Matching Provider Race to Increase Take-up of Preventive Health Services among Black Men in the United States

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Sector(s): Health

J-PAL office: J-PAL North America

Location: California, United States of America

Target group: Men and boys

Outcome of interest: Health outcomes

Intervention type: Cash transfers Health care delivery Conditional cash transfers

AEA RCT registration number: AEARCTR-0002497

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Research Papers: Does Diversity Matter for Health? Experimental Evidence from Oakland

Racial disparities in health outcomes are a major policy concern in the United States. Across all population subgroups, Black men experience earlier morbidity and mortality from preventable or manageable conditions. One potential solution to this problem is increasing diversity and representation in the health care workforce. Researchers examined the impact of race concordance (when the race of a patient matches that of their physician) and incentives on the take-up of preventive health services by Black men. Results indicate that physician race concordance significantly boosted demand for all preventive health services, and especially for more invasive tests.

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On average, Black people in the United States live 70.8 years, while white people live 76.4 years on average and Asian people live 83.5 years on average.[1], More than half of the gap in life expectancy for Black men is associated with preventable chronic conditions such as hypertension, diabetes, HIV, and some forms of cancer, suggesting that some of the disparity is due to inferior care or underutilization of preventive health care services.[2], [3], [4], Many factors may underlie this underutilization: Black communities often lack access to primary health care,[5], are more likely to be uninsured,[6], and are less likely to trust the health care system.[7], This distrust often stems from present and historical discrimination including negative interactions with medical professionals, with nearly 20 percent of Black individuals reporting that they were personally treated unfairly while seeking medical care.[8], Race-based discrimination is deeply rooted: in medicine, from the unethical surgical procedures on enslaved people[9], to the U.S. Public Health Service's Syphilis Study in Tuskegee,[10] contributing to ongoing distrust.

Increasing minority representation in health professions may contribute to ameliorating this distrust and advancing health equity

by facilitating communication or reducing the racial discrimination patients may face. However, as of 2009, Black individuals comprise 12.6 percent of the United States population and only 3.8 percent of physicians.[11], This underrepresentation is unlikely to improve in the coming years as medical school attendance for Black applicants has decreased over time.[12] There is little rigorous evidence on the impact of workforce diversity in health care on minority health outcomes.

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The study took place in Oakland, California. According to the 2010 census, approximately 28 percent of Oakland's population identifies as Black or African-American.[13] Researchers recruited and enrolled study participants primarily from barbershops frequented by Black men in Oakland. Recruitment from barbershops is a commonly used health outreach technique aimed at Black men. Physicians were also recruited from the local area.



Black man has a blood pressure monitor fitted by Black doctor.

Photo: Shutterstock.com

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Researchers conducted a two-phase randomized evaluation to examine the impacts of doctor race and a subsidy on the demand for preventive care services among Black men.

When barbershop clients agreed to participate in the study, they received a generic flier advertising preventive health care services (for blood pressure, diabetes, and cholesterol) at a local clinic. They received an incentive payment for visiting the clinic.

Phase one: After study participants arrived at the clinic, they received a tablet with a photo of a health care provider, randomly assigned to be either a non-Black or Black male doctor. The participant was then shown a list of services and told that their assigned doctor would provide all preventive services they chose (including all listed on the original flier and one service, not on the flier, a flu shot). In addition, the tablet showed that participants would receive an incentive—randomly set at $0, $5, or $10—if they chose to get the flu shot. Study participants then selected which (if any) of the preventive care services they would like to receive.

Phase two: Participants met with the doctor whose image was displayed on the tablet. At this point, they could change their decisions on which preventive services to receive.

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For Black men, seeing a Black male doctor significantly boosted demand for all preventive health services, and especially for more invasive tests.

Phase 1. After seeing a photo of their doctor, Black men selected to receive preventive services at the same rate regardless of the race of their doctor. Initially, around 50 percent of men elected to receive non-invasive screening, blood pressure, and BMI measurement, and around 35 percent of men selected more invasive tests, including diabetes and cholesterol screenings, which require finger pricks.

Financial incentives for the flu shot also increased demand for the vaccine. When participants learned about incentives for flu shots before meeting their doctor, a $5 dollar incentive increased demand by 19 percentage points and a $10 dollar incentive increased demand by 30 percentage points (from a baseline of 20 percent). Approximately 20 percent of participants selected the flu shot when they were not offered an incentive. While subsidies increase demand, researchers found that incentives did not completely substitute for meeting with a Black doctor—that is, participants who met with a Black doctor were still more likely to take up preventive services than those who were incentivized to agree to a flu shot but saw a white doctor. Moreover, Black doctors continued to increase demand even among subjects who initially refused a flu shot despite a financial incentive.

Phase 2. After meeting with the doctor, Black men who were randomly assigned to see a Black doctor were much more likely to select every preventive service, particularly invasive services. Seeing a Black doctor increased the take-up of blood pressure measurement by 11 percentage points, compared to an average take-up rate of 72 percent for patients who were seen by a non-Black doctor (an increase of 15 percent). Likewise, seeing a Black doctor increased the take-up of BMI measurement by 16 percentage points, compared to an average of 60 percent for patients who were assigned to a non-Black doctor (an increase of 27 percent). The impact of being assigned to see a Black doctor has an even larger effect on more invasive tests like diabetes screenings, cholesterol screenings, and flu vaccines. Note that regardless of the race of the doctor, the average demand for preventive services increased after the in-person meeting. However, demand increased more for patients who were seen by Black doctors.

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1. Hill, Latoya, and Samantha Artiga. 2023. “What Is Driving Widening Racial Disparities in Life Expectancy?” 2023. KFF. https://www.kff.org/racial-equity-and-health-policy/issue-brief/what-is-driving-widening-racial-disparities-in-life-expectancy/.

2. Currie, Janet and Hannes Schwandt. 2016. “Mortality Inequality: The Good News from a County-Level Approach.” Journal of Economic Perspectives 30, no 2 (Spring): 29-52. https://doi.org/10.1257/jep.30.2.29.

3. Harper, Sam, Dinela Rushani, and Jay S. Kaufman. 2012. "Trends in the Black-White Life Expectancy Gap, 2003-2008." JAMA 307, no. 21 (June): 2257-259. https://doi.org/10.1001/jama.2012.5059.

4. Silber, Jeffrey H., Paul R. Rosenbaum, Richard N. Ross, Bijan A. Niknam, Justin M. Ludwig, Wei Wang, Amy S. Clark, Kevin R. Fox, Min Wang, Orit Even-Shoshan, and Bruce J. Giantonio. 2014. "Racial Disparities in Colon Cancer Survival." Annals of Internal Medicine 161, no. 12 (December): 845. https://doi.org/10.7326/m14-0900

5. Brown Elizabeth J., Daniel Polsky, Corentin M. Barbu, Jane W. Seymour, and David Grande, 2016, "Racial Disparities In Geographic Access To Primary Care In Philadelphia." Health Affairs 35, no. 8 (August). https://doi.org/10.1377/hlthaff.2015.1612

6. Nambi Ndugga and Samantha Artiga, "Disparities in Health and Health Care: 5 Key Questions and Answers," Kaiser Family Foundation, 11 May 2021, https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/

7. Hamel, Liz, Lunna Lopes, Cailey Muñana, Samantha Artiga, and Mollyann Brodie. 2022. "KFF/The Undefeated Survey on Race and Health," Kaiser Family Foundation, https://www.kff.org/report-section/kff-the-undefeated-survey-on-race-and-health-main-findings/#HealthCareSystem

8. Hamel, Liz, Lunna Lopes, Cailey Muñana, Samantha Artiga, and Mollyann Brodie. 2022. "KFF/The Undefeated Survey on Race and Health," Kaiser Family Foundation, https://www.kff.org/report-section/kff-the-undefeated-survey-on-race-and-health-main-findings/#HealthCareSystem

9. "Life Story: Anarcha, Betsy, and Lucy," Women and the American Story, Accessed 11 November 2022, https://wams.nyhistory.org/a-nation-divided/antebellum/anarcha-betsy-lucy/

10. Heller, Jean. 2017. "AP Was there: Black men untreated in Tuskegee Syphilis Study," The Associated Press https://apnews.com/article/business-science-health-race-and-ethnicity-syphilis-e9dd07eaa4e74052878a68132cd3803a

11. Ellyn Boukus, Alwyn Cassil, and Ann S. O'Malley. 2009. "A Snapshot of U.S. Physicians: Key Findings from the 2008 Health Tracking Physician Survey." Data Bulletin no. 35 (September) Center for Studying Health System Change. https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2009/rwjf45703.

12. Devin B. Morris, Philip A. Gruppuso, Heather A. McGee, Anarina L. Murillo, Atul Grover, and Eli Y. Adashi. 2021."Diversity of the National Medical Student Body — Four Decades of Inequities." New England Journal of Medicine. 384:1661-1668. doi.org/10.1056/NEJMsr2028487

13. Bay Area Census (City of Oakland, Alameda County, Race, Black or African American, Census 2010; accessed March 2, 2018), http://www.bayareacensus.ca.gov/cities/Oakland.htm.