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AHA PRESIDENTIAL ADVISORY

Call to Action: Structural Racism as a Fundamental Driver of Health Disparities

A Presidential Advisory From the American Heart Association

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ABSTRACT: Structural racism has been and remains a fundamental cause of persistent health disparities in the United States. The coronavirus disease 2019 (COVID-19) pandemic and the police killings of George Floyd, Breonna Taylor, and multiple others have been reminders that structural racism persists and restricts the opportunities for long, healthy lives of Black Americans and other historically disenfranchised groups. The American Heart Association has previously published statements addressing cardiovascular and cerebrovascular risk and disparities among racial and ethnic groups in the United States, but these statements have not adequately recognized structural racism as a fundamental cause of poor health and disparities in cardiovascular disease. This presidential advisory reviews the historical context, current state, and potential solutions to address structural racism in our country. Several principles emerge from our review: racism persists; racism is experienced; and the task of dismantling racism must belong to all of society. It cannot be accomplished by affected individuals alone. The path forward requires our commitment to transforming the conditions of historically marginalized communities, improving the quality of housing and neighborhood environments of these populations, advocating for policies that eliminate inequities in access to economic opportunities, quality education, and health care, and enhancing allyship among racial and ethnic groups. Future research on racism must be accelerated and should investigate the joint effects of multiple domains of racism (structural, interpersonal, cultural, anti-Black). The American Heart Association must look internally to correct its own shortcomings and advance antiracist policies and practices regarding science, public and professional education, and advocacy. With this advisory, the American Heart Association declares its unequivocal support of antiracist principles.

Key Words: AHA Scientific Statements ■ cardiovascular diseases ■ cerebrovascular disorders ■ healthcare disparities ■ health equity ■ health status disparities ■ racism

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Structural racism refers to "the normalization and legitimization of an array of dynamics–historical, cultural, institutional and interpersonal–that routinely advantage White people while producing cumulative and chronic adverse outcomes for people of color"[1] (Table). Structural racism leads to "differential access to the goods, services, and opportunities of society by race," determines societal values and power hierarchies, and underlies persistent health disparities in the United States.[12] With the coronavirus disease 2019 (COVID-19) pandemic and the police killings of George Floyd, Breonna Taylor, and others in the Spring of 2020, there is heightened awareness and concern about the impact of structural racism on health and well-being.

The American Heart Association (AHA) is dedicated to reducing the mortality and morbidity attributable to cardiovascular disease (CVD), stroke, and vascular risk factors, and to improving cardiovascular health. The decline in deaths from coronary heart disease and stroke is among the top 10 public health achievements of the last century,[15] and over the past 20 years, mortality rates attributable to CVD and stroke have continued to decline overall. However, these declines have not been realized equitably across racial and ethnic groups (non-Hispanic White, Black, Asian, American Indian/Alaska Native, and Hispanic/Latino*). Black Americans continue to experience the highest mortality rates attributable to CVD and stroke, with almost 30% higher CVD mortality and 45% higher stroke mortality than non-Hispanic White Americans.[16] The declines in CVD and stroke mortality have not changed the persistently higher rates of premature CVD mortality among Black people in comparison with all other racial and ethnic groups. Although there are well-documented disparities in the prevalence and control of cardiovascular risk factors such as obesity (among youth and adults),[17] hypertension, cholesterol, and diabetes,[18] and in the incidence and outcomes of cardiac arrest,[19] the impact of social determinants of health (SDOH), and especially structural racism, on CVD disparities has been less well studied.[20] This Presidential Advisory describes the historical context and current state of structural racism and its implications for health and well-being across populations.

Structural racism inequitably limits opportunities for social, economic, and financial advancement, which in turn results in a complex interplay among race, social determinants, and health that has negative consequences. Structural racism concentrates power among privileged groups and devalues populations whose health needs to be equitably improved, in particular, Black Americans who are also subjected to the ills of anti-Black racism. For example, regardless of socioeconomic position, Black people continue to experience striking disparities in CVD morbidity and mortality[21] (Figure 1). Higher socioeconomic status does not protect Black people from the impact of structural racism and its health effects. For example, in comparison with college-educated White people, college-educated Black people are more likely to experience unemployment and have lower wealth at every level of income.[23] Structural racism is a barrier to the AHA's goal to improve the cardiovascular health of all people, and this advisory is a call to action to bring attention to this injustice and to identify antiracist strategies and solutions to eliminate structural racism in the United States.

The experience of racism results in chronic discrimination, stress, and depression that adversely impact persons from historically marginalized populations.[24,25] Adverse childhood, and adult experiences, as well, attributable to racism and community violence can result in the phenomenon called toxic stress. Furthermore, excessive activation of the stress response system can lead to long-lasting and cumulative damage to the body and brain. This response is described in the weathering hypothesis, which can be captured using measures of allostatic load, and which has been used to explain the effect of socioeconomic disadvantage on deteriorating health in early adulthood among Black populations.[26] For example, stress and stress-related hormones can cause maladaptive changes in gene expression and structural and functional remodeling of brain regions involved in memory and self-regulation, including the hippocampus, amygdala, and prefrontal cortex.[27] The COVID-19 pandemic has highlighted the disproportionate consequences of structural racism among persons who are Black, Hispanic/Latino, and American Indian/Alaska Native. They not only make up a higher proportion of essential workers, who are preferentially exposed to this easily transmitted virus, but they also have a higher prevalence of underlying medical conditions that raise the risk for severe reactions, hospitalization, and death attributable to COVID-19.[28]

The intersection between the SDOH and disparities by race/ethnicity is rooted in structural racism that results in uneven access to quality schools, good-paying jobs, higher incomes, wealth accumulation, better neighborhoods, health insurance, and quality medical care.[29] There is a clear and direct association between socioeconomic position and health outcomes.[30–32] Educational attainment, household income, residential environment, and access to health care help to explain more of the disparities in CVD mortality than traditional cardiovascular risk factors.[30,33] On average, individuals from historically marginalized groups, Black, Hispanic/Latino, and American Indian/Alaska Native people, in particular, are more likely to have lower high school graduation rates,[34] individual and household incomes below the federal poverty level,[35] and lack insurance and regular access to quality primary care,[36] because of structural racism. However,

*Note: In writing this presidential advisory, the authors gave great consideration to the choice of words and language. The authors acknowledge that there may be other acceptable, or even preferred, terms for some descriptors and concepts, such as Latinx or African American. We approach these word choices not from a place of knowledge, but out of humility. Similar to many people, we are learning as society evolves, and certainly do not seek to dictate the language of the ongoing conversation on systemic racism in our country.

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Table. Definitions

Term	Definition
Adverse childhood experiences	Potentially traumatic events that occur in childhood (0–17 y), such as violence, abuse, or neglect that can undermine a child's sense of safety, stability, and bonding. Adverse childhood experiences are linked to chronic health problems, mental illness, and substance misuse in adulthood.[2]
Allyship	The practice whereby a person or group in a privileged position or position of power seeks to operate in solidarity with a marginalized person or group.[2a,2b]
Discrimination	Inappropriate treatment of people because of their actual or perceived group membership and may include both overt and covert behaviors, including microaggressions, or indirect or subtle behaviors that reflect negative attitudes or beliefs about a nonmajority group.[3]
Health disparities	A particular type of health difference that is closely linked with social, economic, and environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group or other characteristics historically linked to discrimination or exclusion.[4]
Health inequities	Health inequities are systematic differences in the health status of different population groups. These inequities have significant social and economic costs to both individuals and societies.[5]
Prejudice	Irrational or unjustifiable negative emotions or evaluations toward persons from other social groups. A primary determinant of discriminatory behavior.[6]
Race	A social construct primarily based on phenotype, ethnicity, and other indicators of social differentiation that results in varying access to power and social and economic resources.[7,8]
Racial trauma	The events of danger related to real or perceived experience of racial discrimination, including threats of harm and injury, humiliating and shaming events, and witnessing harm to other people of color.[9]
Racism	Anti-Black racism: The system of beliefs and practices that attack, erode, and limit the humanity of Black people.[10]
	Cultural racism: A form of racism that relies on cultural differences rather than on biological markers of racial superiority or inferiority. The cultural differences can be real, imagined, or constructed.[11]
	Personally mediated racism: Prejudice and discrimination that can be intentional, and unintentional, as well, and includes acts of commission and acts of omission.[12] Also known as interpersonal racism; this is the form of racism that most people are familiar with.
	Internalized Racism- Acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth.[12]
	Institutionalized racism: Differential access to the goods, services, and opportunities of society by race.[12]
	Structural racism: The normalization and legitimization of an array of dynamics (historical, cultural, institutional and interpersonal) that routinely advantage White people while producing cumulative and chronic adverse outcomes for people of color.[1]
Social determinants of health	Social determinants of health are the conditions in the environment where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.[13]
Socioeconomic position	An aggregate concept that includes both material and social resources (such as income, wealth, and educational credentials) and one's rank in a social hierarchy (conceptualized as access and consumption of goods, services, and knowledge), as linked to both childhood and adult social class position.[14]

the literature examining structural racism and its effects on health is not sufficient. One theoretical framework describes 3 levels of racism: institutionalized, personally mediated (also known as interpersonal), and internalized.[12] This Advisory focuses on institutionalized or structural racism, which has been less studied than interpersonal racism. Race is a social construct and primarily based on phenotype, ethnicity, and other indicators of social differentiation that result in varying access to power and social and economic resources.[7,8]

Structural racism and its deleterious downstream effects on social determinants, CVD, and overall health and well-being require careful attention, exploration, and action. Having explored and addressed clinical approaches to achieve health care and health equity and having identified SDOH as factors to address, the AHA can and should push further upstream to call out structural racism as an historical driving factor of health disparities that must be addressed. It is our shared responsibility to not just optimize cardiovascular health risk factors (such as blood pressure, lipids, glucose, and weight), but to place equal focus on ensuring the elimination of structural racism such that all individuals have equitable access to high-quality education, affordable and safe housing and neighborhoods, fair treatment in the criminal justice system, and accessible, quality health care. The AHA pledges to identify antiracist strategies and solutions and to work with others to eliminate structural racism in the United States.

HISTORICAL CONTEXT

The structural issues defining racism in our country have been a part of its fabric since its beginnings (Figure 2). As a compromise at the 1787 Constitutional Convention,[37] enslaved Black people were denied all human rights and counted, for the purpose of determining state representation in Congress, as only three-fifths of a person.[38]

Despite the emancipation of enslaved persons and the American Civil War, new Black Codes restricted the freedoms of freed Black people and forced them to work for little or no wages.[39] The Civil Rights Act of 1866 gave Black people the same legal rights as White people with regard to property, labor, and contracts, but not the right

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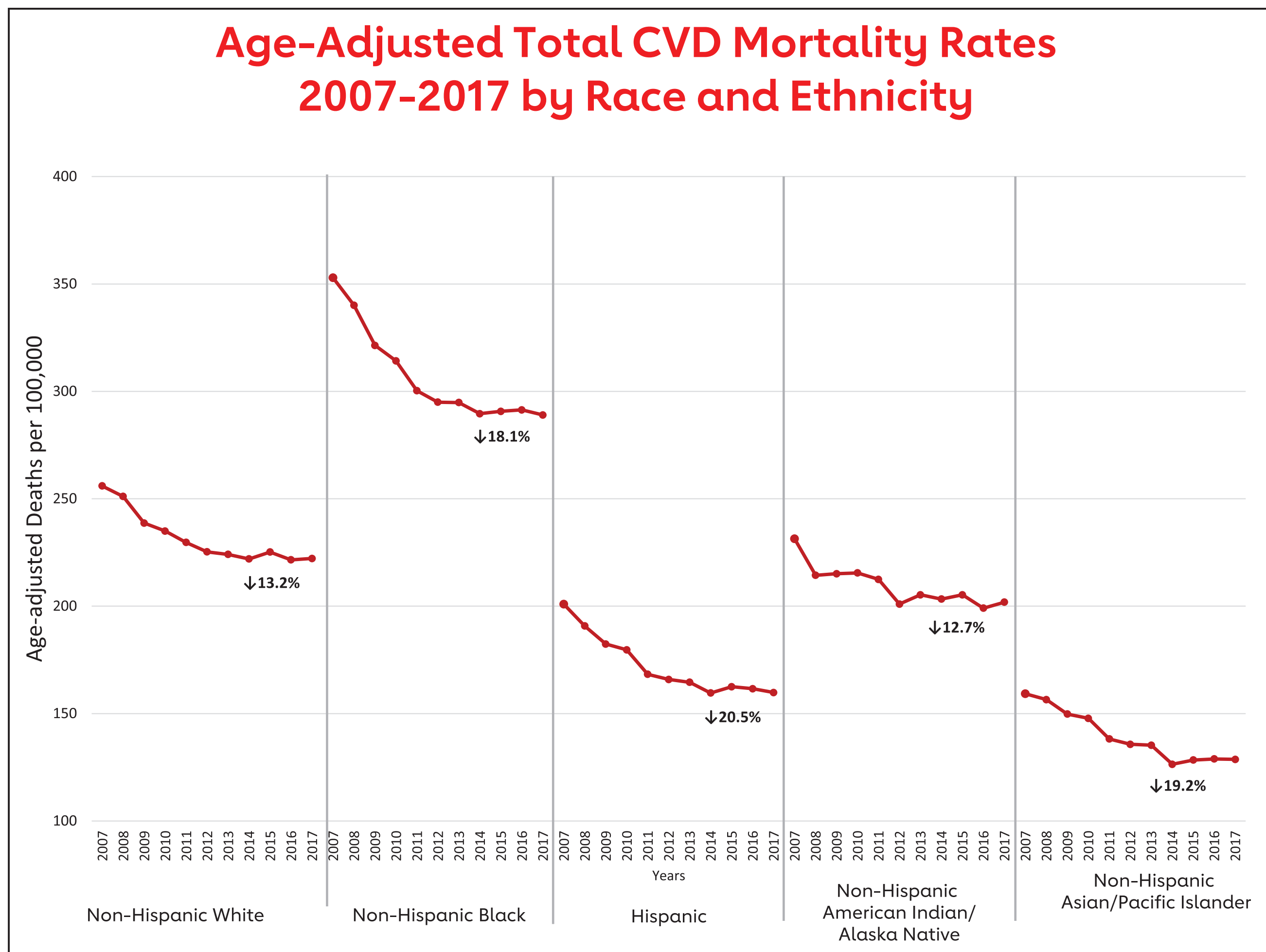

Figure 1. Age-adjusted total cardiovascular disease mortality rates, 2007 to 2017 by race and ethnicity.[22]
Downward arrows indicate a decrease in age-adjusted deaths from cardiovascular disease over the 10-year period shown.

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to vote or hold political office. The experience of Black persons in the United States was similar in other parts of the New World where Black people were enslaved. Unfortunately, even the limited rights in the United States in 1866 were sabotaged by White supremacists, catalyzing the rise of the Ku Klux Klan and ushering in the era of Jim Crow Laws,[40] epitomizing structural racism and institutionalizing disadvantages for Black people under the guise of separate but equal. These actions of segregation had devastating, poverty-concentrating effects, including the denial of economic and educational opportunities. Exclusionary policies such as redlining denied financial services to Black Americans,[41] which had the effect of decreasing property values, reducing the quality of local schools and supermarkets, and limiting access to equitable health care.[42] In medicine, a further decrease in opportunity for Black Americans was codified by the release of the 1910 Flexner report, which led to both the closure of 5 medical schools dedicated to training Black medical students and reduced diversity in the field of medicine,[43] and to the Hospital Survey and Construction Act of 1946 (also known as the Hill-Burton Act), which provided federal support for separate-but-equal hospitals.[44]

Against the backdrop of Manifest Destiny in the 19th century, Native Americans were forcibly expelled from their ancestral homelands to make room for colonizers under the banner of the Indian Removal Act of 1830, leading to tens of thousands of deaths during the grueling relocation process.[45] Legislation such as the Dawes Act of 1887 further strengthened the hand of government and encouraged the ubiquitous usurpation of native lands by colonizers.[46]

Manifest Destiny also fueled expansion into the Southwest and Western regions of what is now the United States and had a deleterious impact on the majority of the Hispanic/Latino population that remained in those regions presumably under the protection of various treaties and US citizenship. The social contracts agreed on by those treaties were not fulfilled, and property rights were challenged by lawsuits resulting in widespread dispossession of Hispanic land.[47] Institutions similar to the South's Ku Klux Klan and practices similar to Jim Crow Laws had the same negative impact, including lynchings, on the lives of many Hispanic Americans. Systematic anti-Hispanic/Latino discrimination has continued to this day, evolving into the modern-day exploitation of Hispanic/

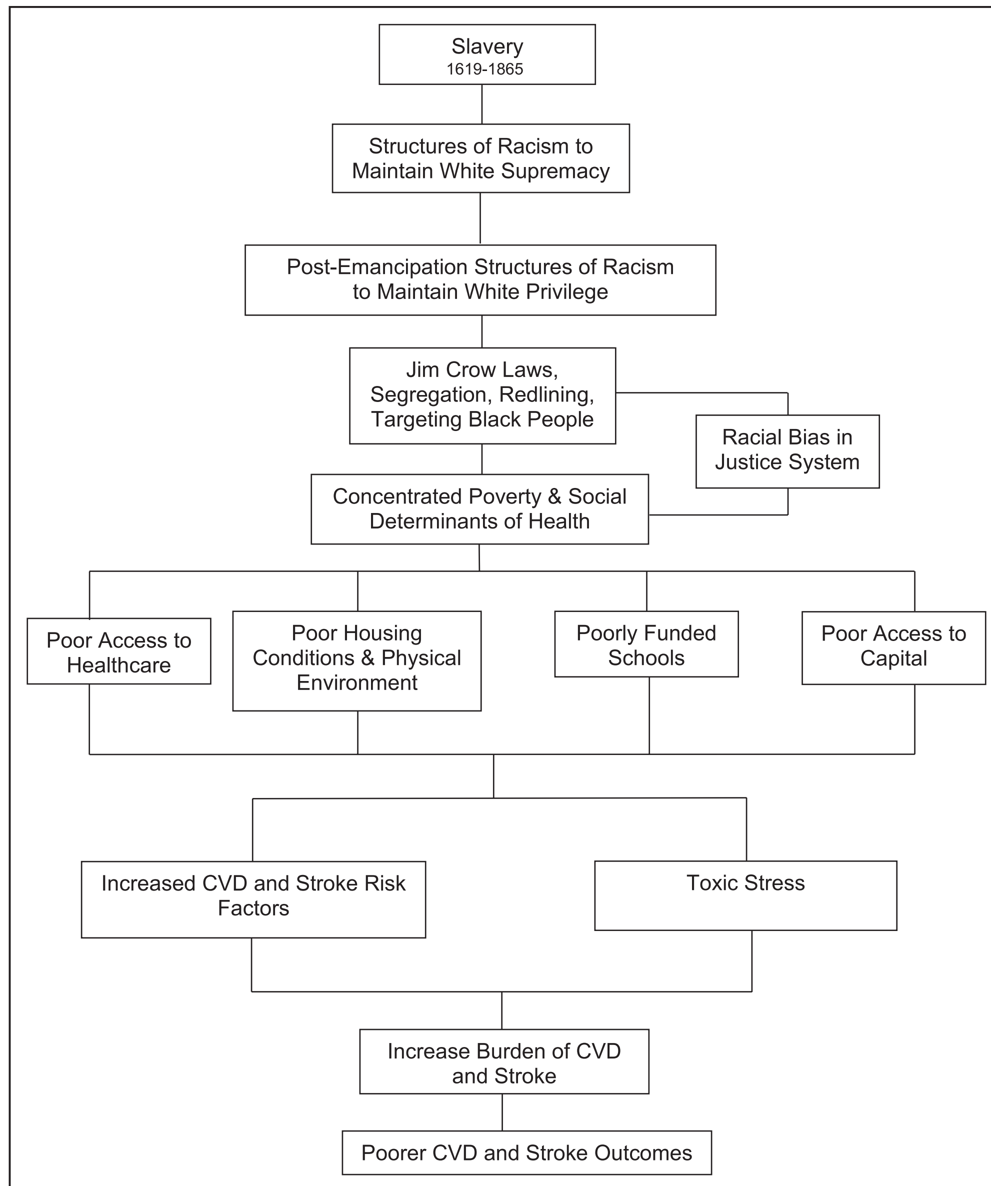

Figure 2. Linking anti-Black structural racism and poor health.
CVD indicates cardiovascular disease.

Latino workers and punitive immigration policies toward persons from Latin America, an unfortunate example being the separation of children from their families in detention camps at the US-Mexico border.[48]

The policies and legacy of structural racism have also been directed at persons of Asian descent. The Chinese Exclusion Act of 1882, designed to preserve White superiority in response to White worker demands, was the first US law to prohibit immigration to America based solely on race. Additional immigration restrictions were extended to other Asian populations with the passage of the 1924 Immigration Act, which simultaneously increased immigration opportunities for people from Northern and Western European countries. During World War II, 120 000 Japanese Americans were placed in internment camps, despite being US citizens.

A review of the historical context would be incomplete without noting the mistrust and poor relationships caused by misdeeds conducted in the United States in the name of science and clinical care. Examples from a long list are the US Public Health Service Syphilis Study at Tuskegee[49] and the forced sterilization of Native American women in the 1960s and 1970s by the US Indian Health Service.[50]

The notion that anyone not White is inferior and could be devalued or dehumanized was important in creating a culture of racism that pervades social, economic, and political institutions where structural racism persists today. The Kerner Commission, formed in response to riots in the United States in 1967, suggested that it was poverty and racism, and not flaws of Black people, that were responsible for the inner-city violence that emerged in reaction

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to the events of the day and played a role in the breadth and extent of poverty present in multiple racial groups.[51,52] The Kerner Commission was prescient when it stated that "race prejudice has shaped our country decisively; it now threatens to affect our future."[51]

RELEVANT AHA CARDIOVASCULAR DISPARITIES STATEMENTS

Over the past 10 years, the AHA has released several scientific statements that reviewed CVD risk and disparities among racial and ethnic groups in the United States.[30,53–58] These statements provided insight into the state of knowledge and into gaps in data for specific groups, framed within the relevant social and cultural context. We provide a brief summary of the relevant topics highlighted in these statements and discuss opportunities for a clear, consistent, and directed approach to discussions of racism, discrimination, and health disparities in future AHA statements.

CVD in Asian people was addressed in 2 AHA statements.[56,57] In a 2010 science advisory, the immigration history of the 6 largest Asian subgroups (Asian Indian, Chinese, Filipino, Japanese, Korean, and Vietnamese) was described, and the authors highlighted the importance of examining disease risk across subgroups.[56] The potential influence of acculturation on disease risk and the need for accurate and reliable data and instruments for measurement of acculturation were noted. The authors stressed the importance of modifying data collection techniques in clinical care and research so that variation across subgroups can be explored. Although not explicitly discussed as such in the statement, the extrapolation of data across ethnic subgroups and the lack of inclusive data collection instruments that can provide disaggregated data demonstrate systemic inequities that can perpetuate health disparities. A 2018 advisory statement focused on CVD in South Asian persons, including people from Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. Issues of acculturation, biculturalism, and other SDOH were mentioned; however, the impact of racism, discrimination, and structural inequities was not explored.[57]

CVD in persons who identify as Hispanic/Latino in the United States was addressed in a science advisory published in 2014.[55] This statement provided a detailed description of Hispanic/Latino subgroups, including a discussion of immigration patterns and some historical context. Extensive demographic detail was provided for Hispanic/Latino people in the United States. Heterogeneity across groups and challenges with documentation of race and ethnicity were also described. The negative influence of experienced discrimination from the individual perspective was discussed; however, the relationships among racism, discrimination, and structural and health system inequities that influence health outcomes were not directly addressed. This area deserves more explicit study in Hispanic/Latino people, and in other racial and ethnic groups, as well.[59]

Cardiovascular health in Black persons, specifically African Americans, was addressed in a 2017 statement in which a detailed description of the status of cardiovascular health in African Americans, and social, cultural, and environmental influences on health were provided.[54] The section on racism focused on discrimination as a salient source of stress; however, the historical context and the influence of structural racism on SDOH was not explored.

In "Cardiovascular Health in American Indians and Alaska Natives" published in 2020, historical context was used to frame the way in which SDOH that influence disease outcomes are impacted by social inequities.[58] The authors described the impact of experienced discrimination on health outcomes and provided examples of health system– and clinician-directed interventions to mitigate the impact of provider implicit bias on health disparities.

The roles of social, structural, and environmental factors on CVD prevalence and outcomes were examined in depth in 2 additional scientific statements. The 2015 statement, "Social Determinants of Risk and Outcomes for Cardiovascular Disease" included race/ethnicity as one of six categories of SDOH.[30] The authors described the impact of experienced racism and discrimination, implicit bias, and stereotype threat on CVD outcomes. The intersectionality of structural racism and the additional SDOH measures (socioeconomic position, social support, culture/language, access to care, and residential environment) was not thoroughly examined. The influence of upstream social structures that shape racial and ethnic disadvantages in housing status was acknowledged in a 2020 statement on the impact of housing on cardiovascular health and well-being; however, racism was not explicitly mentioned as a structural variable.[53]

The referenced statements provide critical information to influence research and practice across racially and ethnically diverse populations. Now, however, in this time of heightened awareness of the inequity produced by structural racism, the AHA must reexamine its previous work on health disparities and social determinants of health disparities by race and ethnicity and clarify what was overlooked in those statements. We highlight 3 key points here.

1. Racism is a current and pervasive problem, influenced by history, but it is not merely an issue of the past. Structural racism and the resulting inequities have existed throughout the entire history of the United States, and yet awareness of them may seem new to the beneficiaries of the status quo. As individuals come to realize these disparities anew, and are moved to act, the AHA must help educate society on the impacts of structural racism on health and the means by which to mitigate or eliminate structural racism to achieve health equity.

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Moving forward, and when appropriate, AHA scientific statements should provide the relevant historical context, make clear the present-day impact of the structural racism that pervades social, economic, and health institutions, leading to poor CVD outcomes among historically marginalized racial and ethnic groups, and describe potential strategies for addressing structural racism.

2. Racism is experienced and produces adverse effects, whether it is blatant to others or perceived only or primarily by the individual. In addition to previous literature that has sought to describe perceived discrimination, we must use language that describes racism and discrimination in terms that do not diminish their significance or soften how damaging the unfair treatment is. We must acknowledge that these structural elements work as designed, in ways that perpetuate the advantages White Americans have over other racial and ethnic groups. We must be firm in acknowledging the real experiences of historically marginalized patients, communities, and colleagues if we are to work toward eliminating the factors that allow discrimination and racism to persist.
3. The burden of mitigating the impact of structural racism on economic, social, and health inequities should not fall solely on patients and physicians/health care workers from historically marginalized communities. Proposed interventions must target structural elements that impact socioeconomics, behaviors, disease risk, and disease outcomes in addition to focusing on patient-level variables. We must also examine the impact of discriminatory practices within our health care systems and address the role of institutionalized racism and bias on patient care and outcomes, and on the health care workforce, as well.

The goal of AHA advisories is to bring visibility to a problem and to solutions. Their purpose is to raise awareness and increase understanding of a topic and influence its audience toward actionable steps and solutions. The AHA has an opportunity to add to previous publications about health disparities and release new scientific and policy statements that address the role of structural racism in contributing to and perpetuating health disparities.

CURRENT STATE

Structural racism operates through "mutually reinforcing systems,"[60] and it is impossible to disentangle its significance to health disparities without briefly considering examples of its effects across multiple systems, including as a principal driver of current inequities in the US housing, educational, criminal justice, health care, and economic systems. Discriminatory laws (eg, the Indian Removal Act, the GI Bill) and federal practices (eg, redlining) were enacted that ensured persons who were American Indian, Black, or Hispanic/Latino were denied access to home ownership and quality affordable housing.[61] These intentional policies debunk the "myth of de facto segregation,"[62] the idea that people choose, rather than are forced, to be segregated, and underlie the housing inequities seen today. For example, Black adults are less likely to own their homes than their White counterparts, regardless of education or income.[61] Housing insecurity, overcrowding, concentrated poverty, environmental hazards, and lack of access to health providers continue to burden historically marginalized communities, and have in part contributed to higher risk of COVID-19 infections.[53]

In the educational system, the racial segregation of public schools, as a purposeful consequence of redlining, perpetuates separate and unequal despite the Brown versus Board of Education Supreme Court ruling in 1954 and the multiple desegregation consent decrees that remain in place today. In 2015, 60% of Hispanic/Latino students, 58% of Black students, 53% of Pacific Islander students, 38% of Asian students, and 37% of American Indian/Alaska Native students in elementary and secondary public schools attended racially segregated schools (defined as historically marginalized students comprising >75% of enrollment) in comparison with only 5% of White students.[63] Exacerbating the persistent financial inequities and lower resource allocation that come with segregation is the disproportionate discipline experienced by Black students. In a study evaluating data on education of racial and ethnic groups in 2018, Black students comprised 15% of the total enrollment in public schools but were 4 times as likely to receive an out-of-school suspension in comparison with White students.[63] Additional data have shown that Black students comprised a higher percentage of students who were physically restrained or restrained with devices (27%), and a higher percentage who were referred to law enforcement (31%), as well.[64] These educational system inequities may partially explain the disparities in graduation rates by race and ethnicity in the United States,[34] and these same heightened disciplinary actions in public schools correlate with inequities in policing and sentencing. In 2018, Black youth age <18 years comprised 35% of total arrests, and Black adults ≥18 years comprised 27% of total arrests, although only 13% of the US population was Black.[65] In addition, inequities in sentencing have been well-documented, with the sentencing rate for >1 year in state or federal prison for US residents of all ages being higher for non-Hispanic Black residents (1134 per 100 000 persons) and Hispanic/Latino residents (549 per 100 000 persons) than for White residents (218 per 100 000 persons).[66] These disparities in sentencing may contribute to the economic consequences of systemic racism evident in the widening wealth gap and persistent inequities in income and employment.[35] In 2016, White families had a higher median family wealth ($171 000) than Hispanic/

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Latino families ($20 920) and Black families ($17 409).[67] For employment, Black (6%) and Hispanic/Latino (4%) persons had higher unemployment than White persons (3%) in the second quarter of 2019.[68] Black people (40%) also have higher rates of underemployment than White people (31%).[69] Moreover, among those age ≥25 and employed full-time, Black and Hispanic/Latina women had lower median weekly earnings than White women, even at the highest level of educational attainment.[70]

In the health care setting, racial disparities are striking with regard to how often Black patients do not receive life-saving care, thereby impacting who lives and who dies after cardiac arrest.[19] In addition, Black and Hispanic/Latino patients experience significantly lower survival to hospital discharge than White patients even when controlling for socioeconomic status.[32] Despite an increase in health insurance coverage since the 2010 Affordable Care Act, American Indian/Alaska Native persons (22%), Hispanic/Latino persons (19%), and Black persons (12%) are more likely to be uninsured than White persons (8%) and Asian persons (7%).[71] The Medicaid expansion enabled by the Affordable Care Act is associated with lower rates of uninsurance[72]; however, 12 states, primarily in the South and some with higher percentages of historically marginalized groups, have not provided this additional coverage. These contemporary examples demonstrate how structural racism continues to perpetuate disparities across these interrelated systems that ultimately affect health.

The emergence of the COVID-19 pandemic in the United States in 2020 has exposed and exacerbated existing disparities in health. The morbidity and mortality rate for COVID-19 has been disproportionately higher for Black persons, American Indian/Alaska Native persons, Pacific Islander persons, and Hispanic/Latino persons in comparison with White persons.[73] Counties with >45% of residents from a historically marginalized group had higher rates of cumulative COVID-19 infection and mortality than counties with predominantly White residents, regardless of the poverty level of the county. In addition to the disparate physical health effects of COVID-19, the prevalence of anxiety and depression has increased during the pandemic, and emerging data indicate that the initiation or increase in substance use has been greater among Hispanic/Latino adults (22%) and Black adults (18%) than among White adults (11%).[74]

Black adults are more likely to experience racial discrimination and the cumulative effects of racial trauma[9]; however, Black adults are also less likely to receive treatment for their mental health.[75] The recent mental health toll of the pandemic, coupled with the racial trauma experienced after the viral sharing of the video of George Floyd's killing, has contributed to a spike in mental health conditions among Black adults.[76]

Although racism has been identified as a fundamental cause of health disparities in the United States,[77,78] the explicit investigation of structural racism in health research has been limited.[20,60] To date, most research studies have investigated race and ethnicity because these measures may be assessed through self-report and are considered essential for descriptive epidemiology and surveillance of health conditions. However, race and ethnicity are sometimes improperly presumed to reflect biological or genetic differences, further contributing to the limited interrogation and conceptualization of structural racism in empirical research on health and mental and physical well-being.[79] In addition, although race and ethnicity can descriptively associate with poorer outcomes, future research needs to capture inherent unmeasured factors. Considering the history of codified racism across these mutually reinforcing systems and their continuing effects, some state, county, and city officials have begun to pass resolutions or proclamations to declare racism as a public health crisis.[80]

FUTURE STATE

To achieve health equity, we must first name and identify structural racism in places it exists, and then challenge and dismantle the structural racism that shapes upstream governance, social structures, and policies that perpetuate ideologies of superiority over historically marginalized populations and perpetuate persistent disparities. Future policies and interventions must be implemented at the individual, community, and population levels to achieve equitable access to social and economic resources that enhance health equity for all historically disenfranchised groups.

First, to eliminate structural racism and its negative effects, adversely affected communities must be transformed. Promoting optimal health in historically marginalized groups and reducing health disparities will require restructuring systems to improve conditions that affect health in workplaces, neighborhoods, and schools.[81] For example, education interventions that improve education quality, increase graduation rates, and improve the cardiovascular health of children at different stages of the life course, policies that expand income, and employment opportunities that reduce discrimination in the workplace should result in more favorable health outcomes and movement toward health equity.[82]

Second, policies that improve the quality of housing and neighborhood environments have been shown to improve the mental and physical health of individuals.[53,83] Future policies must be put in place and enforced that dismantle residential segregation and its negative economic, educational, employment, and environmental consequences that ultimately impact downstream health outcomes.[84]

Third, future policies must eliminate inequities in access to and quality of health care. The Affordable Care Act increased access to insurance and health care for historically marginalized and underserved groups who lack insurance, but more can be done.[85] Future scalable

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interventions should compare the quality and kinds of care received according to race/ethnicity to identify specific areas where targeted prevention and treatment efforts could be implemented to narrow health care disparities. To the extent segregated care exists, it should be eliminated, even when insurance is available.

Fourth, the dismantling of structural racism is predicated on understanding race and transforming attitudes about it. We need to foster allyship between racial and ethnic groups. Malcolm X proclaimed, "When the 'I' in illness is replaced with 'We,' the resultant word is 'Wellness.'"[86] The majority of adults in the United States are unaware of health disparities by race and ethnicity[87] and the role that structural racism plays in their existence and persistence. Awareness should foster changes in individual cultural attitudes, political support for change, and public empathy that change needs to occur,[81] all contributing to increased allyship. In the absence of this transformation, the demographic shift in the racial and ethnic profile of the United States, in individual states, cities, and counties, will continue to have a profound impact on attitudes about inequities.[88] Sustainable changes in attitudes need to accompany these demographic shifts. Future policies and programs must demonstrate that a society free from structural racism results in considerable social, economic, and health benefits for all those living in the United States, including those who are direct beneficiaries of the status quo, and historically marginalized populations, as well.

Fifth, future research on racism must investigate the joint effects of multiple domains of racism (structural, interpersonal, cultural, and anti-Black) and their effects on health outcomes and health disparities. The majority of studies that examine discrimination study the singular measure of interpersonal discrimination and its relationship with CVD risk factors and outcomes.[24,89] Future research needs to examine the intersectionality of multiple domains of discrimination and their combined effect on health disparities, in particular, cardiovascular health and well-being. We must also study the intersection between structural racism and other measures of SDOH and chronic and acute stressors. Research has shown that considering the combined impact of more than one measure of discrimination or stressor has stronger associations with health outcomes than including a single discrimination measure.[90] Interventions need to examine the extent to which positive psychosocial assets (optimism, resilience, purpose in life) may mitigate the negative effects of discrimination on health and result in optimal cardiovascular health.[91] This research can lead to the elimination of structural racism throughout American society and move us forward in our relentless quest to achieve health equity.

CALL TO ACTION

The mission of the AHA to be a relentless force for longer, healthier lives for all people in all communities, in the United States and globally, compels the AHA to meaningfully address structural racism in a bold, comprehensive, and thoughtful fashion. Given the clear link between structural racism and health status, it is crucial that the AHA tackle this obstacle to the well-being of all persons in all communities with the same vigor it has historically approached medical and SDOH, with a focus on science and evidence-based medical care. If, as has been discussed throughout this statement, structural racism is a major determinant of cardiovascular health and a contributing factor for CVD and cerebrovascular disease, then the AHA has a responsibility to both (1) explicitly recognize the role of structural racism in contributing to adverse health outcomes and persistent health disparities and (2) direct its energies and resources toward efforts to actively combat all forms of racism in the United States and elsewhere. This call to action highlights 5 broad areas in which the AHA should focus its efforts to address structural racism (Figure 3).

At the core of the AHA's response is this statement of its support of antiracist policies and practices. It is not enough to maintain a position of neutrality or to pretend to remain above the fray. Science and medicine do not exist in a social or ideological vacuum. The AHA's response must also look both inwardly at its own organizational practices and processes, to embrace antiracism within the AHA, and externally to better account for its interactions with its partners and other organizations in the name of antiracism. At the same time, we pledge to work with communities across the United States that share these values.

These antiracism principles entail pointing out racist policies and practices (unintended or otherwise) where they exist, including within our own walls.[92] This will require consistent education and training of AHA staff at all levels on the different manifestations of racism, including structural racism and interpersonal racism; maintaining and updating, as needed, diversity policies and accountability; monitoring and ensuring diversity of the AHA workforce; and reviewing contracts to maximize hiring of historically underrepresented businesses. The AHA should be committed to also reviewing businesses with which we partner for their own commitment to antiracist principles, just as we currently review for practices that have adverse health consequences (eschewing tobacco companies, for example). When businesses have values that are antithetical to our own antiracist principles, we should decline to do business with them. As recent events have shown us, we must be ever vigilant in our standards to ensure we continue to uphold the values and mission of our organization.

As a science-based organization, the AHA will work to overcome structural racism through the scientific enterprise and through education, quality improvement, and advocacy. We will work to support a national

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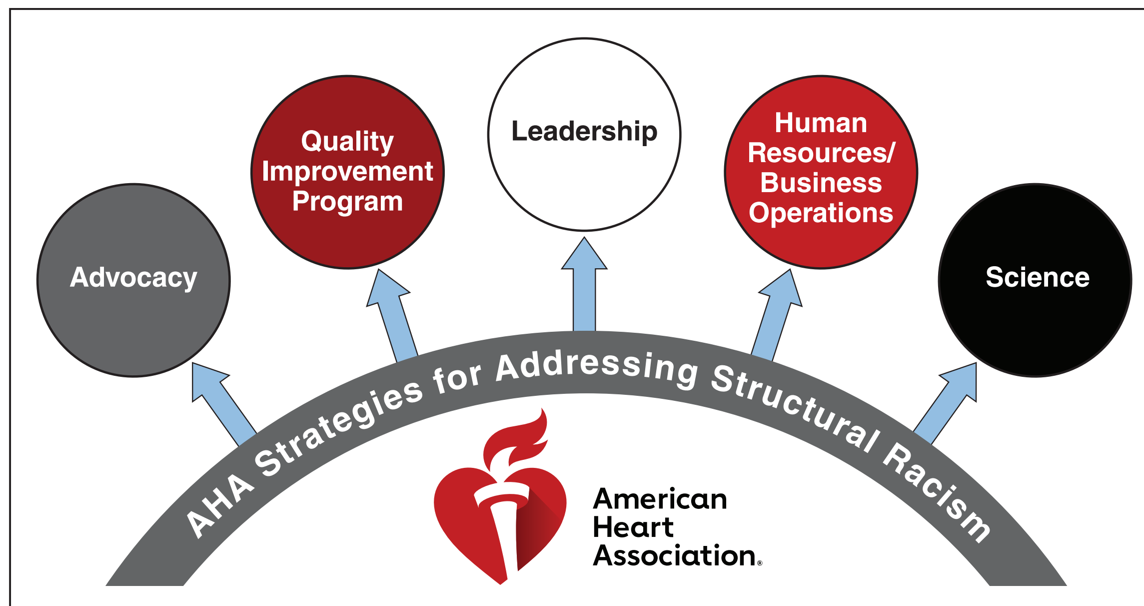

Figure 3. AHA strategies for addressing structural racism.
AHA indicates American Heart Association; and HR, human resources.

awareness of structural racism and promote a national reconciliation around race.

In the realm of science, we will build an antiracism research agenda, with input from key stakeholders. This agenda will focus on research that is directed at racism as a cause of poor cardiovascular and cerebrovascular health, including specific requests for applications and collaboration with external donors and partners who are committed to the study of racism and health. In particular, the AHA will seek to study interventions that can mitigate or eliminate the adverse health effects of structural racism, and also seek to understand ways in which structural racism can be eliminated as a fundamental cause of disease. In addition, we will continue to insist on both inclusion of diversity in clinical trial recruitment and inclusivity in patient engagement in research design. This will include ensuring the diversity and inclusiveness of investigators funded by the AHA, will extend to all areas of research and science activity of the AHA, and will include supporting more early and midcareer investigators from historically marginalized groups.

The AHA must examine how to leverage its sizable science volunteer membership, with 30000 members under 16 scientific councils, to recruit and develop members from underrepresented racial and ethnic groups, with the goal of enhancing diversity and broadening perspectives within leadership positions and roles. The AHA should also explore opportunities to reorganize our scientific council and related committee structure to ensure diversity, inclusion, health equity, and antiracism as essential elements coordinated with other AHA efforts. In the latter capacity, the AHA will also partner with other professional organizations and entities that have traditionally had a core focus around improving the health of diverse populations. The AHA will consider ways to ensure that the 12 journals published under the AHA umbrella use editorial and peer review processes that assure antiracism and diversity considerations.

With regard to public and peer education, we will move beyond statements that report on the well-known disparities in burden of risk factors, disease, and outcomes among specific subgroups of the population to intentionally address racism and structural inequities, both explicit and implicit, as fundamental causes of disparities. We will move beyond the study of race as a predictor of cardiovascular and general health to the deeper analysis of structural racism as a specific and fundamental cause of racial and ethnic disparities. As described above, the AHA has published several scientific statements over the past decade on cardiovascular health in specific populations in the United States; the time has come to update those statements to include a discussion of structural racism and its effects on the health of each of those populations. A scientific statement addressing in more detail the sociomedical and biological mechanisms by which structural racism leads to adverse health will be forthcoming.

The AHA must explore ways to enhance its robust suite of programs in quality improvement, including Get with the Guidelines and Target BP by improving data collection on race, ethnicity, and selected SDOH to drive the elimination of health care and health disparities. For example, AHA's quality improvement programs could be used to investigate policy changes related to structural racism and SDOH and their effect on health care. Many SDOH, such as income, food availability,

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housing quality and affordability, and air pollution are closely linked to race/ethnicity and health outcomes. Data on these measures can be extracted from other databases and linked to the quality programs data. At the same time, the AHA must reconsider when and how to include race/ethnicity and social determinants measures in risk calculators used in its Get With The Guidelines and other programs; the rationale for inclusion of race should be made explicit and reviewed by experts in race/ethnicity and medicine, because its inclusion could have unintended adverse consequences for the care of patients, for example.[93,94]

Given the AHA's history of and success in advocacy, there are concrete steps we can take to actively address structural racism. Advocacy and other externally facing efforts will abide by antiracist principles in the name of health equity. Affordable health insurance for everyone is key to eliminating disparities. The AHA will continue to work toward health care reform that provides adequate, accessible, and affordable health insurance and quality medical care for all in the United States, including expansion of Medicaid in all states.[95] In particular, we will advocate for health care equity and health equity performance measures.

The AHA will advocate for the expansion of the nation's public health infrastructure with adequate funding. One of the compelling lessons learned from the COVID-19 pandemic is that it takes a robust public health system to ensure adequate preparedness, response, and protection of those most vulnerable. The AHA has in the past advocated for robust noncommunicable disease public health surveillance. The AHA will also advocate for public health funding to better understand and address racism, in particular, structural racism, as a public health issue. Recognizing the ways in which structural racism has contributed to current disparities in SDOH, the AHA will advocate for quality, affordable, and equitable education for all from pre-Kindergarten through post–high school education; quality, affordable, and equitable housing in mixed-income neighborhoods; and equitable access to capital. Graduation from high school is one of the most important predictors of a long, healthy life. The opportunities for affordable housing and access to affordable healthy foods must be addressed through policies, programs, and partnerships among local, state, and federal governments along with initiatives supported by the private sector.[53] The importance of lack of access to capital and the impact of not having adequate funding to support one's daily life and the positive influences it brings to every individual and family cannot be overemphasized. Without improvement in access to capital, the cycle of poor health exacerbated by poverty will persist.

The AHA will further advocate for National Institutes of Health funding to establish a national research agenda that focuses on the negative impact of all forms of racism on all aspects of health. The AHA will advocate for National Institutes of Health funding to support investigators whose interest and work are to understand these issues and to test solutions to resolve racism and enhance diversity to improve the nation's health.

This upcoming year, 2021, marks 40 years of AHA advocacy for the improvement of the cardiovascular health and well-being of all Americans. During the past 4 decades, we have successfully advocated for National Institutes of Health funding, tobacco regulation, children's health, and health care reform. Now the problems of structural racism, health inequity, and obstacles to eliminating health disparities across this country have become the next essential part of our advocacy work.

The AHA's best principles and best intentions will ultimately provide a solid foundation for success only if they are implemented, measured, and improved over time. The AHA should establish a robust tracking mechanism, with appropriate metrics, to monitor its progress and measure its success in addressing multiple forms of racism in health and health care. This should include internal measurement of processes and outcomes, related to AHA and its workforce, and external measurement. Scientific investigation will further our understanding of the critical link between structural racism and health through assessment of the operation of racism at various levels (social, political, economic, education, health care, and judicial) that produce downstream health disparities. Although the AHA cannot by itself dismantle structural racism, it can serve as a catalyst, convener, and collaborator toward this end point, in particular, within the realm of cardiovascular science, medicine, and health care. We anticipate that the present statement on structural racism will serve as the first of several AHA statements and initiatives addressing this issue.

The deadly impact of the COVID-19 pandemic on Black, American Indian/Alaska Native, and Hispanic/Latino Americans coupled with the racist social injustice demonstrated in the killings of George Floyd, Breonna Taylor and, sadly, too many others, provide stark witness to the issues of societal inequities in health and well-being. Structural racism prevents us from achieving health equity for all we have the opportunity to serve. Our work must advance the science to understand structural racism and its effects on health, how to eliminate its adverse consequences, and how to offer concrete, science-informed solutions, and actionable steps and programs to improve health and well-being, to achieve equitable health for all.

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The American Heart Association makes every effort to avoid any actual or potential conflicts of interest that may arise as a result of an outside relationship or a personal, professional, or business interest of a member of the writing panel. Specifically, all members of the writing group are required to complete and submit a Disclosure Questionnaire showing all such relationships that might be perceived as real or potential conflicts of interest.

This advisory was approved by the American Heart Association Science Advisory and Coordinating Committee on October 6, 2020, and the American Heart Association Executive Committee on October 26, 2020. A copy of the document is available at https://professional.heart.org/statements by using either "Search for Guidelines & Statements" or the "Browse by Topic" area. To purchase additional reprints, call 215-356-2721 or email Meredith.Edelman@wolterskluwer.com.

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Disclosures

Writing Group Disclosures

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*Modest.

†Significant.

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