The effect of affirmative action bans on the representation of students of color in medical schools

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The United States is facing a nationwide health crisis, with widely documented disparities in the quality and frequency of treatment received by racial and ethnic minorities. The Department of Health and Human Services has documented that patients of color suffer disproportionately from numerous health conditions and are underserved in terms of quality and frequency of care.¹ Indeed, even when controlling for income, communities with high proportions of African American and Latino residents are much more likely to experience physician shortages than are communities with lower concentrations of these residents.²

Racial diversity in medical school

By providing greater access to health care for our increasingly diverse and underserved populations, and more positive interactions between patients and health professionals, a racially and ethnically diverse physician workforce can help address these disparities.³ Physicians who are from underrepresented minority groups are more likely than their non-minority peers to serve minority populations, and to provide care to other medically underserved populations, such as socioeconomically disadvantaged individuals. Racial and ethnic diversity in medical education has also been found to enhance the learning and cross-cultural competencies of all doctors.⁴

Yet, despite gains over the last few decades, African Americans, Latinos, and Native Americans remain underrepresented in the health professions relative to their proportion of the U.S. population. For example, although 16 percent of the U.S. population is Latino and 14 percent is African American, these groups constituted only 9 percent and 7 percent, respectively, of total U.S. medical school enrollees in 2012.⁵ This medical school enrollment disparity creates serious barriers to addressing the health needs of underserved communities and communities of color.

To address these concerns, medical schools have long defended the need for affirmative action: either race-conscious admissions policies, or the ability to consider race or ethnicity as one of many factors in admissions decisions.⁶ While the U.S. Supreme Court in *Fisher v. University of Texas*, 2013, preserved the right of postsecondary institutions to carefully implement race-conscious admissions practices to achieve the educational benefits of a racially and ethnically diverse student body, laws in eight states—California, Washington, Florida, Michigan, Nebraska, Arizona, New Hampshire, and, most recently, Oklahoma—currently ban the practice. After bans on affirmative action were implemented in Texas, California, Washington, and Florida, researchers documented declines in these states in the admission and enrollment of students of color at selective undergraduate institutions, in law schools, and in graduate fields of study.⁷

The effects of affirmative action bans in the field of medicine, however, remain unknown. While the Association of American Medical Colleges (AAMC) has reported drops in minority enrollments following the implementation of such bans, no studies have examined their causal effect.⁸ As stakeholders continue to debate affirmative action policies, knowing whether these changes in policy have had a negative effect on the representation of historically marginalized students of color in the field of medicine is critical to understanding the long-term effects these policies will have on our nation's health care system. This article summarizes a recent study that provides information on the effects of affirmative action bans on medical school enrollment.⁹

In this study, we examined the implementation of the bans in six states—California, Washington, Florida, Texas, Michigan, and Nebraska—in order to estimate their causal effects on the enrollment rates of historically underrepresented students of color at public medical schools.¹⁰ "Historically underrepresented students of color" is defined as students whose self-reported race or ethnicity is black or African American, Latino or Hispanic, or Native American or Alaska Native, and who are not considered "foreign" students.¹¹

Race-conscious admissions policies in medical school admissions

The push to increase racial and ethnic diversity in medicine has led to an admissions culture in which both traditional academic measures, such as grade point averages and standardized test scores, are considered along with skills such as leadership, overcoming adversity, participation in serviceoriented extracurricular activities, and strong communications skills. Given this holistic approach to admission, it is possible that the effect of the bans in medicine may be different than the effect in other fields. It is also possible that the effect of the bans at public institutions is mitigated by students' choices to apply or enroll at private institutions not governed by the bans. For these reasons, in our analysis, we

Table 1
Effect of Affirmative Action Bans on Enrollment of
Underrepresented Students of Color

	Medical School First-Time Enrollment State-Specific Year Trend		
	Public	Private	
Effect of Ban	-0.032*** (0.007)	-0.028 (0.022)	
Number of Observations	1,029	723	
Number of Institutions	64	42	

Notes: *** indicates statistical significance at the 0.001 level. Standard errors are shown in parentheses. Model includes state fixed effects and a full set of institutional- and state-level covariates; institutional-level covariates include whether institution is research ranked (vs. primary care ranked); state-level covariates include percentage of population by race (white, black, Native American, Latino, other), percentage of population with a bachelor's degree, and percentage of 25- to 34-year-olds unemployed.

also considered the effect of the bans on underrepresented student of color enrollment at private institutions.

Findings

To evaluate the causal effects of the bans, we used data from a variety of sources including the Association of American Medical Colleges, and a difference-in-differences analytic strategy, and a multi-level ordinary least squares regression model.¹² We found that affirmative action bans resulted in a drop in underrepresented student of color enrollment at public medical schools of about 3 percentage points, as shown in Table 1. There is no evidence to suggest that underrepresented students of color switched to private institutions from public ones in states with bans, potentially mitigating the effect of the bans at public medical schools in these states. We also conducted a number of sensitivity analyses, and found that all results were robust to a different composition of target states, a narrower subset of comparison groups, and a narrower time period.

To understand these findings more fully, we convert the estimated 3.2 percentage point decline into an overall percentage decline, as shown in Figure 1. Results show that bans on affirmative action have reduced the first-time enrollment of medical school students who are historically underrepresented students of color by about 17.2 percent (from about 18.5 percent to about 15.3 percent) across public medical schools in these six states. This decline is similar to declines in the enrollment of underrepresented students of color at some of the nation's most selective public undergraduate institutions in four of the six states included in this study; that is, about 20 percent and 29 percent, respectively, for Latino and African American students.¹³ The decline is also similar to drops that have taken place in specific fields of graduate study at public institutions, such as the natural sciences, which experienced a 19 percent drop in the enrollment of underrepresented students of color across four of the six states in this analysis, and the social sciences, where there was a 15.7 percent decline.¹⁴ Underrepresented students of color in

public medical schools generally had a slightly smaller decline in their share of the student body than students of color studying law, or those in the graduate field of engineering.¹⁵

Conclusions and implications

The decline in the enrollment of underrepresented students of color at public medical schools has important consequences in light of the demographics and institutional characteristics of states with affirmative action bans. States with affirmative action bans host 35 percent of the nation's research-ranked public medical schools, and 29 percent of primary-care-ranked public medical schools. Given this substantial proportion of schools in states with affirmative action bans, as well as the already low levels of racial and ethnic diversity in the medical profession, the 17.2 percent decline in the enrollment of underrepresented students of color found in the states in our study poses a significant barrier to the medical profession's efforts to train all doctors to address the health-care needs of patients of color more effectively.

This decline also has serious long-term consequences for the health care needs of the United States. A decline in the racial and ethnic diversity of the student body at medical schools will exacerbate existing disparities, and as the population of people of color in the United States increases, these disparities will only worsen; the Association of American Medical Colleges predicts that by 2015, there will be a shortage of 62,900 physicians in the United States, increasing to a shortage of 130,600 by 2025.¹⁶

These findings are particularly timely given the U.S. Supreme Court's 2014 decision in *Schuette v. Coalition to Defend Affirmative Action*, which upheld the constitutionality of Michigan's affirmative action ban. By doing so, the Court left in place similar statewide bans, such as the one in California, while potentially fueling efforts aimed at outlawing affirmative action in more states. Understanding the detrimental consequences of these bans in the medical profession

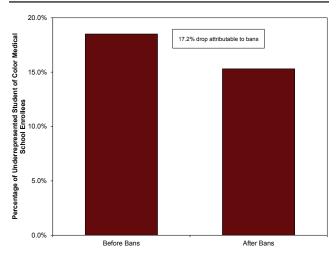


Figure 1. Overall effect of affirmative action bans.

should inform efforts that seek to counter these campaigns and prevent the passage of bans in other states.

The results of this study further demonstrate that a holistic admissions process-which considers leadership skills, overcoming adversity, participating in service-oriented extracurricular activities, having strong communication skills, and evidencing strong standardized test scores-is not enough to mitigate the decline in racial and ethnic student body diversity caused by affirmative action bans. This process is intended to supplement a sole reliance on test scores, a factor shown to disproportionately disadvantage students of color in the admissions process. However, even with this holistic approach, we still see a decline in the racial and ethnic diversity of the student bodies in medical schools when the institutions are prohibited from considering race as a factor in admissions. Studies that employ qualitative methods could help explain why these declines have taken place despite holistic medical admissions policies, and shed light on institutional responses that could help mitigate declines in racial diversity.

Future studies could investigate the effects of recently implemented bans, such as those in Arizona, New Hampshire, and Oklahoma. These studies could provide more detail of the effect of these bans on subcategories of racial and ethnic groups, using data the Association of American Medical Colleges began collecting in 2002 and addressing important questions with respect to subcategories of Asian American students. Future studies could also examine the effect of the bans at various stages, including application, admission, and enrollment.

In the meantime, though, leaders and professionals in the medical community will need to compensate for the effects of these affirmative action bans, developing and adopting new outreach, recruitment, and admissions strategies. Our nation's health depends upon it.■

³B. D. Smedley, A. S. Butler, and L. R. Bristow, eds., *In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce* (Washington, DC: National Academy of Sciences, 2004).

⁴See, for example, S. Saha, S. H. Taggart, M. Komaromy, and A. B. Bindman, "Do Patients Choose Physicians of Their Own Race?" *Health Affairs* 19, No. 4 (2000): 76–83. ⁶See, for example, P. R. Lee and P. E. Franks, "Diversity in U.S. Medical Schools: Revitalizing Efforts to Increase Diversity in a Changing Context, 1960s–2000s," Philip R. Lee Institute for Health Policy Studies, School of Medicine, University of California, San Francisco, December 2009.

⁷For admission and enrollment of students of color at selective undergraduate institutions, see P. Hinrichs, "The Effects of Affirmative Action Bans on College Enrollment, Educational Attainment, and the Demographic Composition of Universities," *Review of Economics and Statistics* 94 (2012): 712–722; for law schools see L. F. Wightman, "The Threat to Diversity in Legal Education: An Empirical Analysis of the Consequences of Abandoning Race as a Factor in Law School Admission Decisions," *New York University Law Review* 72, No. 1 (1997): 1–53; and for graduate fields of study see L. M. Garces, "Understanding the Impact of Affirmative Action Bans in Different Fields of Studies," *American Educational Research Journal* 50 (2013): 251–284.

⁸A. Steinecke and C. Terrell, "After affirmative action: Diversity at California medical schools," *AAMC Analysis in Brief* 8 (2008), 1–2.

⁹This work is explored in more detail in L. M. Garces and D. Mickey-Pabello, "Racial Diversity in the Medical Profession: The Impact of Affirmative Action Bans on Underrepresented Student of Color Matriculation in Medical School," *Journal of Higher Education*, forthcoming.

¹⁰We do not consider the effect of bans in Arizona, New Hampshire, and Oklahoma, as the implementation of the bans in these states is too recent (2010, 2011, and 2012, respectively).

¹¹The determination of race or ethnicity as a factor in admissions decisions presumably does not apply to students who are considered foreign, and application, admissions, and enrollment determinations for these students are different from those for domestic students. We do not include students who identified as Asian in the definition of "underrepresented" because the category was too broadly defined in the dataset from 1993 to 2001 to allow us to capture the educational disparities within the various subgroups included in the category.

¹²Our study actually used the variable "first-time matriculant" rather than enrollment. The term "matriculant" applies to students who have applied, been offered admission, accepted the offer of admission, and indicated that they plan to attend in the year to which they applied. The AAMC defines "first-time matriculants" as "the portion of first year enrollment that does not include medical students repeating the first year: new medical students in the first year." For the sake of simplicity, we employ the term "enrollment" in this article, as it is a term that is more broadly understood than matriculation. However, it should also be distinguished from "first-year enrollment," which is also collected by the AAMC and includes students who may be repeating the first year because they did not advance in class level. For more detail, see Garces and Mickey-Pabello, "Racial Diversity in the Medical Profession."

¹³B. Backes, "Do Affirmative Action Bans Lower Minority College Enrollment and Attainment? Evidence from Statewide Bans," *Journal of Human Resources* 47 (2012): 435–455.

¹⁴Garces, "Understanding the Impact of Affirmative Action Bans in Different Fields of Studies."

¹⁵W. C. Kidder, "The Struggle for Access from *Sweatt* to *Grutter*: A History of African American, Latino, and American Indian Law School Admissions, 1950–2000," *Harvard BlackLetter Law Journal* 19 (2003): 1–42; and Garces, "Understanding the Impact of Affirmative Action Bans in Different Fields of Studies."

¹⁶Association of American Medical Colleges, Center for Workforce Studies, "Physician Shortages to Worsen without Increases in Residency Training," *AAMC Fact Sheet*, 2010, retrieved from https://www.aamc.org/download/150584/data/physician_shortages_factsheet.pdf on April 29, 2014.

¹U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, "National Healthcare Disparities Report, 2011," AHRQ Publication No. 12-0005, March 2012; and U.S. Department of Health and Human Services, Center for Disease Control and Prevention, "Health Disparities and Inequalities Report—United States, 2011," *Morbidity and Mortality Weekly Report*, Supplement 60 (January 14, 2011).

²J. S. Weissman, E. G. Campbell, M. Gokhale, and D. Blumenthal, "Residents' Preferences and Preparation for Caring for Underserved Populations," *Journal of Urban Health* 78 (2001): 535–549.

⁵Association of American Medical Colleges, *Total enrollment by U.S. medical school and race and ethnicity*, Table 31, 2012, retrieved from https:// www.aamc.org/download/321540/data/2012factstable31.pdf on April 29, 2014.