce performing a breadth of services. Rural areas frequently grapple with a shortage of primary care providers, exacerbating healthcare disparities and placing added pressure on local public health agencies. In these underserved regions, where access to healthcare services may be limited, local public health agencies often play a pivotal role in addressing various healthcare needs beyond their traditional scope. This includes providing essential services such as immunizations, home health care, and family planning (Hajat et al., 2003). Therefore, the public health workforce assumes additional responsibilities and must carry out tasks for which it has never received training (Hawley et al., 2013). Some of these responsibilities may include: emergency response coordination during natural disasters such as wildfires, floods, or disease outbreaks; providing education and support for chronic disease management, such as diabetes or hypertension; implementing health promotion and disease prevention programs, such as smoking cessation initiatives or nutrition education campaigns; offering mental health support and counseling services for individuals and families facing psychological challenges, especially in areas with limited access to mental health professionals; participating in environmental health monitoring and assessment activities to address concerns related to air and water quality, sanitation, and food safety (Boulton et al., 2014).

Limited empirical research. Research on the rural public health workforce remains significantly limited, presenting a critical gap in understanding effects of diverse intervention programs on workforce loss and attrition (Hawley et al., 2013). Addressing this gap requires a concerted effort to conduct comprehensive studies that examine various aspects of the rural public health workforce, including workforce job satisfaction, retention factors, and barriers to recruitment. By filling this knowledge gap, policymakers, healthcare organizations, and other stakeholders can make informed decisions and implement targeted strategies to strengthen the rural public health workforce.

Strategies to Improve Recruitment and Retention of the Rural Public Health Workforce

Research on effective recruitment and retention strategies in rural areas is notably scarce in empirical evidence. However, despite this limitation, there are still potential strategies that can be extracted from the existing literature.

Improve academic-practice partnerships.
Academic-practice partnerships play a significant role in recruiting and retaining the public health workforce in rural areas. Research indicates that exposure to rural healthcare settings during undergraduate and postgraduate education, such as through shadowing programs, clinical rotations, and scholarships, can foster positive attitudes towards rural practice and increase the likelihood of pursuing a rural career (Abelsen et al., 2020; Hempel et al., 2017). Developing partnerships between academic institutions and rural health departments to offer students experiential learning opportunities in rural settings yields mutually beneficial outcomes, including internships, practicums, and field placements, which allow students to gain hands-on experience and develop connections with rural communities.

Moreover, literature suggests that individuals who grew up in rural areas are more likely to return to rural communities for work after completing their education and training (Abelsen et al., 2020; Russell et al., 2021). Hence, academic-practice partnerships may develop and deliver continuing education programs, workshops, and training opportunities tailored to the needs of rural public health professionals. These programs enhance skills, expand knowledge, and provide networking opportunities, contributing to professional growth and job satisfaction.

Diversifying pathways to public health careers in rural areas, particularly through initiatives like dual enrollment programs, has been found to be effective in enhancing educational attainment. (Grubb et al., 2017). Dual enrollment programs enable students to simultaneously enroll in high school and college courses, offering them an early opportunity to explore and prepare for careers in public health. One key advantage of dual enrollment programs is their accessibility, as they reduce barriers to higher education for students from rural and underserved backgrounds. Moreover, these programs can serve as pipelines for recruiting and retaining local talent in rural public health roles.

Set-up loan repayment intervention programs.
Loan repayment initiatives, common in various healthcare fields, are either scarce or non-existent for governmental public health staff. This absence underscores the need for a comprehensive program to better understand the impacts and outcomes of such initiatives at the rural level. Current academic literature lacks consistent evidence regarding the effectiveness of loan repayment programs and their efficacy, even for healthcare professionals. For instance, a study conducted in Minnesota reported that 86% of participating rural physicians remained in

practice at their sponsoring healthcare facility after fulfilling their service commitment. However, another study found a concerningly high non-compliance rate of 53% among physicians who did not complete their obligations (Hempel et al., 2017).

In light of these findings, there is a clear call for more intervention programs aimed at the recruitment and retention of the public health workforce, especially in rural areas. The existing research paints an inconclusive picture, indicating the necessity for further investigation and the implementation of targeted strategies to address the unique challenges faced by rural communities. By developing comprehensive loan repayment initiatives tailored specifically to public health professionals working in rural settings, policymakers and stakeholders can better support the recruitment and retention efforts essential for improving health outcomes in underserved regions.

Increase workforce diversity and inclusion. Creating a workforce that reflects the communities served is not only ethically sound but also strategically beneficial. Actively recruiting and retaining professionals from diverse backgrounds fosters stronger connections with patients and enhances the cultural competency of the entire healthcare system (Kirkland et al., 2024). Culturally competent public health professionals can understand nuances of communication, beliefs, and values, fostering deeper connections with patients.

Moreover, in today's competitive healthcare landscape, diversity serves as a powerful asset (Coronado et al., 2020). It attracts top talent, strengthens employer branding, and fosters a more inclusive work environment. This, in turn, translates to higher employee satisfaction, retention, and productivity, creating a win-win situation for both healthcare organizations and their communities. By embracing diversity and actively promoting inclusivity, public healthcare agencies can not only better meet the needs of their diverse patient populations but also create a supportive and engaging workplace culture that attracts and retains top talent.

Offer integrated packages. The notion of tackling complex challenges with singular solutions often falls short, and rural public health workforce retention is no exception. While offering individual interventions like loan repayment programs or childcare subsidies can be beneficial, relying solely on them often yields limited and unsustainable results. Evidence leans towards the efficacy of integrated packages, as indicated by studies conducted by Khalid et al. (2023) and Leiden et al. (2023). These integrated packages combine various targeted interventions which are based on the specific needs of the community and its healthcare professionals.

For instance, research by Abelsen et al. (2020) and Kroezen et al. (2015) highlights the effectiveness of integrated approaches that incorporate elements such as salary support and career development. By addressing a range of factors contributing to workforce retention, including financial stability, professional growth opportunities, and community engagement, these integrated

packages offer a more comprehensive and sustainable solution to rural public health workforce challenges. This holistic approach not only improves retention rates but also enhances the overall resilience and effectiveness of rural public health systems.

Provide professional development opportunities. The geographic isolation and limited professional development opportunities often associated with rural practice can lead to feelings of stagnation and isolation among public health professionals. Countering this requires a commitment to ongoing professional development initiatives, including access to conferences, specialized training, and opportunities for career advancement (Kirkland et al., 2024). This is particularly crucial when considering that local public health workers in rural areas are often tasked with a variety of responsibilities, necessitating a wide range of skills (Hajat et al., 2003).

By providing continuous learning opportunities and avenues for career progression through academic-practice partnerships (in-person or online), healthcare agencies can empower rural public health professionals to expand their knowledge base, stay updated on best practices, and develop new skills relevant to their roles. This investment in professional development not only enhances job satisfaction and retention but also strengthens the overall capacity and effectiveness of rural public health systems, ultimately benefiting both public health professionals and the communities they serve.

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