

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

Researchers:

Marcella Alsan

Owen Garrick

Grant Graziani

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

Data: Download dataset from the AEA website

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. On average, Black males live 4.5 fewer years relative to white males. 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.

Policy issue

On average, Black males in the United States live 4.5 fewer years relative to white males.¹ More than half of the disadvantage 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 One common proposal to combat these disparities and advance health equity is to increase minority representation in health professions. Presently, Black individuals comprise 12.6 percent of the United States population and only 3.8 percent of physicians.³ This underrepresentation is unlikely to improve in the coming years as the medical school acceptance rate for Black applicants has decreased over the last decade. There is little rigorous evidence on the impact of workforce diversity in health care on minority health outcomes.

Context of the evaluation

The study took place in Oakland, California. According to the most recent census, approximately 28 percent of Oakland's population identifies as Black or African-American.⁴ 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.

Details of the intervention

Researchers conducted a two-phase randomized evaluation to examine the impact of both 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 flyer 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 flyer and one service not on the flyer, 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.

Results and policy lessons

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, 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. 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 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 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, average demand for preventive services increased after the in-person meeting. However, demand increased more for patients who were seen by Black doctors.

1. Murphy L., Sherry, Jiaquan Xu, Kenneth D. Kochanek, Sally C. Curtin, Elizabeth Arias. 2017. "Deaths: Final Data for 2015." National Vital Statistics Reports 66, no. 6 (November): 26.
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>, .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>, .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>.
3. Boukus, Ellyn, 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.
4. 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>.