

Numbers of Minority Health Professionals: Where Do We Stand?

Thomas C. Ricketts, III, MPH, PhD, and Katie Gaul, MA

Should race and ethnicity matter in the supply of health professionals? Given that we know there are demonstrated differences in patterns of care and outcomes for racial and ethnic minorities in the United States,¹ the answer is yes. But what should be our workforce goals in eliminating these differences? The simple answer to this question is that there should be equal representation among health professionals according to the race and ethnicity of the population to be served. By that standard, we have failed by a large margin.^{2,3} All health professions fall well short of "population parity" measured against the proportion of under-represented minorities (URMs) in the overall United States population. According to 2000 United States Census data, African Americans, Latinos, and American Indians are 26% of the United States population. URMs constitute 20% and 16%, respectively, of the students in public health schools and baccalaureate nursing programs, with URMs constituting less than 15% of students in all other health professions. The late 1990s through 2002 saw a reversal in promising trends in increasing minority enrollment in United States medical schools, but that seems to have abated to some degree. In its review of applications for the fall of 2004, the Association of American Medical Colleges noted a second consecutive year of increase in minority applications to medical schools. The number of

black and Hispanic applicants was up 2.3% and 2.5%, respectively, and actual enrollment increased by 2.5% for blacks and 8% for Hispanics, reversing decreases in first-year enrollment in 2003. This change may reflect admissions policy changes or the re-application of existing policies in the wake of the June 2003 United States Supreme Court decision on affirmative action.⁴

Underrepresented minorities comprise 25% of the nation's population, but only 10% of all health professionals. Only 3% of medical school faculty, 17% of all city and county health officials, and 2% of senior leaders in healthcare management are minorities.⁵ Table 1 provides an overview of the national racial and ethnic distribution of selected health professions compared to the United States population. Among blacks and Hispanics, the two largest minority groups, only in nursing is there close to parity with the population distribution, with

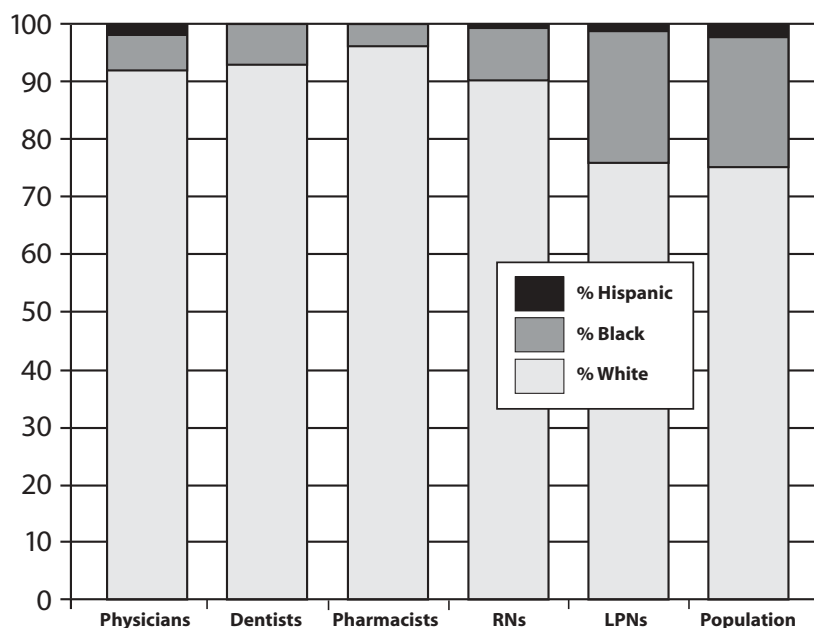
Table 1.
Race/Ethnicity of United States Population Compared to United States Healthcare Professions, 1999-2000⁶

	Non-Hispanic White	Non-Hispanic Black	Hispanic	American Asian/Pacific Islander	Indian/Eskimo Aleutian
US Population >18 years	72.0	11.2	11.0	3.8	0.7
Dentists	88.8	1.5	2.4	7.1	0.2
LPNs	72.9	18.9	4.6	2.8	0.8
Managers (med. & health)	82.6	8.4	5.3	3.2	0.4
Pharmacists	75.9	6.2	3.4	14.2	0.3
Physicians	73.1	5.5	3.8	17.5	0.1
Physician Assistants	88.2	2	5.3	4.1	0.4
RN's	81.7	9.2	3	5.7	0.4

Thomas C. Ricketts, III, MPH, PhD, is a Deputy Director at the Cecil G. Sheps Center for Health Services Research and Professor of Health Policy and Administration in the School of Public Health at the University of North Carolina at Chapel Hill. He is also an Associate Editor of the North Carolina Medical Journal. He can be reached at ricketts@schr.unc.edu or at CB# 7590, UNC-Chapel Hill, NC 27599-7590. Telephone: 919-966-7120.

Katie Gaul, MA, is a Research Associate at the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill. She can be reached at gaul@schr.unc.edu or at CB# 7590, UNC-Chapel Hill, NC 27599-7590. Telephone: 919-966-6529.

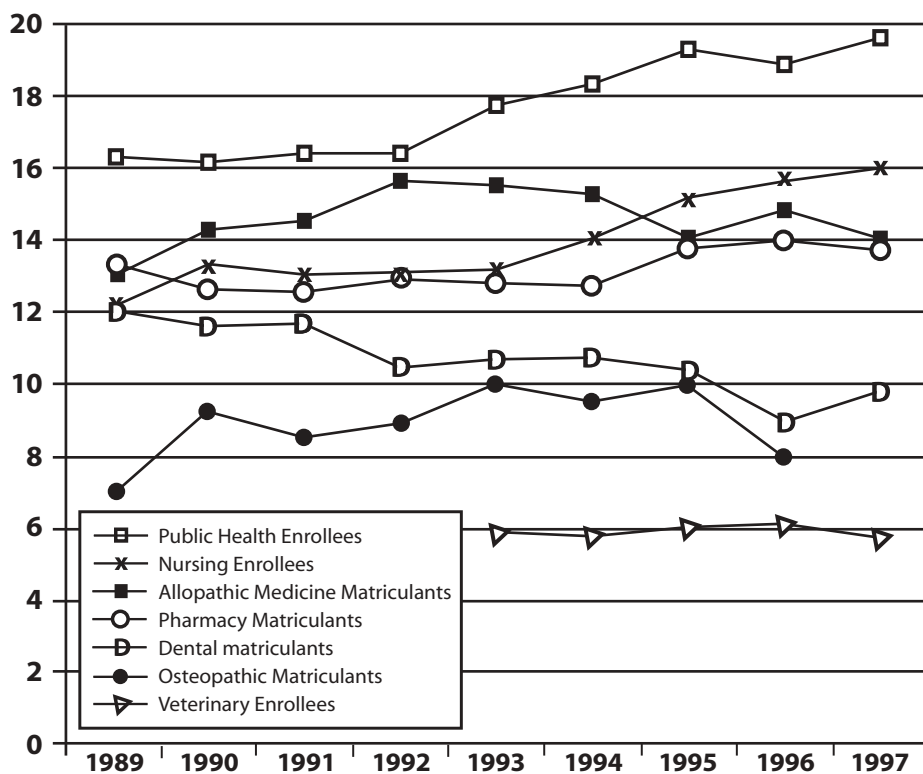
Figure 1.
Race and Ethnicity of North Carolina Population Compared to North Carolina Health Professionals⁷



licensed practical nurses (LPNs) exceeding their overall population representation among blacks. Asians/Pacific Islanders are often “over-represented” among health professions, reflecting the more complex nature of their immigration patterns.⁶

In North Carolina, minority representation in the health professions matches national rates despite higher proportions of minorities in the population. For example, in 2002, 21% of the state’s population was black, but only 5.5% of active physicians in the state were black. The 2002 estimate for the Hispanic population in North Carolina is 4.7%, and Hispanics make up 1.5% of the North Carolina physician supply. In contrast, 22.8% of the state’s licensed practical nurses (LPNs) are black, but only 9% of registered nurses (RNs) and 6.9% of dentists are black. The data displayed in Figure 1 graphically compare these proportions to the state’s population for selected professions. These proportions are likely to remain at their current levels due to a leveling off of minority applications and enrollments in health professional education programs.⁷

Figure 2.
Underrepresented Minorities as a Percentage of Enrollees and Matriculants in Health Professionals Schools, United States, 1989-1997⁸



Recently reported data on enrollments (see Table 2) indicate that the percentages in Figure 2 have not changed substantially over the most recent five years.

Figure 2 tracks numbers of enrolled and matriculated students in selected health disciplines in North Carolina. Only public health has shown a sustained pattern of increase in the numbers of minority students and trainees.⁸

Minority Representation Enhancement Programs in the United States and North Carolina

There have been efforts on the part of the state’s health professional associations and health professional schools to reduce these disparities in minority representation. Since the 1970s, the federal government, through its Title VII and VIII programs that support medical, dental, and nursing training, has given priority funding to programs that increase minority representation. These programs support a full range of interventions intended to modify the “pipeline” into the health professions. The pipeline (See Figure 3) is the metaphor used for the process of career preparation, education, and training that starts at birth and continues through

Table 2.
Medical School Graduates by Race/Ethnicity, North Carolina and United States, 2003⁹

	NC	US
White	249 (66.4%)	9880 (63.7%)
Black	53 (14.1%)	1018 (6.6%)
Hispanic	6 (1.6%)	944 (6.1%)
Asian	56 (14.9%)	3164 (20.4%)
Native American	2 (0.5%)	107 (0.7%)
Unknown	9 (2.4%)	398 (2.6%)
Total	375	15,511

early exposure to health professionals and science courses, through counseling, scholarship, placement, recruitment, and retention in careers and practice in underserved areas. These programs have, for the last several years, been the targets of both Congressional and Administration efforts to reduce federal outlays. Each year, however, the Congress has voted to restore funds roughly at the levels established in the late 1990s. For North Carolina, these programs are important because they support family medicine residencies, the statewide Area Health Education Centers Program (AHEC), basic and advanced nursing education, and the Health Careers Opportunity Program (HCOP) that focuses on minority recruitment into health careers.

A range of “best practice” programs have been highlighted in a report recently released by the Sullivan Commission (www.sullivancommission.org/). That report describes the

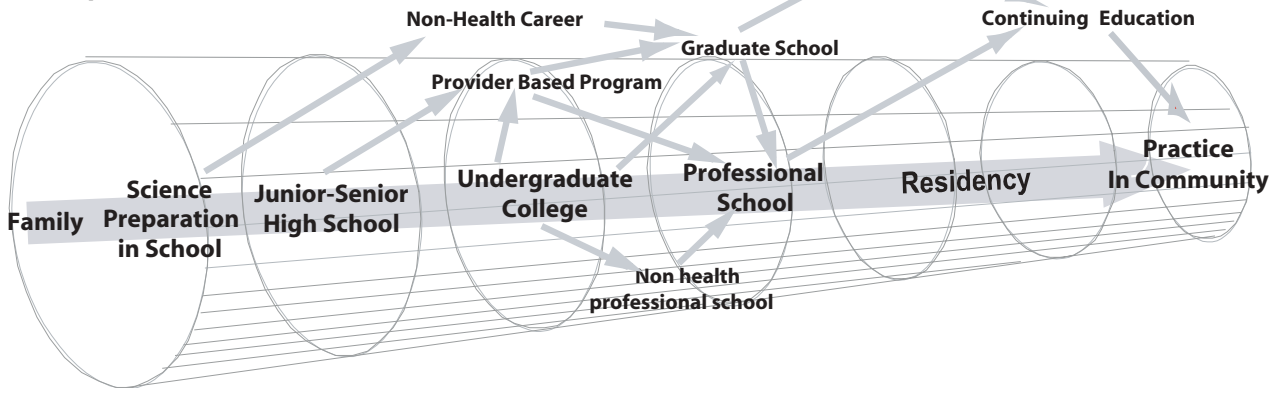
doing some form of “pipeline” programming.¹⁰ In medical schools, more of that effort is targeted to grades nine through 12, 78.6% of medical schools, 40% of dental schools, and 100% of nursing schools report programs for those grades with only 42.9% of medical schools, 40% of dental schools, and 80% of nursing schools reporting working with grades six through eight.

The University of North Carolina sponsors a multi-campus collaborative effort that supports pipeline programs under its HCOP funding. The North Carolina Health Careers Access Program (NC-HCAP) brings together the University of North Carolina at Chapel Hill (UNC-CH) School

of Dentistry; the North Carolina Health Careers Access Program; the Student National Medical Association chapters in North Carolina; East Carolina University; Fayetteville State University; North Carolina Central University; North Carolina Agricultural and Technical State University; University of North Carolina at Pembroke; the school systems of Chapel Hill-Carrboro, Durham, and Orange Counties; and the state’s nine regional Area Health Education Centers. In 2002-2003, through programs supported or affiliated with the North Carolina AHEC Program, 39,000 individuals participated in Health Careers and Workforce Diversity activities. These projects included shadowing and mentoring activities, summer work experiences and placements, health careers fairs, and cultural sensitivity training.

Individual schools also sponsor focused minority health career development projects. East Carolina University sponsors

Figure 3.
The “Pipeline” Into Health Careers



multiple ways in which educational institutions can increase minority presence in health professions and provides a comprehensive guide to funding sources and currently active programs and initiatives.¹⁰

One section of that report describes professional school involvement in “pipeline” programs. These efforts attempt to modify individuals’ perceptions of their career options early in their schooling and help them prepare to move toward health careers sometime in the future. Nationally, 92.9% of medical schools and 100% of dental and nursing schools report

the Ventures into Health Careers Institute that provides two-week experiences for minority students from eastern North Carolina to observe practicing and in-training physicians, nurses, therapists, and technicians. The Pathways to Health Careers and Health Careers Awareness Programs also support local schools in developing curricula and learning modules to improve the chances of minority and rural youth to enter health careers. Wake Forest University Medical School and the Northwest AHEC sponsor several similar programs under a “Health Careers Pipeline” program. An elementary school

program called “Drew Academy” works with young minority males students to develop lifestyle and learning skills; the program is held at the Rowan Regional Medical Center and Winston-Salem State University. Programs for middle school and high school students focus on the development of science and mathematics skills, SAT preparation, and financial aid.

The Wake AHEC program supports a Health Careers Academy that provides educational experiences for students from elementary through and beyond high school. The interventions are mostly workshops or involve specific health professions-related experiences including skills-building, CPR and first-aid certification, job shadowing, and recruitment fairs. The Wake AHEC also sponsors a Summer Youth Enrichment Internship and the Carolina Visions Health Careers Summer Camp, both of which offer structured exposure to health careers for young people.

North Carolina is also home to a statewide Spanish Language & Cultural Competency and Training Program funded by The Duke Endowment. This project brings together the North Carolina Department of Health and Human Services (DHHS) Office of Minority Health, the UNC-CH School of Public Health, the UNC-CH Health Sciences Library, and the North Carolina AHEC system into a coordinated approach to teach Spanish language to practitioners and increase cultural awareness and sensitivity among professionals. This program includes an online translation facility supported by the Duke University AHEC (www.hhcc.areasahcc.dst.nc.us/).

At UNC-CH, the Health Professions Partnership Initiative and the Research Apprenticeship Program are designed for pre-college students to support and direct them into health careers. Established in 1996 with start-up funding from the Robert Wood Johnson Foundation and the UNC-CH Schools of Dentistry, Medicine, and Nursing, the Health Professions Partnership Initiative works with local school systems to offer information, experiences, and skills development for middle and high school minority students to better prepare them for health professions education programs. Students with the potential to pursue health careers come to UNC-CH for summer programs.

Federal efforts are supplemented by national, state, and local programs sponsored by professional associations and societies, foundations, and state government. In North Carolina The Duke Endowment and The Kate B. Reynolds Health Care Trust have been actively supporting diversity and recruitment projects. A national collaboration among the Association of American Medical Colleges, the W.K. Kellogg Foundation, and the Robert Wood Johnson Foundation has set a goal of increasing minority enrollments and minorities in practice in medicine and other health professions through its Health Professions Partnerships Initiative (HPPI). The Association of American Medical Colleges also sponsors the Herbert W. Nickens Scholarships and Faculty Awards, along with other recruitment and retention programs sharing the support with foundations and individuals schools.

Summary

This overview has pointed to a continuing racial and ethnic imbalance in the health professions that applies to North Carolina as well as the nation. Great strides have been made early in the development of programs to enhance racial and ethnic representation, but they have generally reached a plateau in terms of growth and progress. Resistance to affirmative action programs and subsequent uncertainty over their legal standing can be cited as one factor thwarting progress, but that issue has been resolved and schools, professions, and the North Carolina General Assembly can move forward with a clear understanding of how to proceed.

A full generation has matured with the benefit of positive emphasis on increasing the proportion of minorities in the health professions. The coming generations must build and expand on the programs and initiatives that brought the nation and the state to where we are now. But these goals must be re-stated, and intensified efforts are required if any reasonable parity in representation of minorities among the health professions is to be achieved. **NCMJ**

REFERENCES

- 1 Bach PB, Pham HH, Schrag D, Tate RC, Hargraves JL. Primary Care Physicians Who Treat Blacks and Whites. *New England Journal of Medicine* 2004;351(6):575-84.
- 2 Lewin ME, Rice B, eds. *Balancing the Scales of Opportunity*. Washington, DC: National Academy Press 1994.
- 3 Smedley BD, Stith AY, Colburn L, Evans CH, eds. *The right thing to do, the smart thing to do: enhancing the diversity in health professions. Summary of the Symposium on Diversity in Health Professions in Honor of Herbert W. Nickens, M.D.*, Washington, DC: National Academy Press 2001.
- 4 Association of American Medical Colleges. Press Release October 20, 2004. Available at www.aamc.org/newsroom/pressrel/2004/041020.htm.
- 5 Advisory Committee on Primary Care Medicine and Dentistry. *Third Report*, November 2003. Rockville, MD: Health Resource and Services Administration.
- 6 Bureau of Health Professions, Health Resources and Services Administration, US Department of Health and Human Services. *State Health Workforce Profiles* Rockville, MD 2003. US Census Bureau, 2000.
- 7 NC Health Professions Data System, Chapel Hill, NC. Cecil G. Sheps Center for Health Services Research, 2004.
- 8 Grumbach K, Coffman J, Gandara P, et al. *Strategies for improving the diversity of the health professions*. San Francisco: Center for California Health Workforce Studies 2003.
- 9 American Association of Medical Colleges, Applicant-Matriculant File, 2003.
- 10 Sullivan Commission. *Missing persons: minorities in the health professions. a report of the Sullivan Commission on diversity in the healthcare workforce*. September 20, 2004. Available at www.sullivancommission.org/.