Bridging Gaps: Diversity and the Future of Public Health

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Acknowledgments

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Farrell J, Brantley E, Vichare A. Salsberg E. de Beaumont Foundation and the Public Health National Center for Innovations Who Enters the Health Workforce? An examination of racial and ethnic diversity. Fitzhugh Mullan Institute for Health Workforce Equity, George Washington University, May 2022

Ziemann M, Pittman, Under what working conditions? An examination of worker occupational Health and compensation. Health Workforce Equity, George Washington University, May 2022

The de Beaumont Foundation and the Association of State and Territorial Health Officials (ASTHO) conducted the Public Health Workforce Interests and Needs Survey (PH WINS) in 2014, 2017, and 2021.

Deena Shin, McRae, M.D., Lupe Alonzo-Diaz, MPA, Ursula Worsham, Ed.D., Eric Juarez, Ph.D., and Emmie Johnson, MPP. 2023 Women Physicians of Color Study, Physicians for a Healthy California, California Medical Association, University of California Health, and The Physicians Foundation.

Jonathon P. Leider, Valerie A. Yeager, Chelsey Kirkland, Heather Krasna, Rachel Hare Bork and Beth Resnick. The State of the U.S. Public Health Workforce: Ongoing Challenges and Future Directions, Annual Review of Public Health, Volume 44, 2023; first published as a Review in Advance on January 24, 2023.

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Scope and limitations:

The opinions, findings, conclusions, or recommendations presented in this report solely reflect the authors' views. They may not necessarily align with those of the National Hispanic Health Foundation partners, such as the Centers for Disease Control and Prevention.

Due to circumstances outside the authors' influence, this report focuses explicitly on workforce issues affecting Latinos, Blacks, and Native Americans in the U.S. However, this narrow focus does not diminish the importance of addressing workforce challenges faced by all underserved communities.

Additionally, in-depth interviews were conducted with experts to illustrate and provide specific examples of best practices. Although these examples are based on factual narratives and reflect the authentic experiences of individuals and organizations in healthcare and public health, they might not comprehensively represent the diverse experiences of all Latinos, Blacks, and Native Americans.

About The National Hispanic Health Foundation

The National Hispanic Health Foundation (NHHF), a 501(c)(3) organization founded in 1994 as the philanthropic arm of the National Hispanic Medical Association, expresses sincere gratitude to the Centers for Disease Control and Prevention (CDC) for their support through the Public Health Leadership and Education, Advancing Health Equity and Data Science program. This collaboration has been instrumental in empowering NHHF to identify and promote best practices for recruiting and retaining underrepresented minority groups within the public health workforce. By strengthening public and population health pathways, these initiatives contribute significantly to building a more competent, diverse, and inclusive healthcare sector, ultimately improving health outcomes for Hispanic communities.

INTRODUCTION

Critical Need for Strategic Investment in Public Health

Over the last decade, substantial research and increased public attention, particularly due to the COVID-19 pandemic, have highlighted the importance of diversifying the public health workforce and addressing recruitment and retention challenges. Despite these efforts, the public health workforce faces ongoing systemic and structural issues, including insufficient funding and inadequate investment in long-term infrastructure.

In 1915, the Welch-Rose Report aimed to align public health and medicine and became a blueprint for a national public health education system. Decades later, in 1944, the Public Health Service Act created a legislative foundation to ensure that public health agencies would have the necessary powers, responsibilities, and resources to protect and promote the population's health. However, though this federal law helped create the architecture for public health services, it was hindered by compartmentalized funding that limited capacity and collaboration. The 1988 Institute of Medicine (IOM) report anticipated that health departments' shift from clinical care to population-based prevention would warrant a significant workforce shift. Despite all these efforts, accurately defining and quantifying the public health workforce remained challenging.[1]

According to the IOM's 1988 and 2003 reports, state and local governments shifted Medicaid services to the private sector, reducing the need for local health department services. This shift decreased funding for public health programs, impacting their capacity. This transition resulted in insufficient public health infrastructure investments compared to medical care, and the Great Recession led to significant workforce losses, with 40,000 jobs lost between 2010 and 2013. While public sector employment has broadly recovered, the public health workforce has not.[2]

In 2020, healthcare spending in the U.S. reached a staggering $4.1 trillion, with only 5.4 percent dedicated to public health and prevention efforts. [3 4] This public health spending figure nearly doubled in 2020

In 2020, healthcare spending in the U.S. reached $4.1 trillion, with **only 5.4% dedicated to public health and prevention efforts.**

(from 2.8 percent in 2019), primarily due to short-term COVID-19 response funding, but it remains insufficient. There is a concerning trend in robust financing during emergencies followed by neglect, likely resulting in a return to pre-pandemic levels. This chronic underfunding can impede crucial public health initiatives, such as those addressing suicide prevention, obesity, and reducing maternal morbidity, which perpetuates high rates of chronic disease and exacerbates health disparities.[5] [6]

Investments in public health are imperative across the board, particularly for those living in communities that represent about half of the U.S. population and currently lack sufficient protection due to an inadequate public health infrastructure.[7] These findings underscore the intertwined nature of funding and workforce challenges, emphasizing the need for strategic financial support to improve public health capabilities.

The U.S. Centers for Disease Control and Prevention (CDC) is the nation's foremost public health agency and the primary funding provider for state, local, tribal, and territorial health departments. Among the CDC's many important objectives, such as updating the public health data systems, prioritizing investments in health promotion and preventive measures, and addressing health disparities, this paper focuses on contributing to the urgent need to expand and diversify the workforce.[8]

Social Determinants of Health

The mission of the public health workforce now encompasses a robust mix of population-based prevention, inspection and regulation, and clinical prevention. The public health system plays an important role in addressing communities disproportionately impacted by structural racism, poverty, discrimination, and neglect, particularly during health crises. Investing in a diverse and well-trained public health workforce is essential for addressing health inequities. The conditions in which people are born, live, work, and age—known as the Social Determinants of Health—significantly influence health outcomes and determine whether communities have the necessary resources to promote and sustain good health. [9] [10]

A wealth of literature indicates that a diverse and inclusive workforce can increase access to care and improve healthcare outcomes for underserved communities. On the other hand, the absence of diversity in the healthcare workforce exacerbates health disparities for marginalized populations and perpetuates historical inequities in healthcare.[11] [12]

Roadmap for Diversifying the Public Health Workforce

This report's purpose is multifaceted. First, it aims to address the underrepresentation of Latinos, Blacks, and Native Americans within the public health workforce by examining the historical and systemic barriers that have limited their opportunities for careers in public health.

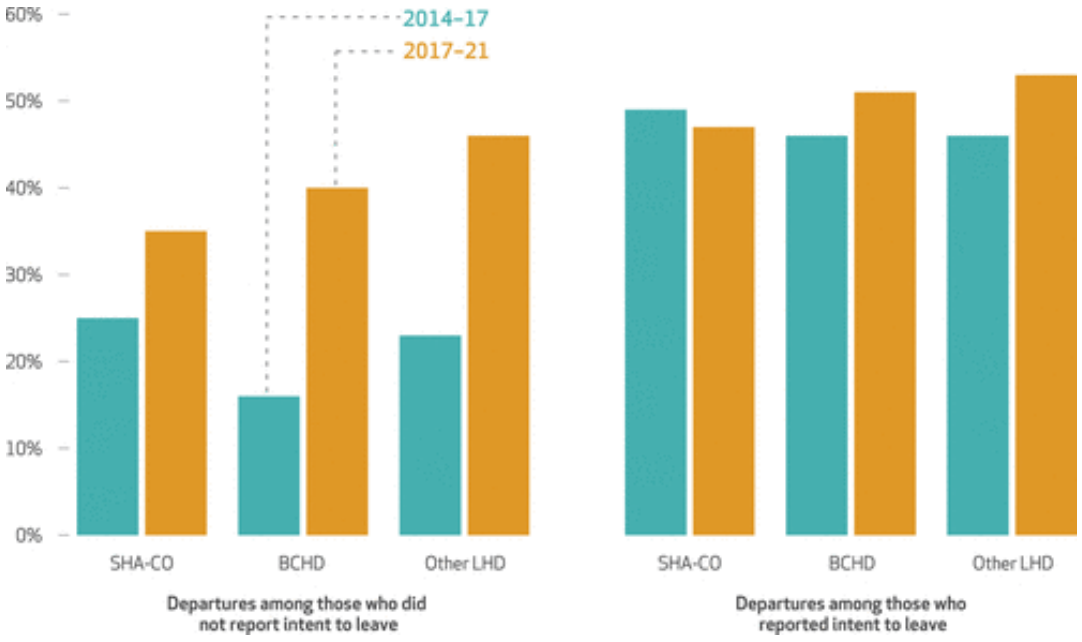
Second, the critical role of public health system leaders in driving change and influencing policy decisions cannot be overstated. For example, in Indiana, effective advocacy efforts by the leadership of the broader public health coalition and the state's elected officials led to a 1,500 percent increase in the state government's public health budget. This illustrates the power of public health leaders and the significant impact they can achieve.[13]

Additionally, the report seeks to benefit the public health officials and supervisors responsible for recruiting, professional development, and creating inclusive work environments. By providing insights into avenues for supporting the leadership opportunities of underrepresented professionals, such as mentorship, financial compensation for "diversity tax,"[14] collaboration, and organizational cultural change, the report equips supervisors and officials with actionable strategies to promote diversity and inclusion within their teams and organizations.

Public Health Workforce: Equity and Inclusion Perspective

According to an analysis by the de Beaumont Foundation and the Public Health National Center for Innovations, there is an urgent need for a foundational workforce increase of 80 percent to deliver sufficient, essential public health services.

Specifically, local health departments need around 54,000 additional full-time employees, while state departments require approximately 26,000 across various expertise areas and categories.[15] Public health departments at the state, local, tribal, and territorial levels are responsible for safeguarding the well-being and prosperity of their communities. This gap between responsibility and capability underscores the disparity, necessitating a significant workforce expansion. Furthermore, turnover within public health poses a significant threat to community health and safety. Alarmingly, almost half of state and local public health personnel departed from their positions between 2017 and 2021.[16]



Almost half of state and local public health personnel departed from their positions between 2017 and 2021.

Public Health Workforce Composition

The U.S. population has grown more diverse, with the percentage of non-Hispanic whites decreasing from 84 percent in 1965 to 62 percent in 2015, while Hispanic and Asian populations have increased.[17] By 2043, over half of the nation's population is anticipated to comprise minority ethnicities.[18] This demographic shift poses a new challenge for public health systems to cultivate a culturally and ethnically diverse workforce reflective of the community it serves.[19]

In recent years, some public health agencies in the United States have made strides in increasing diversity. Agencies like the CDC and big city health departments now exhibit greater diversity than state or regional health departments.[20] The majority of public health workers identify as white (54 percent), female (79 percent), and aged 40 or older (63 percent). Although the workforce has grown more diverse, reflecting the U.S. population more closely, diversity diminishes significantly at senior levels, where 66 percent of executives are white.[21]

Minorities comprise 42 percent of the governmental public health workforce, varying across different levels and locations.[22] However, minorities often occupy administrative roles, while non-Hispanic whites are more prevalent in public health science positions and managerial roles.[23] For example, in 2019, Black individuals constituted 13.7 percent of the U.S. working-age population (ages 20 to 65). However, they comprised only 7.3 percent of advanced practice registered nurses, 5.2 percent of physicians, and 4.4 percent of dentists.[24] Hispanic individuals, representing 18.2 percent of the working-age population, were also underrepresented, accounting for just 5.5 percent of advanced practice registered nurses, 6.9 percent of physicians, and 5.7 percent of dentists.[25] Native Americans comprise 0.7 percent of the working-age population, only 0.3 percent of advanced practice registered nurses, 0.1 percent of physicians, and 0.1 percent of dentists.[26] These discrepancies highlight the need for targeted strategies to address diversity-related challenges in public health.

Health Equity

Despite overall improvements in health indicators like life expectancy and infant mortality, health disparities persist, with minority groups facing worse outcomes from preventable conditions.[27] Research consistently shows that minority groups encounter significant barriers in accessing healthcare, racial discrimination, and often receive biased treatment, leading to unequal health outcomes.[28 29]

Improving the diversity of the public health workforce is pivotal for reducing racial and ethnic health disparities in the United States. There is increasing evidence that healthcare providers from underrepresented minority groups are more likely to serve minority, underserved, Medicaid-insured, and uninsured patients.[30] These providers often facilitate culturally competent communication, leading to improved patient outcomes.

Studies have consistently shown that a diverse health workforce improves patient-provider interactions, increases access for underserved groups, and improves overall cultural competence within healthcare.[31 32] The specific benefit of racial or ethnic concordance cannot be overstated. Many patients from minority groups prefer healthcare providers who share their racial or ethnic background, and such concordance has been demonstrated to improve health outcomes and reduce healthcare costs, especially among patients less familiar with routine medical care.[33]

A diverse public health workforce is essential for effectively serving an increasingly diverse population. By mirroring the communities they serve, public health agencies can better understand and address the unique health needs of different groups. Cultural competence, including interpreter services and multilingual materials, is crucial for building trust and delivering effective care.[34]

Leadership influence is paramount in driving these efforts. A diverse leadership team brings many perspectives that can significantly impact decision-making, policy development, and program implementation. By fostering a culture of inclusion, diverse leadership can improve workforce mentoring, training on bias and social determinants of health, and the promotion of metrics that accurately reflect health equity. Additionally, diverse leadership is instrumental in advocating for salary equity and creating a more equitable workplace.

Research has consistently demonstrated the positive impact of diversity on organizational performance and outcomes. For instance, a study by McKinsey & Company found that companies with diverse leadership teams are more likely to outperform their peers financially (McKinsey & Company, 2015). In public health, this translates to improved population health outcomes and a more equitable distribution of health benefits.

To summarize, a diverse public health workforce, coupled with strong and inclusive leadership, is fundamental to achieving health equity. By embracing cultural competence, fostering innovation, and prioritizing equity in all aspects of public health practice, we can create healthier communities for all.

A diverse public health workforce plays a significant role in serving an increasingly diverse population. By adopting culturally competent strategies, such as offering interpreter services and providing materials translated into different languages[35], a varied workforce is better prepared to promote health equity. These practices foster innovation and strengthen the foundation for health equity training, leading to enhanced overall public health outcomes.

Barriers to Workforce Diversity

Barriers to workforce diversity in public health include educational disparities, such as inequitable access to quality education and financial barriers to higher education. These issues are compounded by a lack of mentorship and role models for underrepresented groups. Workplace environments often suffer from discrimination, bias, and a lack of genuine inclusion, while structural issues like the civil service hiring process and unequal promotion opportunities further hinder diversity. Cultural barriers, including a lack of cultural competency, also play a role. Geographic disparities, with more opportunities in urban areas, limited budgets that restrict initiatives to increase diversity, low wages, and unsafe working conditions also add to the challenges. Addressing these barriers requires comprehensive policy changes, organizational reforms, and community engagement initiatives.[36 37]

Understanding the barriers to entry and retention for Latinos, Blacks, and Native Americans in the public health workforce is crucial for developing effective strategies to enhance diversity, equity, and inclusion within this sector.

Racial Disparities in Education

The history of public education in the United States is impacted by systemic racial barriers that, despite the Brown v. Board of Education school desegregation ruling nearly 70 years ago, continue to manifest in significant racial disparities in educational opportunities.[38] These disparities have profound implications for labor market outcomes, affecting employment, wages, and the quality of jobs available to individuals, particularly people of color. The Federal Reserve suggests substantial economic gains could be achieved by addressing educational gaps, estimating that closing these gaps could have increased GDP by $190 billion in 2019 alone.[39]

Research shows that family background significantly impacts racial achievement gaps in elementary and secondary education, but debate continues regarding whether schools mitigate or exacerbate these disparities. For example, racial disparities in school discipline, such as higher suspension and expulsion rates for Black students compared to their peers for the same infractions, may adversely affect educational attainment across different groups. This pattern holds regardless of the school's type or affluence, suggesting a systemic issue that impacts academic achievement negatively.[40 41] The persistent educational disparities often stem from factors

beyond individual control, including socioeconomic background, school resources, neighborhood environments, and systemic biases in school discipline and teacher expectations. These factors underline the importance of targeted interventions to mitigate these deep-rooted inequalities.

In college, minority students frequently experience stigmatization and stereotyping, impacting their sense of belonging and persistence. A study at a predominantly white university found that Black students reported more frequent racial microaggressions than other minority groups, correlating with a reduced sense of belonging.[42] [43]

Challenges Faced by Minority Students

Minority students encounter numerous obstacles when pursuing careers in health professions. Groundbreaking research has identified key contributors to the underrepresentation of Black, Hispanic, and Native American populations in health professional schools.[44] These include social factors like inadequate exposure to health careers, insufficient mentoring, stereotyping, racial bias, and a lack of belonging. Institutional barriers such as subpar secondary education, poor institutional support, and challenges with standardized tests also play a role.[45] [46] [47]

Additionally, affordability issues affect college access and completion. Minority and low-income students are more likely to depend on student loans, attend less selective institutions, and have lower graduation rates, often leaving college with substantial debt.[48] This financial burden can hinder their ability to pursue further education and exacerbates existing inequalities, posing a significant barrier to diversifying the health workforce.[49]

Latinos, particularly Mexican Americans, are significantly underrepresented in U.S. health professions requiring advanced degrees. A study conducted by George Washington University revealed that Mexican Americans, constituting one-tenth of the U.S. population, are represented at less than one-quarter in five of the eight health professions examined. This underrepresentation highlights persistent diversity gaps and barriers facing Latinos in achieving roles such as doctors, nurses, or pharmacists.[50]

Pathways in Public Health

Creating effective entry pathways for trainees in public health is essential. Also referred to as pipelines, these pathways gained momentum after several key developments: the 2003 IOM's call for undergraduate public health education, the 2005 National Board of Public Health Examiners, and the 2008 introduction of the Certified in Public Health credential.[51] Despite these advances, challenges persist, such as slow hiring processes and lower government salaries than the private sector, compounded by increasing tuition and student debt. [52] [53]

Recent trends show that undergraduate degrees in public health have surpassed master's degrees as the most common qualification. However, employment data reveals that a small fraction of public health workers possess a degree in the field, a statistic that has yet to improve significantly over time.[54] Additionally, most graduates initially find employment in for-profit and healthcare settings rather than government or academic roles. Although a higher percentage of those with master's degrees end up in government jobs, managers and graduates feel there are gaps in preparedness, particularly in management, data analysis, and professional writing skills.[55]

Efforts to create hiring pathways include programs like Morehouse College's Project, Public Health AmeriCorps, and CDC's Epidemic Intelligence Service, which use internship or fellowship models.[56] [57] [58]

These programs have seen about 60 percent of participants remain in public health after three years. However, structured recruitment partnerships and research on the impact of internships are limited.[59]

While student loan repayment programs have addressed healthcare workforce gaps since 1972, similar programs for public health students still need funding.[60]

Determinants of Public Health Recruitment

While developing career pathways is essential for public health workforce diversity, it alone is inadequate. Understanding career choice factors is crucial, especially for roles with high competition from the private sector. Studies show that 55 percent of public health graduates seek government jobs for job security, benefits, mission alignment, and training opportunities, but only 17 percent obtain these positions. Key challenges include understanding job descriptions and navigating the hiring process. Compensation was a less critical motivator for those already working in government. Workers from healthcare sectors are drawn by public health's mission, flexible schedules, and employee empowerment. Recruitment factors vary by occupation; for example, nurses are motivated by flexible schedules, empowerment, innovation opportunities, and mission alignment.[61] [62] [63] [64]

The Need for Ongoing Monitoring of Artificial Intelligence (AI) in Hiring Practices

There has been considerable discussion about Artificial Intelligence (AI) driving hiring practices. AI is significantly transforming how employers recruit and hire new employees.

Integrating AI in hiring can streamline and improve recruitment strategies' efficiency while tackling challenges like bias reduction and candidate experience improvement. In the context of AI-driven hiring, the functionality of bias reduction revolves around standardizing recruitment processes and concentrating on objective data to minimize the biases commonly found in human-led evaluations. This approach has been promised to significantly benefit organizations by promoting diversity and inclusivity, as it reduces unconscious biases that often occur during traditional hiring processes. However, there is an inherent challenge: AI systems can potentially inherit and perpetuate biases in the data they are trained on. This can inadvertently undermine efforts to reduce bias, highlighting the need for careful monitoring and continuous adjustment of AI algorithms to ensure fairness and objectivity in hiring practices.[65]

Retention Challenges in Public Health

The 2021 Public Health Workforce Interests and Needs Survey (PH WINS)'s key findings indicate that nearly three-quarters of public health employees were involved in the COVID-19 response, and there has been a significant increase in employees working in infectious diseases. However, almost one-third of employees are considering leaving their organization within the next year, with 39 percent attributing their decision to the pandemic.[66]

Nearly half of all U.S. state and local public health agency employees departed their positions between 2017 and 2021, and over 100,000 public health workers could exit their jobs by 2025 if this trend persists.[67] Key findings revealed that over half of public health workers report symptoms of post-traumatic stress disorder, with one in five describing their mental health as fair or poor. A significant number of public health workers, particularly those in executive positions, face bullying, threats, and harassment. Additionally, more than one in four public health employees are contemplating leaving their organization.[68]

The high turnover rate among public health workers poses a significant threat to community health. As more professionals leave their positions, the stability and effectiveness of public health services, crucial for safeguarding the well-being of communities, are increasingly jeopardized.

Limited access to professional networks and mentors can hinder potential candidates from entering the field due to a lack of necessary guidance and opportunities. Furthermore, workplace challenges such as insufficient cultural competency among peers and supervisors can create an unwelcoming environment for minority workers. This, combined with inadequate inclusive policies for career advancement and professional development, can stifle their career growth and retention. Economic disparities, such as racial wage gaps and the prevalence of contractual and part-time positions with fewer benefits, further discourage long-term commitment among minority public health workers. Additionally, barriers to career advancement, including a scarcity of leadership training and tailored

mentorship programs, alongside the frequent undervaluation of minority staff contributions, contribute to job dissatisfaction and high turnover rates.

Research shows that younger minority staff are frequently dissatisfied with their jobs at state and local health departments due to inadequate cultural competence among managers.[69] This issue is less pronounced in diverse big-city local departments.[70] There are also disparities in earnings and management representation between white and minority staff. To address these issues, scholars recommend improving pay, management parity, and workplace conditions and establishing pathways for minority staff from higher education institutions.[71]

Another emerging threat in the public health workforce is leadership turnover, exacerbated by the COVID-19 pandemic, politicization of health responses, and harassment of agency leaders. The pandemic's economic and social impacts, coupled with hostility toward science, led to criticism, reduced public health authority, harassment, and personal threats against officials and their families. Despite media and public attention, there has yet to be coordinated national action to protect and support the workforce, resulting in increased stress, job dissatisfaction, mental distress, and expedited departures.[72]

Physician Burnout

As the challenges of retaining public health workers intensify, similar difficulties are mirrored in the medical field, particularly among physicians facing systemic issues and burnout. Physician retention has been an escalating issue for decades and was further worsened by the COVID-19 pandemic. A recent Physicians for a Healthy California study found that female physicians are more likely to experience burnout than male peers. The research highlighted that burnout among women of color in the medical field is particularly linked to workplace harassment and a low sense of value at their jobs. The study suggests that "moral injury," rather than personal characteristics, plays a significant role in physicians' decisions to leave the profession. Interviews conducted with physicians revealed systemic problems contributing to stress and burnout, including institutional racism, discrimination from patients and colleagues, and the blurring of work and personal life boundaries due to technology. Additionally, there is pressure to engage in unpaid diversity and equity initiatives, also known as "diversity tax."[73]

Nearly half of all U.S. state and local public health agency employees departed their positions between 2017 and 2021, and **over 100,000 public health workers could exit their jobs by 2025** if this trend persists.

"Our nation's future depends on successfully rebuilding a robust and reinvigorated public health workforce."

HOWARD K. KOH, MD, MPH

Harvey V. Fineberg Professor of the Practice of Public Health Leadership at Harvard and an author of The Exodus Of State And Local Public Health Employees: Separations Started Before And Continued Throughout COVID-19, March 2023.

Recruitment and Retention Best Practices And Recommendations

"Building the future of public health begins with inspiring and mentoring the next generation. By fostering a passion for public health careers among young people, we can ignite a lifelong commitment to improving the well-being of our communities."

DR. ELENA RIOS
President and CEO of the National Hispanic Health Foundation

A multifaceted recruitment strategy is essential to effectively diversify the public health workforce. Key strategies include exposing young people to health careers early to spark interest and align educational pathways, making higher education more affordable to ensure accessibility, and addressing cultural and social barriers that minority students face. Providing minority role models, addressing biases in hiring practices, and tackling implicit biases that people hold are also crucial steps. Additionally, increasing scholarships and funding opportunities for underrepresented minorities in public health educational programs can help alleviate financial constraints.

This section presents four case studies showcasing successful initiatives that address creating internship opportunities for high school students to provide early exposure to public health careers, culturally competent recruitment, and model partnerships to fund fellowship and a successful retention model. These case studies highlight practical examples and the outcomes of these strategies in action.

CASE STUDY 1:

Mentorship and Role Models:

Inspiring and Mentoring Young People to Pursue Public Health Careers - *Youth Mental Health Academy, Workforce Training and Capacity managed by the Department of Health Care Access and Information (HCAI) and administered by The Child Mind Institute.*

Exposing young people to health careers is crucial for several reasons. It helps spark early interest and motivation, align their educational pathways with necessary prerequisites, and improve workforce diversity. This early exposure also helps address skills shortages in the healthcare sector, develop essential capacity-building skills, and allow long-term career planning.

A notable example of a project is the Youth Mental Health Academy, a community-based career development program for high school students. The Academy aims to identify and support the early career development of 2,500 culturally diverse California high school students interested in behavioral health careers. The program includes mentorship, paid project-based learning, and paid internships in the mental health field for over 14 months. As of 2023, 156 high school students completed the pilot summer academy, with 100 percent of participants coming from underrepresented backgrounds or regions. Impressively, 73.9 percent of participants were "very likely" to pursue a career in mental health. The Academy also assists students with college applications and provides career counseling, marking it a huge success in guiding the next generation toward mental health professions.

The Youth Mental Health Academy strives to address the key contributors and social factors responsible for the underrepresentation of Black, Hispanic, and Native American populations in health professional schools. This is achieved through a community-based career development program for high school students, which employs the following strategies:

1. Launched a five-week pilot summer academy cohort, which operated at four college campuses.
2. Convened a community stakeholder event with 400 participants. This event showcased student research projects covering topics such as mental health disorders and trauma.
3. Developed year-round programming that offers a monthly virtual seminar on topics like substance use prevention, gender, racism, and bullying.

Early exposure allows students to align their academic paths with the prerequisites of public health careers. This might include taking relevant science and math courses, engaging in specific extracurricular activities, or pursuing relevant summer programs. By introducing mental health careers to a diverse young audience, the sector can increase the diversity of its workforce. Public health careers often require long-term educational commitments, including advanced degrees and certifications. Early exposure helps individuals plan for these commitments well in advance, ensuring they are prepared for the rigors of healthcare education and training.

CASE STUDY 1 CONTINUED

Recommendations for Public Health Officials

- **Community Engagement and Education:** Establish local youth public health academies modeled after the Youth Mental Health Academy and partner with schools and community organizations to ensure equitable access to the program.
- **Capacity Building:** Offer state or local public health departments sponsored training programs for mentors and educators involved in youth health academies. Provide technical assistance to strengthen school-based health programs.
- **Inter-Agency Coordination:** Foster collaboration between educational institutions, healthcare providers, and community organizations to support public health career pathways. Develop state-wide health education campaigns to promote public health careers.
- **Emergency Preparedness:** Integrate public health career education into local emergency preparedness plans, highlighting the importance of public health roles in crisis situations.
- **National Health Policies and Guidelines:** Establish national guidelines for youth career development programs in public health. Promote best practices based on successful models like the Youth Mental Health Academy.

By implementing these strategies, public health officials at all levels can encourage young people to pursue careers in public health, thereby ensuring a diverse, skilled, and prepared workforce for the future.

"With this program, I learned that I could be a researcher myself, and it made me feel really confident in my scientific skills and my knowledge in psychology, and I cannot thank this program enough."

12TH GRADE PARTICIPANT[74]

CASE STUDY 2:

Fellowship and Scholarship Programs

Insights from Model Fellowship and Scholarship Programs - *APHA/Kaiser Permanente Fellowship and Scholarship Programs*

The APHA/Kaiser Permanente Community Health Fellowship and Scholarship programs are designed to cultivate diverse leadership and promote health equity within the public health sector. Building on APHA's successful administration of model fellowship and scholarship programs that demonstrate the impact of public and private sector partnerships in addressing workforce shortages, these initiatives target early-career professionals and students from underrepresented backgrounds. They provide significant financial support and immersive experiences to advance participants' careers.

The APHA Kaiser Permanente Community Health Fellowship offers a year-long immersive experience for early-career professionals with an MPH, DrPH, or PhD in public health from APHA partner universities. The fellowship prioritizes first-generation college graduates, individuals from lower socioeconomic backgrounds, and underrepresented racial or ethnic groups. Fellows receive a $120,000 stipend for the 12-month program (September to August) and work with Kaiser Permanente partners or within Kaiser itself. Priority placement sites for 2024-25 include AcademyHealth, Bon Secours Community Works, CDC Foundation, Climate for Health (ecoAmerica), Hawai'i Public Health Institute, Tubman Center for Health and Freedom, and the United States Interagency Council on Homelessness.

The APHA Kaiser Permanente Community Health Scholarship supports students pursuing an MPH or DrPH/PhD at one of the partner universities. This initiative aims to foster diverse leadership in public health by aiding the education of underrepresented students committed to health equity. Recipients of the MPH scholarship receive a $15,000 tuition award annually for two years of full-time study. For the DrPH/PhD scholarship, recipients receive a $20,000 tuition award per year for three years, with an option in the final year to receive the award as a stipend or a combination of stipend and tuition.

Partner universities include Charles R. Drew University of Medicine and Science, Georgia State University, Morehouse School of Medicine, Morgan State University, Portland State University (OHSU-PSU), University of California (Berkeley, Irvine), University of Colorado Anschutz, University of Hawai□i at Mānoa, and University of Washington.

These programs create clear and compelling entry pathways for public health trainees by offering significant financial support, immersive experiences, and prioritizing underrepresented groups. The fellowship and scholarship initiatives address financial barriers and preparedness gaps, ensuring participants gain practical experience and leadership skills. Replicating these models across the public health sector could significantly enhance workforce development, reduce disparities, and improve public health outcomes.

"Through the APHA/Kaiser Permanente Community Health Fellowship and Scholarship programs, we are not just addressing workforce shortages but empowering a new generation of diverse leaders to champion health equity. Investing in early-career professionals and students from underrepresented backgrounds creates a future where every community has the skilled and passionate public health professionals it deserves."

GEORGES C. BENJAMIN, M.D.
Executive Director
American Public Health Association

CASE STUDY 2 CONTINUED

Recommendations for Public Health Officials

- **Public and Private Partnerships:** Invest in Fellowship and Scholarship Programs: Public health agencies and organizations should analyze the successful components of the APHA/Kaiser Permanente fellowship and scholarship programs and replicate these models across various regions and sectors. The NHHF Leadership stands as an exemplary model worthy of highlighting. Collaboration between the public and private sectors can further amplify the impact and sustainability of these efforts.
- **Establish Robust Scholarship and Loan Repayment Programs for Public Health Students:** Since 1972, the National Health Service Corps has successfully used loan repayment programs to fill healthcare workforce gaps. However, no similar programs exist for public health students. There should be federal legislation to establish a robust loan repayment program for public health students. This would reduce financial burdens, attract more individuals to the field, and ensure a well-prepared workforce to tackle public health challenges.

CASE STUDY 3:

Cultural Competency Recruitment Massaging

Sacramento Native American Community Health Center and UC Davis Tribal Health

The Sacramento Native American Community Health Center, in partnership with UC Davis Tribal Health PRIME, actively addresses the significant health disparities faced by Native American communities through its efforts to increase Native American representation in medical education. This year, they have successfully identified nine Native American medical students for admission. This is a new record and a step toward creating a healthcare workforce that mirrors the diversity of the communities it serves.

This initiative aims to bring diversity into the medical field and targets the unique health challenges in Native American communities. These include diabetes, cardiovascular diseases, and, notably, mental health issues, which are often exacerbated by the socioeconomic conditions of reservation life, such as segregation, poverty, and isolation. The recognition of these health determinants—race, culture, gender, and socioeconomic status—is crucial for understanding and addressing the specific needs of Native American patients.

Furthermore, the partnership is designed to combat the lack of culturally sensitive healthcare by equipping future medical professionals with a deep understanding of the cultural, economic, and geographical barriers that impact healthcare delivery in these communities. This approach includes training in modern medical practices and integrates traditional healing methods, respecting the preference among many Native Americans to seek help from spiritual or traditional healers. This strategic approach aims to improve access to healthcare for Native American communities by fostering a workforce that is inherently knowledgeable and sensitive to their specific needs, thus improving health outcomes and reducing disparities.

The Sacramento Native American Health Center Inc. (SNAHC) is a Federally Qualified Health Center and a non-profit organization in Sacramento, CA. SNAHC offers a holistic, patient-centered continuum of culturally competent care. The center is inclusive and requires no tribal or ethnic affiliations for care. Since its establishment, the center has grown its staff to more effectively meet the community's needs. Notably, 26 percent of SNAHC's staff members are Native Americans from local and distant tribes.

SNAHC partners with over 40 community organizations to broaden access to assistance programs. In a partnership with UC Davis Tribal Health Prime, SNAHC is crucial in recruiting Native American students into medical fields, aiming to improve healthcare provision within tribal communities. American Indian and Alaska Native (AIAN) communities experience notable health inequities, underscoring the urgent need to identify and train pre-med students with deep connections to these communities.

"PRIME programs, or Programs in Medical Education, are training programs that supplement standard training with additional curriculum for underserved populations. A Native-specific program also offers medical students opportunities to work in their communities and have an extended community while away from home. The opportunity to ignite the spark of Community Health with these students early is a long-term investment that we share with UC Davis in hopes of getting future Native M.D.s back into our community."

BRITTA GUERRERO, (SAN CARLOS APACHE)
Chief Executive Officer
Sacramento Native American Community Center

CASE STUDY 3 CONTINUED

The UC Davis Tribal Health PRIME Community Health Scholars Program is designed to equip students with the necessary knowledge and skills for medical practice within California's urban and rural tribal areas. UC Davis partners with these communities to recruit and support students throughout their medical education journey. Scholars in the Tribal Health PRIME program will enter UC Davis medical school through both traditional and specifically tailored pre-medical recruitment strategies.

To build on the successful partnership between the Sacramento Native American Community Health Center (SNAHC) and UC Davis Tribal Health PRIME, we recommend the following strategies to address health disparities in Native American communities further:

Recommendations for Public Health Officials

- **Expand Recruitment Initiatives:** Identify and recruit Native American students into medical education programs.
- **Expand Community Collaborations:** Strengthen partnerships with local, state, and national organizations to broaden the scope and reach of health programs. Leverage these partnerships to secure funding, share resources, and implement best practices, such as partnering with a Federally Qualified Health Center.
- **Cultural Competency Training:** Increase the employment of community health workers from Native American backgrounds to bridge the gap between healthcare providers and the community. These workers can play a vital role in health education, outreach, and advocacy.
- **Integrate comprehensive cultural competency training into medical education curriculums.** This should include the history, traditions, and specific health challenges facing Native American communities.
- **Mentorship Programs:** Establish mentorship and support networks for Native American medical students to ensure retention and success and pair students with Native American healthcare professionals and community leaders.
- **Integrate Traditional Healing Practices:** Recognize and respect the role of spiritual and traditional healers in the community. Train healthcare providers in understanding and integrating traditional healing practices. This could involve workshops, seminars, and collaboration with traditional healers.
- **Address Social Determinants of Health:** Implement outreach programs that address the social determinants of health, such as poverty, segregation, and isolation. Focus on improving living conditions, access to education, and economic opportunities.
- **Holistic Health Approaches:** Promote holistic approaches to health that consider the physical, mental, social, and spiritual well-being of individuals. This could involve community wellness programs, mental health support, and substance abuse prevention initiatives.
- **Policy Reforms:** Advocate for policy changes that support the recruitment and retention of Native American healthcare professionals, enhance cultural competency in healthcare, and address the social determinants of health.

By implementing these recommendations, public health officials can build on the foundation established by SNAHC and UC Davis Tribal Health PRIME, further reducing health disparities and improving health outcomes for Native American communities.

CASE STUDY 4:

Retention Through Relationship-Based Care Model

UC Davis Health - Achieving a 92 Percent Nurse Retention Rate Through Relationship-Based Culture, Effective Onboarding, and Professional Development

UC Davis Health has a remarkable 92 percent nurse retention rate, significantly higher than the industry average of 22.5 percent. The system employs just over 4,000 nurses, with 54.8 percent belonging to minority groups. This success is rooted in a relationship-based culture, comprehensive onboarding, and diverse professional development opportunities. The Relationship-Based Care model, embraced since 2010, focuses on building healthy team relationships through trust, respect, open communication, and consistent support, creating a strong, collaborative environment for patient care.

Relationship-Based Care Model

Since 2010, UC Davis Health has implemented the Relationship-Based Care (RBC) model, emphasizing trust, respect, open communication, and consistent support. This model fosters healthy team relationships and creates a robust and collaborative environment for patient care. The RBC model focuses on key relationships with self, colleagues, and patients, improving healthcare outcomes.

Professional Development and Governance

UC Davis Health has established professional governance structures and systemwide councils to empower nurses as decision-makers and leaders. They offer workshops to enhance relational skills and professional growth. This inclusive and supportive culture has maintained high nurse retention rates and improved team cohesion, efficiency, and satisfaction.

New Graduate Onboarding

The organization has a one-year nurse residency program accredited by the American Nurses Credentialing Center, helping new nurses transition from theoretical training to clinical practice. This program includes multiple specialties, such as Ambulatory Care, and has maintained a first-year retention rate of over 93.8 percent since its inception in 2012.

Critical Care Fellowship Program

Launched in 2016, the Critical Care Fellowship Program (CCFP) streamlines new nurse onboarding in critical care settings. From 2016 to 2022, 60 out of 65 new nurses who participated completed the orientation and secured ICU positions. This program underscores the organization's commitment to focused nursing leadership and organizational support.

Innovative Staffing Solutions

UC Davis Health introduced a new graduate float pool to address staffing needs. Nurses in this program rotate through acute care units for a year before receiving permanent assignments, ensuring flexibility and comprehensive exposure to various clinical environments.

Results and Recognition

As of June 2023, UC Davis Health's nurse turnover rate was just below 7 percent, significantly lower than the national average. The organization has been a Magnet® hospital since 2014, reflecting its commitment to nursing excellence. Leaders emphasize the importance of experienced nurses in providing high-quality patient care and maintaining team cohesion.

UC Davis Health's approach to nurse retention is formed around a relationship-based model, effective onboarding, and professional development, which serve as the core pillars of its program. These strategies have resulted in high retention rates, improved patient care, and a supportive, inclusive work environment.

Recommendations for Public Health Officials

- **Evaluate and Implement Relationship-Based Care Models:** Emphasize the importance of building healthy relationships among staff, patients, and self to improve healthcare outcomes.
- **Promote Trust and Respect:** Foster a culture of trust, respect, and open communication to create a supportive and collaborative work environment.
- **Offer Professional Development Opportunities:** Provide workshops and training sessions to enhance professional skills and support career growth.
- **Promote Diversity in Nursing:** Increase efforts to recruit and retain a diverse nursing workforce to improve patient trust and healthcare outcomes, especially among underserved populations. Provide regular training on equity, diversity, and inclusion to all staff, particularly senior staff and executives.
- **Empower Nurses as Leaders:** Create governance structures and councils that empower nurses to be decision-makers and leaders within the organization.
- **Promote Inclusion and Participation:** Encourage all staff members to participate in decision-making to foster ownership and accountability.
- **Critical Care Fellowship Programs:** Implement fellowship programs for specialized areas such as critical care to streamline onboarding and ensure nurses are well-prepared for their roles. Expand fellowship programs to cover various specialties to address diverse healthcare needs.
- **Rotational Assignments:** Implement rotational assignments during the initial year to help new nurses gain a broad range of experiences before settling into permanent roles.
- **Monitor Retention and Turnover Rates:** Regularly assess nurse retention and turnover rates to identify areas for improvement and implement necessary changes. Establish robust feedback mechanisms to gather input from nurses and other healthcare staff to continuously improve workplace conditions and policies.
- **Specialized Training Tracks:** Develop specialized training tracks within residency programs to cater to new nurses' varied interests and career paths.

By adopting these recommendations, public health officials can create supportive and effective work environments that enhance nurse retention, improve patient care, and build a more resilient public health system.

Advancing Public Health Through Strategic Initiatives

"To influence public policy, focus on the broader benefits of public health like healthy communities and economic vitality. Build support by engaging diverse stakeholders such as Black churches and business communities. Leverage respected local leaders like county supervisors, develop a credible community-based support base, advocate for strategic investments, and maintain transparency to build trust and drive impactful change."

DAVID LUBARSKY, M.D., M.B.A., F.A.S.A.
Vice Chancellor of Human Health Sciences and Chief Executive Officer
UC Davis Health

Policy Advocacy: A Catalyst of Change for Better Public Health – State of Indiana

Public policy and advocacy are essential for addressing systemic issues in public health. By influencing policy, officials can secure necessary funding, streamline hiring practices, and ensure fair compensation for public health workers. Advocacy efforts help raise awareness, build community support, and drive legislative change, leading to improved health outcomes and more robust public health systems.

In Indiana, public health funding increased by 1,500 percent through strategic alliances. Careful messaging, engaging diverse stakeholders, and leveraging leadership led to this success and transformed the public health landscape by addressing structural issues and ensuring sustainable improvements.[75] This case underscores the vital role of public policy and advocacy in securing resources and enacting change.

Public health officials are critical in shaping and changing policies to improve community health outcomes. As demonstrated by Indiana's significant boost in public health funding, strategic initiatives can lead to substantial improvements even in challenging political climates.

Promoting Equity: The Role of DEI Training

The Importance of Diversity and Inclusion Training for Public Health Supervisors and Staff

Diversity, Equity, and Inclusion (DEI) training fosters a more equitable public health environment. Effective DEI training helps public health supervisors and staff understand and address the root causes of health inequities, ensuring that services are inclusive and accessible to all communities.

Several organizations provide resources for DEI training, including:

- National Association of County and City Health Officials (NACCHO): The Health Equity and Social Justice program empowers local health departments to address health inequities through public health practices and organizational reforms.
- Association of State and Territorial Health Officials (ASTHO): Offers resources and training for state and territorial health officials.
- National Network of Public Health Institutes: Provides collaborative support and training.
- Regional Public Health Training Centers: Offers localized training programs.
- TRAIN: An online learning network offering various DEI courses.

These organizations, among others, play a vital role in enhancing the capacity of public health departments to serve diverse populations effectively and equitably.

Empowering Future Public Health Leaders

Implementing outreach programs in high schools and undergraduate institutions is essential for building a robust pipeline of future public health professionals. The importance of organizations like Health Career Connection (HCC) cannot be overstated, as they play a crucial role in fostering diversity and innovation within the public health workforce. HCC's commitment to empowering undergraduate students, recent graduates, and alumni from underrepresented, first-generation college or disadvantaged backgrounds through real-world experiences, mentoring, and networking has significantly contributed to the development of over 5,000 public health professionals over the past 34 years.

Their exemplary efforts in recruiting and retaining minority students, with an impressive job retention rate and a high percentage of participants pursuing public health careers, highlight such organizations' impact on addressing implicit bias and harmful stereotypes. For example, HCC's comprehensive career and professional development program extends support to interns through alum initiatives long after their comprehensive 10-week cohort program concludes. Most participants are from under-resourced communities and pursue public health careers, with 71 percent securing a job, 82 percent completing a graduate degree, and 68 percent serving underserved communities. HCC tackles critical issues in recruiting and retaining a diverse workforce by connecting students with role models who address implicit bias and harmful stereotypes and connecting participants to public health organizations. Furthermore, numerous other organizations are doing equally commendable work in promoting public health workforce diversity, and they deserve support and recognition for their contributions.

> "HCC has a proven turn-key program for recruiting and developing a diverse public health workforce. We could increase our impact significantly if the CDC and other health departments partnered with HCC to host or sponsor HCC interns and hire our talented alumni on a large scale."
>
> **JEFF OXENDINE**
> Co-Founder and President of
> Health Career Connection

Conclusion

As we look to the future of the public health workforce, addressing the broader challenges of recruitment, retention, and infrastructure is essential for building a robust and effective public health system. Evolving public health demands require a workforce that reflects the diversity of the populations it serves.

Financial constraints are a significant barrier for many pursuing careers in public health. **Increasing scholarships and funding** opportunities for all students, particularly those from underrepresented backgrounds, is crucial to alleviate these challenges. **Establishing robust scholarships and loan repayment programs** for public health students is urgently needed to ensure broader access and participation, enriching the workforce with diverse perspectives and experiences.

Establishing mentorship programs that connect high school students and early-career professionals with experienced mentors can provide essential guidance, support, and networking opportunities. These relationships are vital for navigating the complexities of public health careers, fostering professional development, and enhancing contributions to public health.

Implementing inclusive recruitment and retention practices is essential to attracting and retaining a diverse, skilled workforce. This includes creating targeted recruitment strategies, partnering with institutions that serve diverse populations, and conducting outreach programs in schools and universities. By actively seeking and supporting individuals from diverse backgrounds, a pipeline of future public health professionals equipped to meet the needs of all communities can be built.

Cultural competency is crucial for improving public health service delivery and fostering a supportive workplace environment. Ongoing cultural competency training for all public health staff can enhance understanding and sensitivity toward diverse populations. This training should address implicit biases and promote inclusive behaviors, ensuring public health workers are prepared to serve all communities effectively.

Developing clear pathways for career growth, including paid internships, mentoring programs, and professional development opportunities, will ensure that talented individuals are recognized and supported in their professional journeys.

Public health leaders and officials are pivotal in driving change and impacting policy decisions. Leaders must prioritize comprehensive policies, support career advancement, and advocate for necessary changes and investments to improve public health outcomes.

Since 1972, the National Health Service Corps has successfully used loan repayment programs to address healthcare workforce shortages. However, there are currently no comparable programs for public health students. To address this gap, federal legislation should establish a robust loan repayment program specifically for public health students.

Improving retention rates among diverse public health professionals requires implementing robust professional development opportunities and creating supportive work environments such as diversity and inclusion training for all staff. Organizations should focus on offering competitive salaries, career development programs, and measures to mitigate workplace harassment. Addressing these issues is essential for maintaining a motivated workforce.

Building broad-based public health coalitions is essential for driving change in public policy and advocacy. These coalitions can amplify the voices of public health professionals and advocate for policies that promote health equity and address the needs of diverse populations. By engaging community leaders and experts, public health coalitions can develop strategies that effectively address different communities' unique challenges.

The public health workforce is undeniably the cornerstone of the public health enterprise. Bridging gaps in the public health workforce through comprehensive strategies is vital for the future of public health. Addressing financial barriers, fostering mentorship, implementing inclusive recruitment and retention practices, providing cultural competency training, and developing clear career advancement pathways are essential to creating a more diverse, equitable, and effective public health workforce.

The coordinated efforts of educational institutions, government bodies, community-based institutions, and public health organizations are crucial in achieving these goals. By adopting targeted strategies and emphasizing the importance of policy and advocacy, a public health workforce can be better equipped to address the complex health challenges of a diverse society.

Diversifying the public health workforce extends beyond fairness. This action is crucial to create a system that can effectively address the health needs of all communities. It is essential to advocate and promote an environment where every public health worker, regardless of their background, can thrive and contribute to the well-being of their communities.

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