

# Healthcare Training Tracking: A Key Intervention Point to Improve Racial Equity in the Healthcare Workforce

Authors: Eunjung Jee, Sylvia Stewart, and Jessica Santos

OPRE Report 2023-152

Brandeis

THE HELLER SCHOOL  
FOR SOCIAL POLICY  
AND MANAGEMENT  
Institute for Economic  
and Racial Equity

Brandeis University, Heller School for Social Policy and Management, Institute for Economic and Racial Equity (IERE) conducted an analysis of career pathways progress through job quality and micro-advancements with funding from **OPRE's Career Pathways Secondary Data Analysis Grants**. These grants are designed to stimulate and fund secondary analysis of data collected through the **Health Professions Opportunity Grants (HPOG) Impact Study** on questions relevant to career pathways program goals and objectives.<sup>1</sup>

## Research Highlights

### Training

Black HPOG participants entered lower-level training programs, compared to their White counterparts with **the same educational background**.



White participants who did not graduate high school entered similar training programs as Black participants with a high school diploma (controlling for variables such as family factors, gender, education, and location).



Black participants with bachelor's degrees or higher entered training programs for lower-quality jobs than those that white trainees with high school diplomas and certificates entered.

36%

This training gap explains about 36% of the racial wage gap.

### Wage differences in the payoff of healthcare training programs

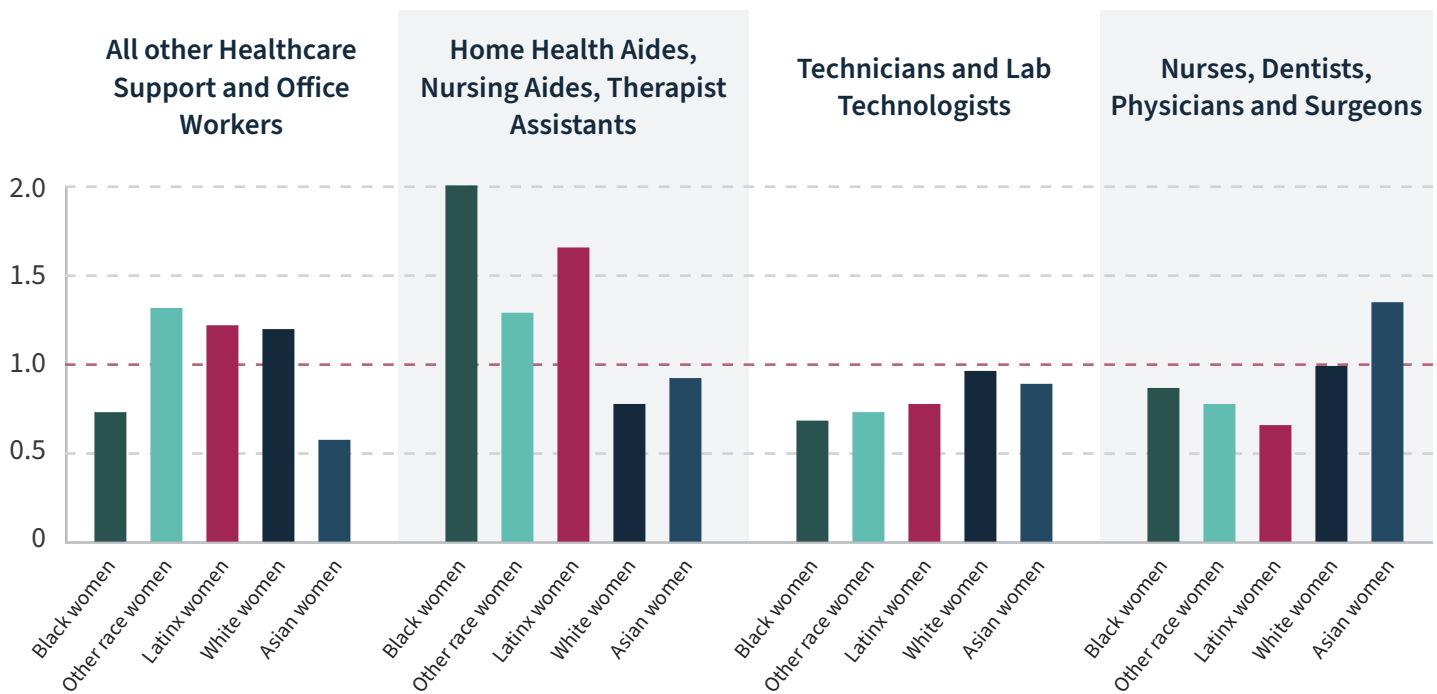
On average, a one-step increase in training program levels correlates to an increase in white participants' wages by 17%, 16% for Black men, and 15% for Black women.

- Racial wage gaps are greater at higher levels of training.
- Guiding Black participants into higher level training will **close the racial wage gap by 4 percent points**.

# Background

Healthcare occupations are highly segregated by race and gender (Bahn & Cumming, 2020; Goger, 2020). As of 2020, women make up 74.4% of the healthcare practitioner and technical occupations and 85.3% of healthcare support occupations. While Black workers make up only 12.1% of the employed population, 37.4% of home health aides are Black (Bureau of Labor Statistics, 2020). These healthcare support occupations offer relatively lower wages and less access to benefits and protection compared to other healthcare jobs.

**Representation ratios of HPOG-eligible women in the healthcare sector:** Representation ratio = (a race/gender group’s share in the occupation group) / (a race/gender group’s share in the entire healthcare sector)



Notes: The HPOG-eligible workforce includes employed Individuals whose family incomes were less than 200% federal poverty line in the 23 states with HPOG 1.0 programs. White refers to non-Hispanic White, and Black refers to non-Hispanic Black.

Source: 2010-2015 Annual Social and Economic Supplement (ASEC) files of the Current Population Survey

Women and workers of color are overrepresented in the lower-quality segments of the labor market. In the healthcare sector, Black women are nearly twice as likely to work in low-quality jobs such as home health aides, nursing assistants, and other direct-care occupations than in high-quality segments such as technicians, physicians, and other occupations. This national trend led us to question whether there is a similar pattern of segmentation among HPOG participants (HPOG 1.0), who may be led into specific training programs by race and gender. Specifically, we aim to answer the following questions:



How much of the difference in training program enrollment can be explained by differences in pre-enrollment educational attainment?



How much of the difference in training program choices explain the existing racial and gender wage gaps among HPOG participants?

## Method

We use the HPOG 1.0 Performance Reporting System (PRS) data<sup>2</sup> to analyze training program levels and wages. In PRS, training programs are linked to the standard occupational classification (SOC) codes. We rate and rank these occupations based on our job quality scale (“Examples: 2010 detailed SOC codes” below).<sup>3</sup> We use the highest level of a training program a participant has ever taken as our outcome variable for the training regression model. For the wage decomposition model, we use the most recent wage of participants (either at exit or at follow-up).



## Examples: 2010 Detailed SOC codes

- Healthcare support workers (31-9099), Counselors (21-1010), Community Health Workers (21-1094)
- Home Health Aides and Personal Care Aides (31-1011), Nursing Assistants (31-1014), Medical Transcriptionists (31-9094), Phlebotomists (31-9097)
- Medical and Clinical Laboratory Technologists (29-011), Emergency Medical Technicians and Paramedics (29-2041), Medical Records and Health Information Technicians (29-2071)
- Registered Nurses (29-1141), Nurse Practitioners (29-1171), Licensed Practical and Licensed Vocational Nurses (29-2061)

Using a set of participant characteristics<sup>4</sup> at the time of program entry and the grantee site ID, our statistical models estimated job quality.

## Findings

Overall, we found that:



About 14% of HPOG 1.0 participants enrolled in nursing aide or home health aide training.



The most frequently chosen trainings were for nursing aides, orderlies and attendants (8.6%). These training programs prepare students for occupations that often require lower levels of skills and education compared to other training programs such as those for registered, licensed, or vocational nurses. **Black participants enrolled more in lower-level training programs than White participants with the same educational background**, indicating that differences in enrollment cannot be fully explained by pre-enrollment education levels.



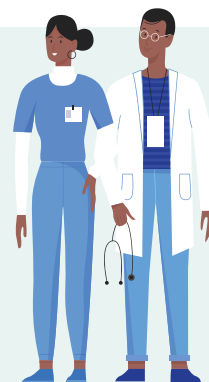
Black participants with a high school diploma or GED enter the same level of training program as White participants without a high school diploma, and Black participants with bachelor’s degree or higher enter programs for lower-level certifications than White trainees with a high school diploma or GED.

This difference in training choices explains a significant portion of the racial wage gap among HPOG participants. The mean wages were \$12.2 for White participants and \$10.9 for Black participants. This wage gap can potentially be closed, by about 40%, if Black participants were guided to take the same level of training programs as White participants.

## Implications

It is possible that workforce programs are continuing longstanding patterns of racial and gender occupational segregation by leading certain participants to choose specific occupational tracks. More work is needed to counter these patterns to ensure that career pathway programs advance equity in addition to individual opportunity. Although the economic rewards for training were still greater for White participants, guiding Black participants into trainings for higher-level occupations could help close some of the racial wage gap. HPOG 1.0 provided training and education opportunities to low-income individuals, and its positive impacts on educational and labor market outcomes have been widely reported (Peck et al., 2018). Consistent with the previous findings in the literature, our analysis adds evidence of positive impacts of HPOG training on participants' wages. However, we should not overlook the significant racial disparity in training program enrollment.

Despite growing demand for skilled registered nurses, especially exacerbated by the COVID-19 pandemic (American Association of Colleges of Nursing, 2020; American Nurses Association, 2021; Epstein & Sarna, 2021), HPOG participants of color were overrepresented in low-level healthcare training and underrepresented in higher-level training programs that lead to occupations with higher wages. Our results show that this is the case even when accounting for differences in participants' educational backgrounds.



## Takeaways for Career Pathways Program Partners

1

Black HPOG participants were enrolled in lower-level training programs than White participants with the same educational background. This training level gap explains about 36% of a racial wage gap in our sample.

2

Guiding Black participants into training programs with better outcomes could help reduce some of the racial wage gap.

3

To counter the longstanding patterns of segmentation in the healthcare sector, more work is needed to ensure that career pathway programs advance equity in addition to individual opportunity.

- 1 The data from the Evaluation of the First Round of Health Profession Opportunity Grants (HPOG 1.0) is housed at the Child and Family Data Archive, which preserves and disseminates data on topics related to young children, their families and communities, and the programs that serve them.
- 2 Abt Associates, and Peck, Laura. Evaluation of the First Round of Health Profession Opportunity Grants (HPOG 1.0), United States, 2010-2020. Inter-university Consortium for Political and Social Research [distributor], 2022-04-20. <https://doi.org/10.3886/ICPSR37290.v6>
- 3 Further details are available in the [online appendix](#).
- 4 Predictor variables included: grantee site ID, race, sex, age, education (less than high school/GED, has HS/GED, BA degree or more), marital status (never married, currently married, previously married), parental status (has child, no child), and youngest child's age (no child, under 6, age 6 and over).

---

## References

- American Association of Colleges of Nursing. (2020). Fact Sheet: *Nursing Shortage*.
- American Nurses Association. (2021, September 1). *ANA Letter to Department of Health and Human Services*. [https://www.nursingworld.org/~4a49e2/globalassets/rss-assets/analettertohhs\\_staffingconcerns\\_final-2021-09-01.pdf](https://www.nursingworld.org/~4a49e2/globalassets/rss-assets/analettertohhs_staffingconcerns_final-2021-09-01.pdf)
- Bahn, K., & Cumming, C. S. (2020). U.S. occupational segregation by race, ethnicity, and gender. *Washington Center for Equitable Growth*, 3.
- Bureau of Labor Statistics. (2020). *Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity*. Labor Force Statistics from the Current Population Survey. <https://www.bls.gov/cps/cpsaat11.htm>
- Epstein, Z., & Sarna, M. (2021). The Healthcare Workforce during COVID-19: Results from an Environmental Scan. *Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, OPRE 2021-104*.
- Goger, J. M. and A. (2020, December 2). The health care workforce needs higher wages and better opportunities. *Brookings*. <https://www.brookings.edu/blog/the-avenue/2020/12/02/the-health-care-workforce-needs-higher-wages-and-better-opportunities/>
- Peck, L., & Abt Associates. (2020). *ICPSR Codebook for Performance Reporting System: Training*.
- Peck, L., Werner, A., Harvill, E., Litwok, D., Moulton, S., Fountain, A., & Locke, G. (2018). *Health Profession Opportunity Grants (HPOG) 1.0 Impact Study Interim Report: Program Implementation and Short-Term Impacts* (OPRE Report 2018-16a). Office of Research, Planning, and Evaluation, Administration for Children and Families, US Department of Health and Human Services.

This publication was made possible by Contract Number GS00F010CA/140D0421F0706 and Grant Number 90PE0040 from the Office of Planning, Research, and Evaluation (OPRE), Administration for Children and Families (ACF), U.S. Department of Health and Human Services (HHS). The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research, and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services. It was developed in partnership with ICF, the contractor for OPRE's Career Pathways Secondary Data Analysis project. ICF delivers evidence-based solutions, training, technical assistance, and tools for developing and implementing programs that strengthen families and communities.