

Improving Diversity in the Health Professions

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The health professional workforce of North Carolina does not reflect the rich diversity of the state's population, and the underrepresentation of various demographic groups in health care may affect the health outcomes of the state's citizens. There are opportunities for educational institutions to partner with others, share successful strategies, and implement measures to promote diversity among health professionals.

As the US population has become increasingly diverse, more health agencies are seeking to have a workforce that reflects the general population in terms of race, ethnicity, and socioeconomic background [1, 2]. Such representation is important in addressing the needs and interests of the communities health professionals serve. However, the challenge lies in the limited availability of diverse health professionals to fill vacancies.

Today's health professional workforce does not reflect equity in all racial and ethnic groups. Whites comprise 72% of the US population, yet they represent more than 80% of the health professional workforce. While Asian Americans are well represented in health careers, the representation of African Americans, Hispanics, and Native Americans is much lower. When combined, these groups represent over 30% of the US population, yet these minorities are underrepresented among physicians, registered nurses, dentists, pharmacists, and allied health professionals (see Figure 1).

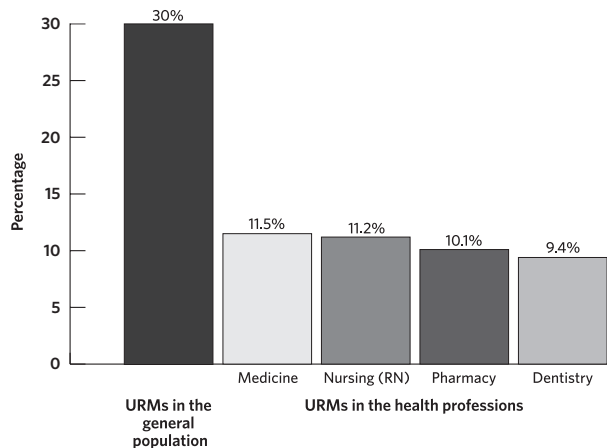
North Carolina is one of the most diverse states in the nation; people of color constitute 32.6% of the state's population, yet they represent less than 17% of the state's health professional workforce (see Figure 2) [3]. The underrepresentation of people of color in the health professions has been noted for some time. In 2004, the Sullivan Commission reported that the nation's health professions had not kept pace with the nation's changing demographics and that this imbalance could impair access to health care [4]. Underrepresentation of minorities in the health professions has implications for worsening health disparities.

A diverse workforce is important for a number of reasons. Such a workforce will likely lead to improved public health by increasing access to care for underserved populations and increasing opportunities for these populations to see practitioners with whom they share a common culture [1, 2]. Health care providers of color are more likely than others to address health disparities in a culturally competent manner.

In contrast, limited health care access could result in worsening disparities and health outcomes for people of color. A diverse workforce will help to expand health care access for underserved communities, promote research regarding health disparities, and increase the number of leaders and policy makers who support diversity in the workforce [5, 6].

As noted in the 2015 Kelly Report, "People of color are the fastest growing segment of our population and an increasingly large number of healthcare recipients. Therefore, they should make up a larger percentage of the health workforce" [7]. For these reasons, there is an urgent need for schools to prepare more diverse graduates [8]. Health professional schools require a competitive pool of students who can be admitted to college, satisfy admission requirements, and be retained in their educational program.

FIGURE 1. Underrepresented Racial and Ethnic Minorities (URMs) in the US Health Professions



Source: Sex, Race, and Ethnic Diversity of US Health Occupations (2010-2012) [2].

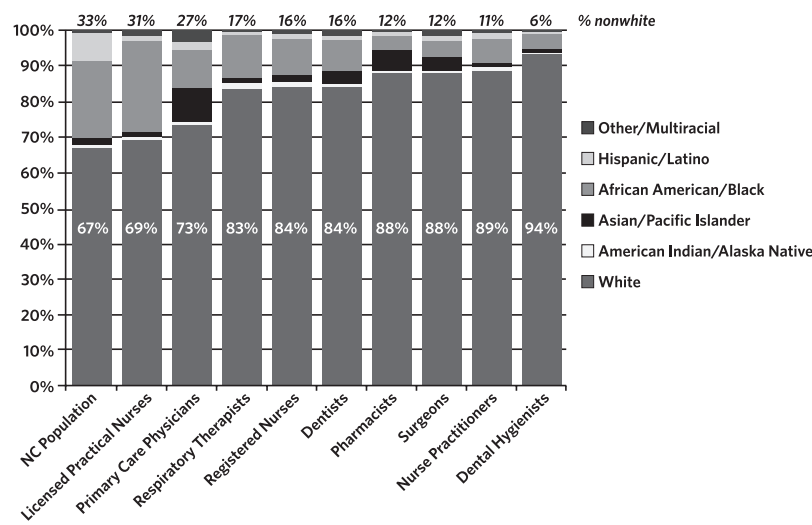
Note. Underrepresented racial and ethnic minorities include Hispanics (15.5% of the general population), blacks (13.6% of the general population), Native Americans (0.7% of the general population), and Native Hawaiians (0.2% of the general population). Asians represent 6% of the general population and are not classified as underrepresented.

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FIGURE 2.
Diversity of North Carolina's Population Versus Diversity of Selected Health Professions, 2009



Source: *The Diversity of North Carolina's Health Care Workforce* [3].

Academic Preparation

Academic preparation can affect matriculation and attrition. A 2003 study estimated that only 51% of all black students and 52% of all Hispanic students graduated from high school and that only 20% of all black students and 16% of all Hispanic students left high school prepared for college [9]. However, recent data show improvement. In the period 2012-2013, the National Center for Education Statistics reported that graduation rates were improving, and North Carolina had an 83% graduation rate—2 points higher than the national average [10]. Students of color who successfully complete high school may face challenges with standardized testing and the emphasis that many health professional programs place on SAT scores. Inadequate academic preparation of socioeconomically disadvantaged students and students of color can be partially explained by systematic inequalities in the educational system. Compared with their more affluent counterparts, low-income students and students of color from under-resourced K-12 schools may lack resources, tools, and knowledge of test taking [11].

Since many health professional programs require competitive SAT and GRE scores, some low-income students and students of color are automatically eliminated from the admissions pool. African Americans, Hispanics, and Native Americans tend to score lower on these tests than whites or Asian Americans [12-14]. More universities are now recognizing that standardized tests do not account for personal experiences or other knowledge that may impact applicants' success in a university setting [8]. Therefore, admissions committees should review their practices and take into consideration applicants' unique experiences, other predictors of academic readiness, and their potential to succeed in health professional programs.

Knowledge of Health Careers

As noted by McGee and Fraher, there are other challenges in diversifying the health care workforce [3]. Economically disadvantaged students and students of color experience high attrition rates, have limited knowledge of health career opportunities, and often lack mentors.

Many low-income students, students of color, and their parents lack knowledge about the variety of health careers in allied health and nursing [1]. This challenge can be overcome through the pairing of students with mentors. A mentor is an advisor or role model who can assist students and junior professionals with school retention and advancement in the workplace [5, 15]. Mentors can play an important role in recruiting and retaining diverse students. Since people of color graduate from high school and enroll in college at lower rates than whites, mentors can share lessons learned, such as how to prepare a competitive college admissions application and how to succeed in difficult courses. Upon students' successful completion of a health professional program, mentors can help people of color feel welcome in the health care environment, where there may be few role models on staff [16].

Programs that pair students with health professionals, faculty, or high-achieving students of color may provide the experience of academic guidance and social support needed for success in pursuing a health career. Larriex and colleagues are avid supporters of mentoring [17]. They proposed a "shadow day" to increase the interest of high school students of color in pursuing a health career. The authors recommend exposing students to a day of college life in a health program to increase their interest in, and knowledge of, the health career of their choice.

Researchers have cited the value of mentoring programs

in improving retention and graduation rates of students of color [18, 19]. When students who have an interest in pursuing a health profession are identified early, a mentor can provide guidance on admissions requirements, provide feedback on where applicants stand and what is required to be competitive, provide emotional support, and put students in contact with professionals in the field who can offer further support [18].

In addition to mentoring programs, summer programs have also proven helpful in raising the awareness of health careers among economically disadvantaged students and students of color. In North Carolina, many programs have been offered. For example, the North Carolina Area Health Education Centers program has conducted puppet shows for young students; provided information to guidance counselors; produced videos of successful graduates; and implemented summer camps, job shadowing, and informational workshops. Many universities and community colleges also hold summer enrichment programs for youth who are interested in pursuing a health career [20].

Paying for College

The challenge of paying for college is one of the most important factors affecting the enrollment and retention of students in health programs. Since students of color and economically disadvantaged students more often come from low- and moderate-income families, they have fewer personal funds and may have difficulty in acquiring loans to pay for a college education. As a result, low- and moderate-income high school graduates who are qualified to attend college are less likely to pursue higher education than are their peers from families with higher incomes. Further, many minority students may be the first in their family to attend college, and their families may be less familiar with available resources to fund a college education or may have misperceptions about the true costs of college. They may also be unfamiliar with the process of completing admission and financial applications [20]. Without adequate funding, students are unable to pay tuition, purchase textbooks, and buy other supplies needed to complete professional studies.

Another factor that affects funding for college is the rising cost of tuition. The cost to attend a 4-year college at public and private institutions has risen more than 400% in the past 20 years, while family incomes have remained relatively flat. Thus, obtaining a degree in the health professions is unaffordable for many. Even when low-income students and students of color qualify to pursue a health career, the loan burden from rising college prices may dissuade them from enrolling. The federally funded Pell Grant that was created over 40 years ago helped many students pay for college. Given the state of the US economy and the need to reduce the national debt, this program has been cut back, and students are now limited to 12 semesters of Pell Grant funding [11]. Without adequate financial resources, student may be deterred from pursuing a health career [21].

A Focus on Equity

The 2015 book *America's Unmet Promise* makes the case for using high-impact practices to expand access and promote success for underserved students in higher education [11]. Winston-Salem State University (WSSU) has applied these principles to promote student success through tutoring, supplemental instruction, learning centers, and skills enhancement activities. The university has launched a new strategic plan that will enhance student retention and graduation rates.

A specific example of a high-impact practice at WSSU is an agreement between the Exercise Physiology Department and the Doctor of Physical Therapy Department to increase diversity in graduate programs at WSSU. Eligible students in this program spend the last semester of undergraduate studies in the doctoral program, thereby shortening the overall enrollment time and saving the cost of one semester of tuition. Another example involves the recent signing of a memorandum of understanding between Bennett College and WSSU. This will encourage more well qualified students of color to apply to the graduate and professional health sciences programs. Since many WSSU students remain in North Carolina upon graduation, such practices will help to diversify the health professions in the state.

The North Carolina Alliance for Health Professions Diversity

Steps are also being taken to address diversity at the state level. On March 27, 2015, a memorandum of understanding was signed by senior officials from 19 North Carolina colleges, universities, statewide organizations, and local health agencies (see Table 1). Louis Sullivan, former secretary

TABLE 1.
Founding Members of the North Carolina Alliance for Health Professions Diversity

Appalachian State University
Bennett College
Campbell University
Davidson Community College
East Carolina University
Elizabeth City State University
Elon University
Fayetteville State University
Forsyth County Department of Public Health
High Point University
Johnson C. Smith University
North Carolina Area Health Education Centers
North Carolina Central University
North Carolina Department of Health and Human Services
St. Augustine's University
University of North Carolina Greensboro
Wake Forest Baptist Medical Center
Western Carolina University
Winston-Salem State University

of the US Department of Health and Human Services, has worked with this group and others around the country to form statewide alliances. Signers of the agreement committed to several goals: reducing disparities by increasing racial and ethnic diversity in the health care workforce in North Carolina; expanding the pipeline of diverse, fully prepared, qualified candidates for health professional schools; building collaborations and partnerships; expanding relationships among faculty and alliance institutions; addressing faculty diversity; and pursuing funding to support the alliance efforts. The collective intellectual prowess of partners will undoubtedly lead to solutions for a more diverse health professional workforce in North Carolina.

Summary and Recommendations

North Carolina's population is becoming more ethnically and culturally diverse, and there is need to plan for the future. To increase diversity in health careers, health professional schools may need to revisit their admissions processes and identify equitable practices to enhance student success for admission, matriculation, and completion. Coordinated efforts are needed to boost the success of diverse students in their academic preparation at the K-12 level, to increase their knowledge of the variety of health careers, and to provide technical support to them and their families in navigating the admissions and financial aid processes. Creative programs to increase diversity in health professional students are needed, and the North Carolina Alliance for Health Professions Diversity is committed to addressing this need by leading and strategizing with others. *NCMJ*

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