## **Health Workforce Abstract**

August 2022

Fitzhugh Mullan
Institute for Health
Workforce Equity
THE GEORGE WASHINGTON UNIVERSITY

## Increasing Degree Requirements Decreased Diversity of Physician Assistants and Physical Therapist Graduates

Erin Brantley, Eric Luo, Jenee Farrell, Indira Islas, Edward Salsberg

**ISSUE:** In recent decades, many health professions have increased the degree required for entry. Assuring competent practitioners is often cited as the rationale for this requirement. However, there are concerns that this could decrease racial and ethnic diversity in the profession, given that underrepresented minorities (URMs) face greater barriers to higher education. To date, little empirical research has addressed whether increased entry degree requirements impact the diversity of new graduates. Therefore, we assessed whether the shift from a bachelor's to a master's degree in physician assistants (PAs) or the shift from a master's to a doctoral degree for physical therapists (PTs) affected diversity among graduates in these professions.

**METHODS:** Our main data source is the Integrated Postsecondary Education Data System (IPEDS), 2001 to 2020, which provides information on the degree level and race/ethnicity of graduates by program and year. In addition, we used the American Community Survey from 2001 to 2020 to control for changes in the racial/ethnic composition of the student age population. We also controlled for state-level unemployment rate using data from the BLS, 2001 to 2020.

The key independent variable was the level of degree offered by the program, dichotomized for simplicity as any or all graduates receiving the higher degree. The key outcome variable was the percent of all U.S. resident graduates who are Black, Hispanic, or Native American.

We ran linear regression models with high-definition fixed effects (year and institution), which allowed us to weight models by the graduating class size. In this way, we controlled for institutional characteristics that do not change over time (e.g., public/private status) and national trends. Models isolated the impact on diversity when the institution shifts from the lower to a higher degree. We conducted several sensitivity tests, including testing a 1-year lag of the degree variable and excluding schools in the top 5% of URM graduates.

**FINDINGS**: Baseline models indicate a 2.0 percentage point decrease in URM graduates when PA programs shifted from bachelor's to master's degree graduates (95% CI, -3.72 to -0.31) and a 1.3 percentage point decrease in PT graduates when programs shifted to doctoral degrees (95% CI, -2.42 to -0.28). This represents an approximate 18 percent decline for PA graduates and a 15 percent decline for PT graduates. Results were robust to most sensitivity tests, with some exceptions.

**DISCUSSION:** The trend toward increasing degree requirements continues. For example, there are current debates about whether to require a doctoral degree for PAs and Nurse Practitioners. However, in many professions, there is limited evidence that increasing degree requirements increases the competence of graduates. In addition, students from underrepresented backgrounds are more likely to face financial barriers to obtaining a higher degree. Our findings indicate that professions risk limiting the proportion of graduates from underrepresented backgrounds when degree requirements increase.

Key Words: Racial equity, diversity, health professions education, entry requirements