

An Analysis of the Association Between Trump's Presidency and Health-Seeking Behaviors of African Americans in the United States

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Abstract

Background: Slavery legally ended over 150 years ago, yet African Americans are still oppressed. The lingering effects of systemic and institutional racism are still present in all walks of life, especially in healthcare. As a result, Black patients have historically been less likely to seek preventive care and subsequently reported lower health outcomes compared to their white counterparts. The election of Donald Trump in 2016 created a wider gap in healthcare disparities. This study aimed to investigate whether there was any association between Trump's racist rhetoric and the health-seeking behaviors of Black patients. We explored whether the number of Black patients that reported not having a primary care physician (PCP) changed and how online search history trends researching Black physicians have also changed.

Methods: This study utilized datasets from the Behavioral Risk Factor Surveillance System (BRFSS) and Google Trends. A logistic regression analysis was then performed to determine if race was a significant predictor for our predetermined health indicators.

Results: GoogleTrends data does support increased popularity of the search term "black doctor near me" from 2015 to 2018, supporting our hypothesis. The results from the logistic regression analysis showed that race was significant in 9 out of our 11 health indicators.

Conclusion: Despite decades of work to minimize healthcare disparities, this study has demonstrated how much more still needs to be done. It has shown how the intersection of seemingly unrelated issues, such as politics and health, as described in this study, can drastically impact health outcomes. This study highlights the importance of targeted and equitable programming to ensure quality care for all, that can withstand political and social pressures.

Introduction

In recent years, there has been an unprecedented focus on racial inequalities, racially based brutality, and a heightened sense of racial divide within this country (1). The Black community has attempted to push back against instances of disparity and racism, as seen through the extensive activity and support of the Black Lives Matter movements. For years, Black patients have reported feeling ignored by physicians; previous research discusses how prejudice exists in medicine, with physicians treating pain management differently depending on race, due to their implicit bias and beliefs (2). It has been established that distrust of physicians is prevalent among Black patients and has been correlated to not having

a regular healthcare provider (3). Black individuals are less likely to visit office-based physicians (4) despite reporting poor health outcomes and overall health status (5). In light of this information, recent studies show that Black patients tend to have better health outcomes and place more trust in their physicians when their physicians are of the same race, which ultimately "improves medical compliance and quality of care" (6–7). It is important to identify any changes in health-seeking behaviors — such as if the desire to seek treatment from physicians of the same race has increased — to understand how to provide better care for Black patients.

According to the Federal Bureau of Investigation (FBI) Uniform Crime Reporting, hate crimes can be defined as "a committed criminal offense which is motivated, in whole or in part, by the offender's bias(es) against a race, religion, disability, sexual orientation, ethnicity, gender, or a gender identity" (8). The increase in racial tensions can be attributed to the divisive and racist rhetoric incited by Trump's presidency (7). Since his election in 2016, there has been approximately a 20% rise in hate crime incidents (9–10). Black patients have often turned away from preventive care due to perceived racial discrimination, which past researchers have associated with a range of adverse health outcomes (11). While factors contributing to these disparities have been identified, very little research describes how racially charged events, such as Trump's presidency, have increased mistrust in the healthcare system, mainly for Black patients (5). Specific actions by the Trump administration, such as trying to repeal Obamacare or at least restrict some of its functions, along with its initial inaction with the COVID-19 pandemic, ultimately led to millions of Americans losing health insurance, all of which has caused minority populations to be disproportionately affected by the virus (12–14). A January 2020 poll showed that 65% of Black adults reported individual acts of discrimination as a personal obstacle to seeking care (4) and 83% of Black adults believed racism had become a bigger issue in the United States (U.S.) since Trump started his presidency (15). These studies have shown that prejudiced remarks made by President Trump led to the harboring of negative sentiments and rhetoric aimed at minority groups, such as Black individuals (7, 16). The change in racial attitudes seen today has forced Black people to become more intentional about the care they seek.

This study aimed to determine whether the increasing racial tensions from 2015 to 2018 impacted health-seeking behaviors of Black patients. The first hypothesis for this study was that there would be an increase in search term hits for "a black doctor near me" from 2015 to 2018. The second hypothesis was that race would strongly predict various health indicators.

Methods

Participants

The Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) is the world's "largest continuously conducted health survey system" (17). These annual telephone surveys collect information on United States (U.S.) residents about their health-seeking behaviors and current health conditions. The source population included adult individuals who identified as Black, non-Hispanic, and individuals who identified as White, non-Hispanic, to the BRFSS questionnaire. Respondents that reported being mixed-raced were excluded. Each dataset for every year the survey was conducted, differed between states depending on the additional health modules they chose to include, if any. To keep the health indicators consistent, the target population was chosen from states listed on the BRFSS website as having the same health modules analyzed and included the same health indicators, from 2015 to 2018, contained within the datafile "LLCP" (Combined Land Line and Cell Phone data). Thus, the target population for this study consisted of all adult White and African American individuals living in two different states with opposing political views, the District of Columbia (DC) and Louisiana, with Trump having a much higher approval rating in Louisiana compared to DC (18). The study population size (n) meeting the above criteria was 32,195 across all four study years (17).

Procedures

Secondary data analysis in this study was drawn from the BRFSS and Google Trends datasets. Data from Google Trends was used to observe changes in the popularity of searches for "black doctors near me" from 2015 to 2018, to serve as a method of measuring health-seeking behaviors. The BRFSS dataset was used to observe changes over time in the number of Black patients who reported not having a primary care physician (PCP). The outcome was measured as the number of Black individuals who reported not having a PCP per 100,000 individuals per comparison year per state. The data from the study has been de-identified, so there is minimal risk to participants. This study underwent review by the Geisinger IRB Committee at the start of the Community Health Research 2 course of the Master of Biomedical Sciences (MBS) program at the Geisinger Commonwealth School of Medicine and was exempt.

Data analysis

A table was generated utilizing the BRFSS data on responses from Black participants on the health indicators listed in Table 1. The study analyzed any overall changes, such as overall decline or increase in the number of Black patients without PCPs and any changes in overall health and other health indicators between the years 2015 and 2018. Data that met the study's timeline and criteria were selected to compare any observed changes over time. A logistic regression analysis was performed

Variable	Question	Reference value	Comparison
X_RACE	Race/ethnicity categories	White only, non-Hispanic	Black only, non-Hispanic
ADDEPEV2	(Ever told) you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?	No	Yes
CHECKUP1	About how long has it been since you last visited a doctor for a routine checkup?	Over a year ago	Once within the past year
MEDCOST	Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?	No	Yes
MENTHLTH	Now thinking about your mental health, which includes stress, depression and problems with emotions, for how many days during the last 30 days was your mental health not good?	Less than 14 days	14 days or greater
PERSDOC2	Do you have one person you think of as your personal doctor or health care provider?	No or unsure	At least 1
POORHLTH	During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work or recreation?	Less than 14 days	14 days or greater
X_HCVU651	Respondents aged 18–64 who have any form of health care coverage	Not covered	Covered
X-RFBMI5	Adults who have a body mass index greater than 25 (overweight or obese)	No – BMI less than 25 but greater than 12	Yes – BMI greater than 25
X_RFHLTH	Adults with good or better health	Fair or poor health	Good or better health
X_RFSMOK3	Adults who are current smokers	No – not a current smoker	Yes – a current smoker
X_TOTINDA	Adults who reported doing physical activity or exercise during the past 30 days other than their regular job	No – no physical activity or exercise in the last 30 days	Yes – had physical activity or exercise

Table 1. List of all 11 health indicators utilized for the logistic regression analysis. Also included are the expanded health variable questions, reference value, and comparison value.

to determine any effect of race on various health indicators from 2015 to 2018.

We used GraphPad Prism version 9.0.0 for macOS, R 4.1.2 (macOS), Excel (MacOS), Numbers (macOS), and GoogleSheets to perform our statistical analyses and generate our figures. We highlighted the change in Google search trends through GoogleTrends and illustrated the trend as shown in Figures 1 and 2.

Results

A total of 32,195 responses from individuals that participated in the BRFSS questionnaire across DC and Louisiana from the years 2015 to 2018 and fitted the inclusion criteria were retained. The total sample size of 32,195 was made up of 7,890 responses from 2015, 8,139 responses from 2016, 7,761 responses from 2017 and 8,405 responses from 2018. All responses were from individuals that lived in DC and Louisiana, identifying as “non-Hispanic Black” or “non-Hispanic White.”

Google Trends was utilized to monitor the popularity of searches for the term “black doctor near me” over time. Since GoogleTrends data represents search interest relative to the highest point on the chart for the given region and time, the period between Jan. 1, 2015, and Dec. 31, 2018, was selected. A value for the popularity of the search term is given each week in the selected time frame. The popularity of the search term steadily increased between 2015 and 2018, as seen in the running average (Figure 1) calculated with GoogleSheets (19). The average popularity for each year was fitted to a regression line which showed a significant increase ($F=46.25$, $p<0.0001$) from 2015 to 2018 (Figure 2).

The number of all Black Americans in each state who reported having a PCP for each year between 2015 and 2018, among several other health indicators, were compared using logistic regression analysis. Regression testing suggested Black people were 0.75 times less likely than whites to have a personal doctor in Louisiana, which was statistically significant in 2015, 2016, and 2018 ($p = 0.00271, 0.036, 0.014$,

respectively). In DC, Black people were 1.3 times more likely to report having a personal doctor than White people, although this was only significant in 2016 and 2018 ($p = 0.0228$ and 0.021 , respectively) (Figure 3). The odds of demonstrating negative health-seeking behaviors followed a similar trend in both DC and Louisiana. For instance, Black individuals in DC

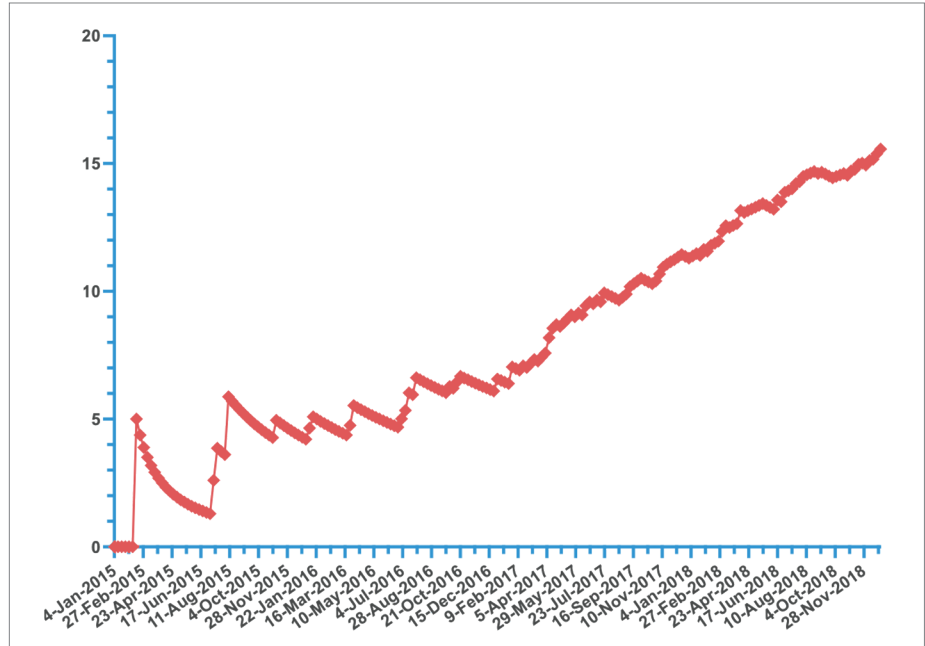


Figure 1. The Running Weekly Average of “Black doctor near me” searches from January 2015 to December 2018.

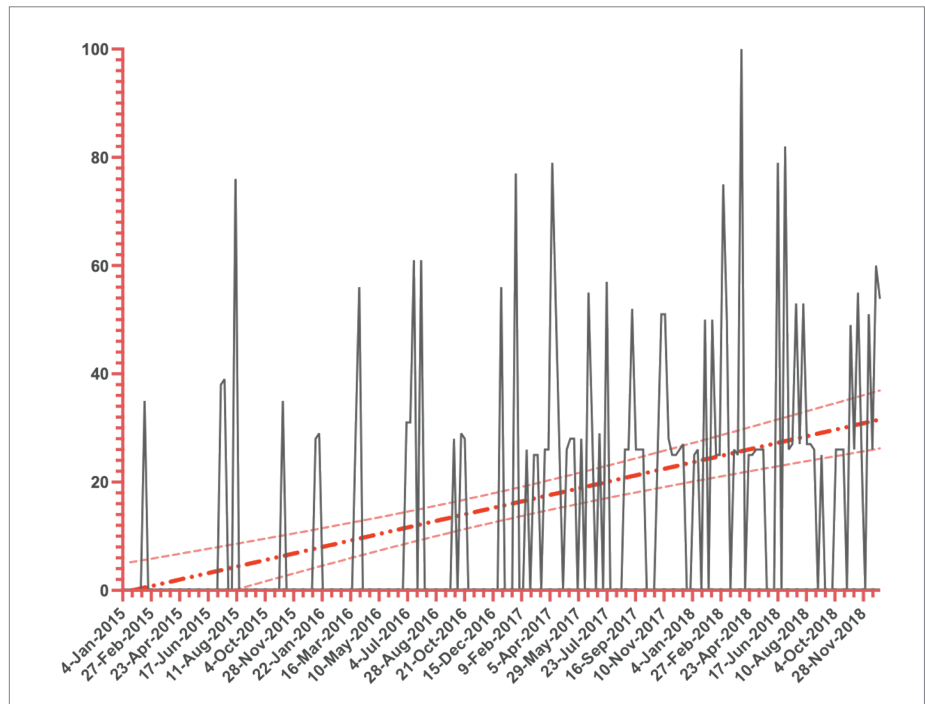


Figure 2. The Number of Searches for “Black doctor near me” from January 2015 to December 2018. The average popularity for the search term “black doctor near me” for each year was calculated, plotted, and fitted to a regression line.

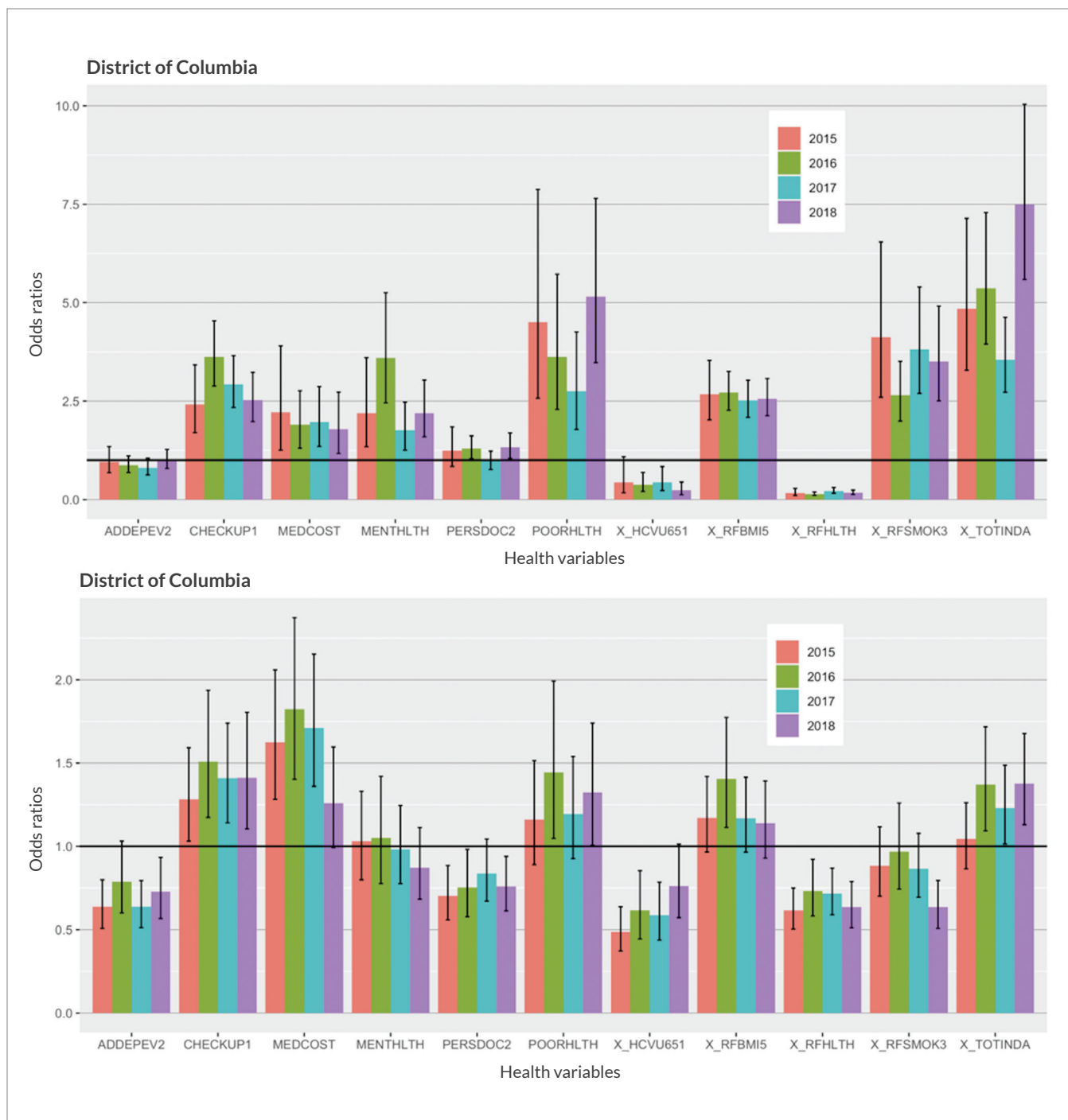


Figure 3. The Odds Ratios and their Corresponding 95% Confidence Interval (CI) of 11 Health Indicators from DC and Louisiana between 2015–2018 Showing the Odds of Black People Having the Specified Health Indicator, Compared to their White Counterparts¹. The horizontal line represents null value. A 95% CI bar that crosses this horizontal line indicates that the associated odds ratio is not statistically significant.

From left to right, "ADDEPEV2" - Ever told you had a depressive disorder? (Yes); "CHECKUP1" - About how long has it been since your last routine checkup? (within the past 12 months); "MEDCOST" - Was there a time in the past 12 months when you needed to see a doctor but could not due to cost? (Yes); "MENTHLTH" - How many days in the past month was your mental health not good? (14 days or greater); "PERSDOC2" - Is there someone you think of as your personal care doctor? (Yes, at least one); "POORHLTH" - How many days within the past month did poor physical or mental health prevent you from doing your normal activities? (14 days or greater); or cretzen, a nuvubol- hesor "X HCVU651" - Respondents aged 18–64 with any form of health care (Covered); "X RFBMI5" Adults with a BMI over 25 (Yes, greater than 25 - overweight or obese); "X_RFHLTH" - Adults who report good or better health. (Yes); "X RESMOK3" - Adults who are current smokers. (Yes); "X TOTINDA" - Adults who report doing physical activity outside of work. (Yes).

and Louisiana were less likely to report good or better overall health, less likely to have health insurance, and more likely to skip out on doctor visits due to cost, compared to their White counterparts (Figure 3).

Discussion

Our data suggest that there were significant changes observed in negative health-seeking behaviors in Black Americans between the years 2015 to 2018. GoogleTrends data does support increased popularity for the search term “black doctor near me” from the years 2015 to 2018, supporting our hypothesis. This suggests that between those years, individuals within the U.S. were particularly interested in locating Black physicians for care. Race was a clear and significant predictor for the majority of the health indicators, which confirms previous research describing differences in care based on race (2–4, 9). Trump's presidency was used as context to explain these results simply because of the racist rhetoric his term promoted (6, 20). As a result, Black people were more inclined to find a doctor of similar background (Figures 1 and 2). Although there were significant increases in these searches, the same trend was not seen in the number of Black people reporting a personal doctor, which is attributed to insurance coverage, cost, and transportation, among many other factors (14). When President Barack Obama first enacted the Affordable Care Act, it aimed to minimize the significant disparities present in healthcare coverage among the different races and ethnicities. However, once Trump took office, some of his policies negatively targeted the Affordable Care Act, causing many to lose coverage and preventing many more from getting coverage (13, 15, 21) — the effects of which were quite immediate, with Black people being significantly less likely to have healthcare coverage in a more progressive area (DC) and even in a more conservative area (Louisiana) (Figure 3).

There are several limitations that have been identified within the study model outlined here. Limitations in using Google Trends data have been identified, such that it is not the only search mechanism patients used to locate a Black PCP. Searches for “a black doctor near me” might be made by individuals that do not align with the population meeting the inclusion criteria for this study. In addition, GoogleTrends data cannot determine each individual's reasoning behind completing the search. Furthermore, the BRFSS dataset does not gather information from every resident of each state, which may alter the accuracy of representation for results. However, BRFSS has incorporated raking to weight data according to known proportions of race and age in a population (17). Lastly, by only evaluating two states in the U.S., it may have made the findings of this study less generalizable to all Black people in the U.S.

The basis of this study and similar studies explores the implications of racially motivated biases across the U.S. on medical mistrust in Black patients (3, 5). Further continuation of this study would be necessary to target specific demographics within the Black community that has been affected the most by unconscious bias. The logistic regression analysis performed earlier can be expanded to include other predictors besides race, such as age, education, income, employment, metropolitan status, etc., along with any interactions between them. Studies (5, 9, 11) such as the one presented here could allow the development of community-level interventions by focusing on

building trust and lessening the experience of discrimination during physician-patient encounters. One way to improve this is to suggest that physicians get more involved in the communities that they serve, learn about the disparities experienced by Black patients, and build rapport with the community, as suggested by previous polling (1). Another possible intervention would include creating community programs to educate Black patients and the community about resources on local Black providers that they are comfortable with. Programs optimized for cell phones could also be installed that teach Black patients how to be active participants in the management of their care to harbor positive health-seeking behaviors. Future quantitative and qualitative studies would benefit by gathering primary data from participants who directly experienced instances of bias in the medical setting. Data from participants who have personally experienced discrimination in patient-physician interactions would be best to evaluate the causative implications of bias on health-seeking behaviors and its effects on patients' trust in physicians. Extensive intervention is required to effectively minimize the impact of unconscious bias and blatant racism in our fractured healthcare system to ensure quality care for all.

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Disclosures

No conflicts of interest.

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