Trends in Health Professions Diversity in New York: Medicine, Dentistry, and Nursing

Highlights

A comparative analysis of data from 2006-2010 and 2011-2015 showed:

- New York's physicians continue to be less racially and ethnically diverse than the state's population.

- The percentage of female physicians in the state rose by 2%, from 36.3% to 38.3%.

- Like physicians, New York's dentists continue to be less diverse than the state's population.

- The percentage of female dentists in New York rose by nearly 5%.

- Hispanics were underrepresented in the state's nursing workforce and Asians were overrepresented; the percentages of white and black nurses were similar to their presence in the state's population.

Background

There has been longstanding attention to the importance of diversity—both racial/ethnic and gender diversity—within the health professions.[1] Certain racial and ethnic groups are underrepresented in the medical, dental, and nursing workforce compared to their presence in the general population. Underrepresented minorities (URMs) have traditionally included Blacks/African Americans, Hispanics/Latinos, and American Indians/Alaskan Natives. Further, women represent a smaller proportion of the country's physicians and dentists, but a higher proportion of nurses.

Health workforce diversity has the potential to improve the quality of and access to health care services. First, recruiting more URMs and promoting gender balance in the health professions, at a minimum, assures the adequacy of health workforce supply, while addressing concerns about social justice.[2] Second, as the population of the country grows increasingly diverse, there is greater emphasis on assuring a culturally competent health workforce that is better equipped to meet the needs of the population.[3] Over the past decade, a number of publicly funded programs have supported improvements in racial and ethnic diversity in the health professions.[4] It is important to understand the progress made in improving diversity within the health professions.

This research brief summarizes a comparative analysis of American Community Survey (ACS) data conducted by the Center for Health Workforce Studies to assess changes in the racial/ethnic and gender diversity of New York's medical, dental, and nursing workforce. Data from 2 time periods (2006-2010 and 2011-2015) were compared to assess trends in racial/ethnic and gender diversity in the selected health professions.

Methods

The data for this study were retrieved from the ACS Public Use Microdata Sample (PUMS) files for 2006-2010 and 2011-2015 for populations from New York State and adjacent states (Vermont, Massachusetts, Connecticut, New Jersey, and Pennsylvania). The analysis included dentists, physicians, and nurses who were at least 18 years of age and actively working in New York State. Nurses who possessed at least an associate's degree, and physicians and dentists who possessed at least a professional degree were included in the analysis. PUMS uses Bureau of Labor Statistics Standard Occupational Classification (SOC) codes to identify job titles. Prior to 2010, the SOC code for

registered nurses included advanced practices nurses (certified registered nurse anesthetists, nurse practitioners, and nurse midwives). After 2010, each title had its own SOC code. For purposes of this report, advanced practice nurses were combined with registered nurses for 2011-2015 to appropriately compare them to the 2006-2010 data. The following racial/ethnic categories were included in this analysis: White non-Hispanic (hereafter referred to as White); non-Hispanic Black/African American (hereafter referred to as Black); non-Hispanic Asian including Non-Hispanic Pacific Islanders (hereafter referred to as Asian); and Hispanic/Latino (hereafter referred to as Hispanic). Estimates drawn from PUMS were weighted for statewide analysis to approximate the entire active workforce.[5]

Findings

Medicine

New York's physicians continue to be less racially and ethnically diverse than the state's population.

While the percentage of Black and Hispanic physicians increased slightly between the 2 time periods, their percentages are substantially lower than their representation in the state's population. In both time periods, Asians and Whites were overrepresented in medicine compared to their presence in the state's population.

Figure 1. Race/Ethnicity of New York Physicians Compared with General Population, 2006-2010
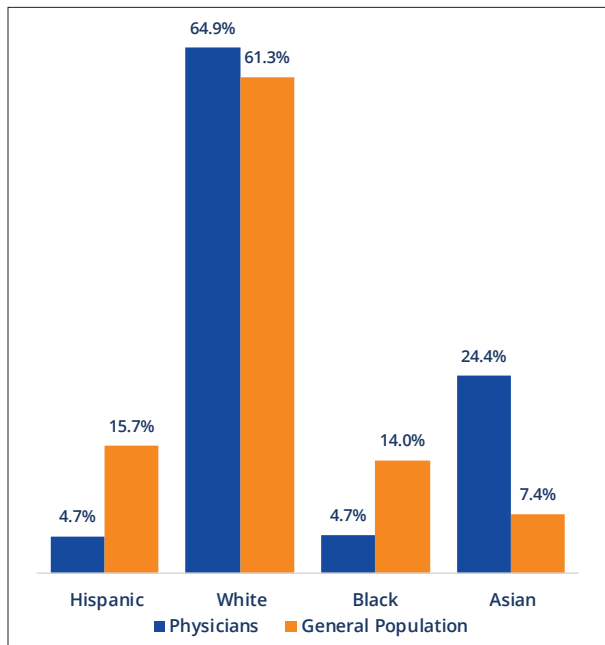
Figure 2. Race/Ethnicity of New York Physicians Compared with General Population, 2011-2015
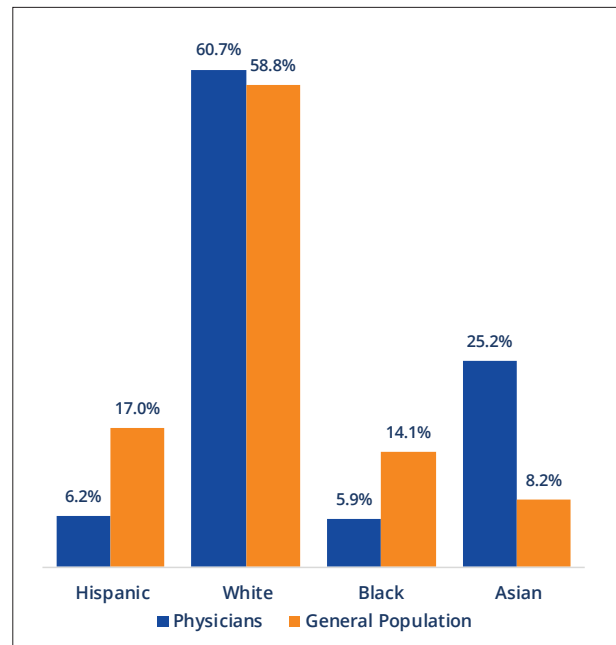
The percentage of female physicians in the state rose by 2% between the 2 time periods, from 36.3% to 38.3%.

Male physicians were older than their female counterparts. The average age of female physicians was about 42 in 2006-2010 and rose slightly in 2011-2015 to 43. The average age of male physicians was just over 48 in both time periods.
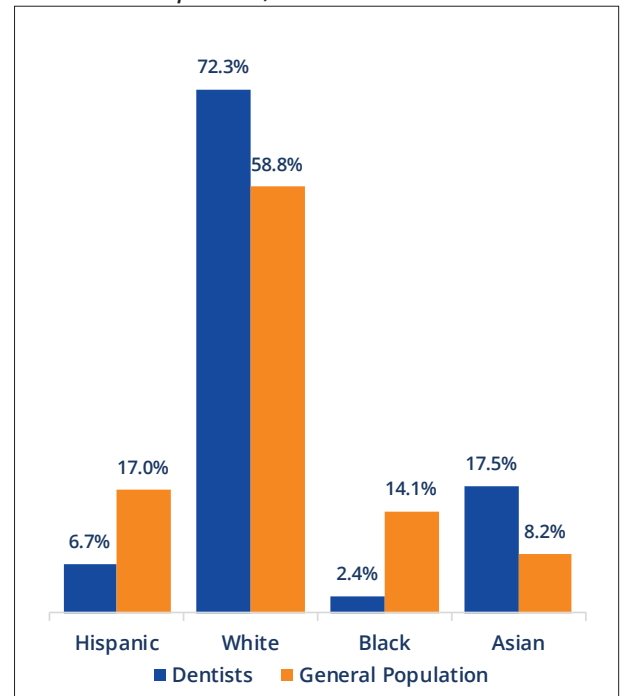
Dentistry

Like physicians, New York's dentists continue to be less diverse than the state's population.

The percentage of Black and Hispanic dentists was significantly less than their presence in the state's population. Moreover, there was little change between the 2 time periods. Whites and Asians remain overrepresented in dentistry compared to their presence in the state's population.

Figure 3. Race/Ethnicity of New York Dentists Compared with General Population, 2006-2010
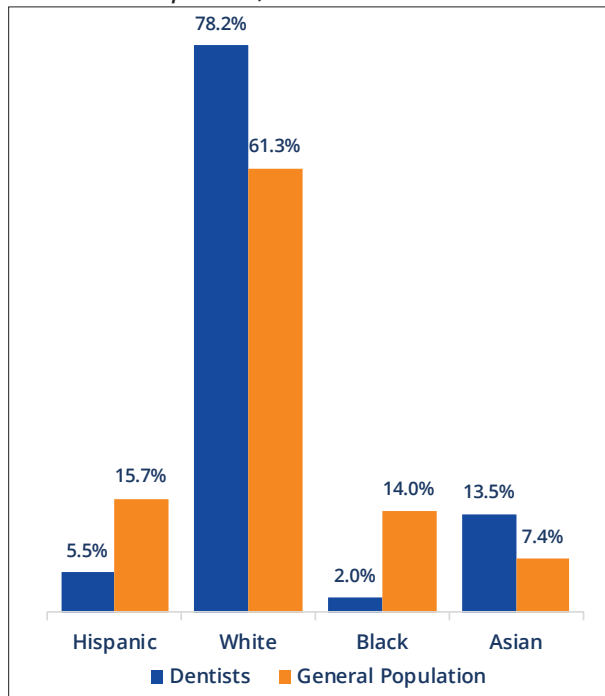
Figure 4. Race/Ethnicity of New York Dentists Compared with General Population, 2011-2015

The percentage of female dentists in New York rose by nearly 5% between the 2 time periods.

In 2006-2010, just over a quarter of the state's dentists were female, while in 2011-2015, the percentage increased to nearly 30%. In both time periods, male dentists (52 and 53, respectively) were, on average, substantially older than female dentists (42 and 45, respectively).

Nursing

Hispanics were underrepresented in the state's nursing workforce and Asians were overrepresented; the percentages of White and Black nurses were similar to their presence in the state's population.

The percentage of Hispanic nurses grew slightly between the 2 time periods, but continued to be less than their presence in the state's population. There was little change in the percentage of White and Black nurses in the state over the 2 time periods, and both groups were representative of the state's population.

Figure 5. Race/Ethnicity of New York Nurses Compared with General Population, 2006-2010
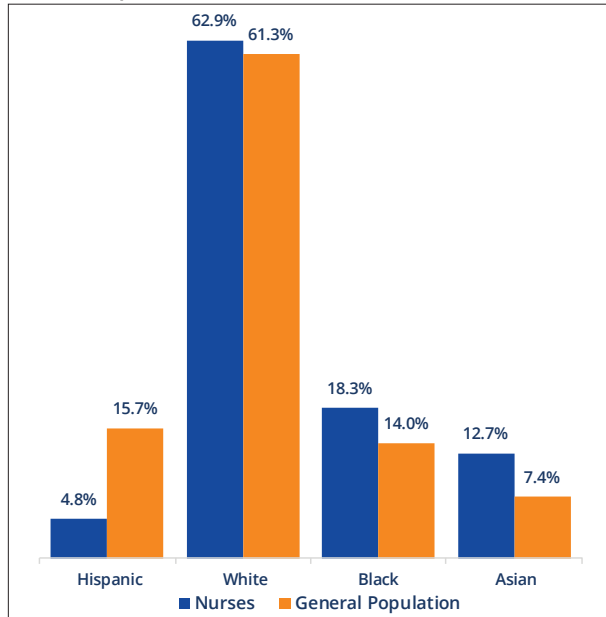

Figure 6. Race/Ethnicity of New York Nurses Compared with General Population, 2011-2015
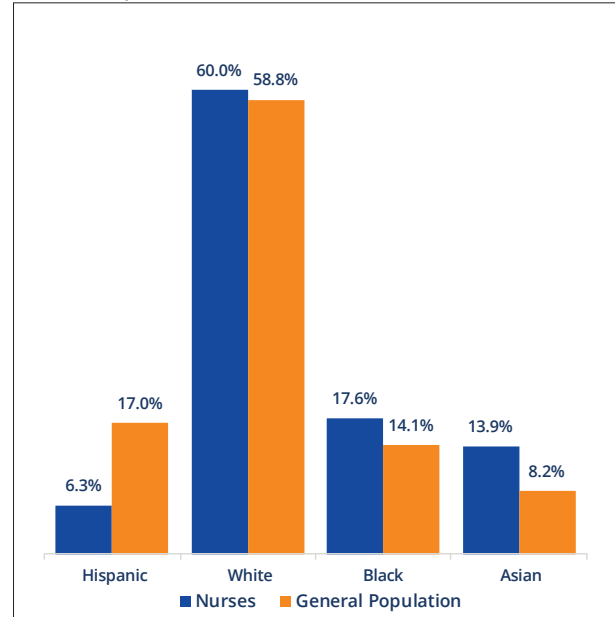
Nurses in New York were predominantly female in both time periods studied, with little change in the percentages. There were increases in the percentage of younger and older nurses over the 2 time periods.

In 2006-2010, nearly 9% of the state's nurses were male and the percentage increased to nearly 10% in the 2011-2015 time period. The percentage of nurses between the ages of 18 and 24 and over the age of 54 both increased by 4%.

Figure 7. Percentage of New York Nurses by Age
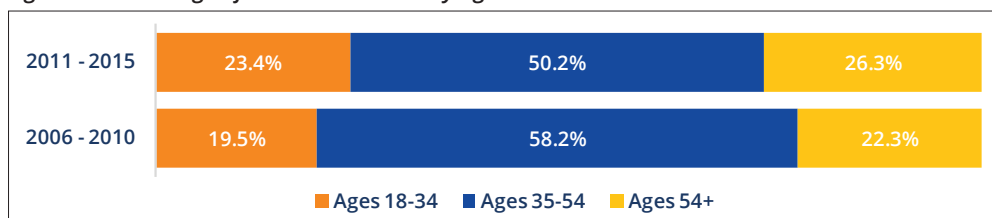
Limitations

This analysis is subject to a number of limitations.

- The size of the ACS sample for the state is not large enough to:

    - Conduct a more detailed analysis of racial ethnic groups, particularly for those that comprise a very small percentage of the health workforce, such as American Indians.

    - Carry out bivariate analyses, such as race/ethnicity by age group.

    - Conduct regional analyses for all areas of the state.

- Occupational data in the ACS are self-reported and subject to potential misclassification.

Conclusion

This research brief was designed to inform policymakers, planners, and other stakeholders about racial/ethnic and gender diversity in selected health professions in New York. Hispanics remain underrepresented in medicine, dentistry and nursing, while Blacks are underrepresented in medicine and dentistry compared to their presence in the state's population. The most notable change in gender diversity was found in dentistry where female dentists increased over the 2 time periods by 5%.

The findings from this analysis suggest the need to continue to support efforts to further improve racial/ethnic and gender diversity in medicine, dentistry, and nursing. Future research should also consider the impacts of diversity on patient outcomes and population health.

References

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3. Cohen JJ, Gabriel BA, Terrel C. The case for diversity in the health care workforce. *Health Affairs*. 2002; 21(5):90-102.

4. Camacho A, Zangaro G, White KM. Diversifying the health-care workforce begins at the pipeline: a 5-year synthesis of processes and outputs of the scholarships for disadvantaged students program." *Eval Health Prof*. 2015.doi: 10.1177/0163278715617809.

5. PUMS Technical Documentations: https://www.census.gov/programs-surveys/acs/technical-documentation/pums/documentation.html

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