

No. 24-03108

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IN THE  
**United States Court of Appeals for the Ninth Circuit**

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AZADEH KHATIBI, *ET AL.*,

*Plaintiffs-Appellants,*

v.

RANDY HAWKINS, *ET AL.*,

*Defendants-Appellees.*

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Appeal from the United States District Court  
for the Central District of California;  
No. 2:23-cv-06195-MRA-E; Hon. Mónica Ramírez Almadani

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**BRIEF FOR *AMICI CURIAE* THE NAACP CALIFORNIA HAWAII  
STATE CONFERENCE, THE LAWYERS' COMMITTEE FOR CIVIL  
RIGHTS UNDER LAW AND THE LAWYERS' COMMITTEE FOR CIVIL  
RIGHTS OF THE SAN FRANCISCO BAY AREA**

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## CORPORATE DISCLOSURE STATEMENT

Pursuant to Rules 26.1 and 29(a)(4)(A) of the Federal Rules of Appellate Procedure, counsel for *amici curiae* states the California Hawaii State Conference of the National Association for the Advancement of Colored People, the Lawyers' Committee for Civil Rights Under Law and the Lawyers' Committee for Civil Rights of the San Francisco Bay Area are non-profit, tax-exempt organizations that have issued no stock; that they have no parent corporations; and that no publicly held company owns 10 percent or more of any shares in them.

Pursuant to Rule 29(a)(4)(E), counsel for *amici curiae* states that no counsel for any party authored this brief in whole or in part and no entity or person, aside from *amici curiae*, its members, or its counsel, made any monetary contribution intended to fund the preparation or submission of this brief.

Counsel for *amici curiae* states that Appellants and Appellee consent to the filing of this *amicus* brief.

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## **INTERESTS OF *AMICI CURIAE***

*Amici curiae* are the California Hawaii State Conference of the National Association for the Advancement of Colored People (“NAACP CA/HI”), the Lawyers’ Committee for Civil Rights Under Law, and the Lawyers’ Committee for Civil Rights of the San Francisco Bay Area.

NAACP CA/HI, which has over 47,000 members, is an affiliate of the NAACP. The NAACP State Conferences, including NAACP CA/HI, conduct programming at the state and local level to combat racial health disparities. Health equity is one of the NAACP CA/HI’s five priorities for 2024, and initiatives promoting equitable access to healthcare for Black communities, addressing social determinants of health, and addressing racial health disparities are a focus area for the organization.<sup>1</sup> NAACP CA/HI has supported efforts to ameliorate health inequity, including Assembly Bill 241 (“AB 241”), which created the curriculum requirement for continuing medical education (“CME”) courses in California that is at issue in this litigation. NAACP CA/HI supported AB 241’s enactment because it believes implicit bias training can help ameliorate persistent ethnic and racial disparities in healthcare across a range of illnesses in medicine. For that reason,

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<sup>1</sup> NAACP CA/HI, *2024 Priorities Unveiled at NAACP Board Meeting*, (Mar. 20, 2024), <https://cahinaacp.org/2024-priorities-unveiled-at-the-naacp-board-meeting/>

NAACP CA/HI believes that a ruling invalidating AB 241 would harm the health and welfare of its members.

The Lawyers' Committee is a nonpartisan, nonprofit organization, formed in 1963 that uses legal advocacy to achieve racial justice, fighting inside and outside the courts to ensure that Black people and other people of color have voice, opportunity, and power to make the promises of our democracy real. As part of this work, Lawyers' Committee has participated as counsel or *amicus curiae* in cases addressing race, ethnicity, and national origin discrimination across sectors, including in education, employment, and health care. *See, e.g., Students for Fair Admissions, Inc. v. President & Fellows of Harvard Coll.*, 600 U.S. 181 (2023); *Am. All. For Equal Rights v. Zamanillo*, No. 24 CV 00509 JMC (D.D.C. 2024); *Hernandez v. Monsanto Co.*, No. 23 CV 1 JPJ-PMS (W.D. Va. 2023); *Mississippi v. Becerra*, No. 22 CV 113 HSO (S.D. Miss. 2022).

The Lawyers' Committee for Civil Rights of the San Francisco Bay Area ("LCCRSF") is a nonpartisan, nonprofit organization dedicated to advancing access to justice and opportunity in Black communities and other of communities of color in California. LCCRSF is an affiliate of the national Lawyers' Committee for Civil Rights Under Law. For over 50 years, LCCRSF has engaged in impact litigation and provided direct legal services to those most affected by systemic racism and histories of oppression, namely people of color, individuals in economic distress,

and people from immigrant communities. *See, e.g., Bad Boys Bail Bonds v. Caldwell*, 288 Cal. Rptr. 3d 439 (Cal. Ct. App. 2021); *Zepeda Rivas v. Jennings*, 445 F. Supp. 3d 36 (N.D. Cal. 2020), *aff'd*, 845 Fed. App'x. 530 (9th Cir. 2021). Along with pro bono attorneys, LCCRSF also provides legal counsel, advice, and education to California nonprofits with the goal of reducing racial disparities and improving health outcomes for underserved communities. These efforts are part and parcel of LCCRSF's longstanding priority to build a more equitable and just society.

AB 241 requires California's CME courses to "contain curriculum that includes the understanding of implicit bias."<sup>2</sup> A recent publication by the National Academies of Sciences, Engineering, and Medicine ("National Academies") defined "implicit bias" as "unconscious or unacknowledged preferences that can affect a person's beliefs or behaviors, and in particular, an unconscious favoritism toward or prejudice against people of a certain race, gender, or group that influences one's own actions or perceptions."<sup>3 4</sup> Implicit bias has been referred to as "the cognitive residue

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<sup>2</sup> Cal. Bus. & Prof. Code § 2190.1(d)(1).

<sup>3</sup> National Academies, *The Science of Implicit Bias: Implications for Law and Policy: Proceedings of a Workshop—in Brief* (National Academies Press) (2021) (hereinafter "*The Science of Implicit Bias*"), <https://doi.org/10.17226/26191>.

<sup>4</sup> The National Academies are private, nongovernmental institutions established by an act of Congress to "investigate, examine, experiment, and report on any subject of science or art" upon request of the U.S government. 35 U.S.C. § 150303. The National Academies provide independent advice to inform Congress's

of past and present structural inequalities.”<sup>5</sup> As the National Academies recently recognized, in the medical field, implicit bias can impact “clinical decision making, leading to inequitable care decisions.”<sup>6</sup>

This case presents questions about the nature of implicit bias, its presence in the medical profession, consequences for patients, and the role of training in addressing implicit bias and its effects. *Amici* have an interest in ensuring that this Court is aware of the realities of implicit bias in the medical field given mischaracterizations made by Appellants. Implicit bias is real; it is not an “ideology.” Its existence has been recognized by science and medicine. Consequently, *amici* respectfully submit that this Court would benefit from

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policymaking. *About Us*, National Academies, <https://www.nationalacademies.org/about> (last accessed Oct. 29, 2024). Its members are elected by their peers for their contributions to research, medicine and health, and engineering. *Id.* The National Academies publishes the Reference Manual on Scientific Evidence jointly with the Federal Judicial Center; the manual is provided to federal judges to guide them in “managing cases involving complex scientific and technical evidence.” *Reference Manual on Scientific Evidence*, National Academies (2011), <https://nap.nationalacademies.org/catalog/13163/reference-manual-on-scientific-evidence-third-edition>.

<sup>5</sup> B. Keith Payne, et al., *Historical Roots of Implicit Bias in Slavery*, 116 PROC. NAT’L ACAD. SCI. 11693 (2019), <https://www.pnas.org/doi/full/10.1073/pnas.1818816116>.

<sup>6</sup> National Academies, *Ending Unequal Treatment: Strategies to Achieve Equitable Health Care and Optimal Health for All*, The National Academies Press (2024), <https://doi.org/10.17226/27820> (hereinafter “*Ending Unequal Treatment*”).

understanding the state of racial health disparities in this country; the significant research showing that implicit bias contributes to and perpetuates health disparities in the United States, including poor health outcomes and lower patient satisfaction for Black patients and other patients of color; and how implicit bias in the medical field can be addressed by provider training.

## **INTRODUCTION**

Implicit bias is a well-established phenomenon backed by decades of evidence.<sup>7</sup> Virtually every major organization focused on the science of medicine has recognized the existence and impact of implicit bias in the medical sphere. That includes the National Academies, the National Institute of Health, the Centers for Disease Control, the American Medical Association (“AMA”), the American College of Physicians, the National Cancer Institute, the American Cancer Society, the American College of Cardiology, the American Academy of Pediatrics, and others cited in this brief. There are far too many authoritative scholarly publications regarding implicit bias to cite here, but studies regarding the issue have been published in *The Lancet* and the *New England Journal of Medicine* among many other journals.

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<sup>7</sup> See generally *The Science of Implicit Bias*.

Within the medical realm, implicit bias and its impacts have been studied across a broad array of specialties, including but not limited to cancer, heart disease, kidney disease, and maternal health. “Implicit biases can affect cognition (i.e., stereotypes), affect (i.e., prejudice), and behavior (i.e., discrimination).”<sup>8</sup> Studies indicate that healthcare professionals exhibit the same levels of implicit bias as the wider population.<sup>9</sup> However, the context of the medical field is critical: providers’ “implicit biases lead to poor health and health care outcomes” for patients of color.”<sup>10</sup> The result is that implicit bias contributes to and perpetuates the persistent inequities in the American health system.

Against this backdrop, AB 241 was enacted. Recognizing that implicit bias is a major driver of racial health disparities, the California legislature set out to address this problem by educating healthcare professionals about potential biases they may harbor, and to ensure that healthcare providers are well-trained and equipped to care for all their patients.<sup>11</sup>

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<sup>8</sup> *Ending Unequal Treatment*, at 57.

<sup>9</sup> Chloë FitzGerald & Samia Hurst, *Implicit Bias in Healthcare Professionals: A Systematic Review*, 18 BMC MEDICAL ETHICS (Mar. 1, 2017), <https://bmcmethics.biomedcentral.com/articles/10.1186/s12910-017-0179-8>.

<sup>10</sup> *Id.*

<sup>11</sup> 2019 Cal. Legis. Serv. Ch. 417 (A.B. 241).

Despite this, Appellants doubt the prevalence of implicit bias in healthcare and its impact on patients, and claim they prefer to teach “evidence-based” subjects. ER-30. As Plaintiffs and their *amici* characterize it, implicit bias is a politically sensitive, ideological concept. Plaintiffs and their *amici* are incorrect. The overwhelming consensus of the scientific and medical community recognizes implicit bias as a tangible factor in healthcare disparities. Its real-world effects are not subject to reasonable dispute. In this brief, *amici* provide a brief overview of the state of racial health disparities in America, focusing on disparities experienced by Black patients. *Amici* also highlight for the Court the extensive research demonstrating the extent to which implicit bias contributes to those disparities. And *amici* explain what the research indicates about how training of medical professionals can be used as a tool to address implicit bias.

## **ARGUMENT**

### **I. SIGNIFICANT RESEARCH SHOWS THAT RACIAL HEALTH DISPARITIES HAVE BEEN AND REMAIN A SIGNIFICANT PROBLEM IN AMERICA.**

Racial health disparities in America have been thoroughly studied and documented by the scientific and medical community. Health disparities are the “health difference[s] that adversely affect[] disadvantaged populations in



comparison to a reference population, based on one or more health outcomes.”<sup>12</sup>

“Populations with health disparities are socially disadvantaged due in part to being subject to racist or discriminatory acts and are underserved in healthcare.”<sup>13</sup>

The United States government’s first comprehensive study of racial health disparities was published in 1985.<sup>14</sup> The report, commonly known as the “Heckler Report” (after former Health and Human Services (“HHS”) Secretary Margaret Heckler), concluded among other things that racial “health disparities accounted for 60,000 excess deaths each year.”<sup>15</sup> Her successor in that role during the George H.W. Bush administration, Louis Sullivan, later recounted that Secretary Heckler called those health disparities “an affront both to our ideals and to the ongoing genius of American medicine.”<sup>16</sup>

Congress followed up on the Heckler Report by mandating that that the National Academy of Medicine (formerly the Institute of Medicine) conduct its own

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<sup>12</sup> National Institute on Minority Health and Health Disparities, *Minorities Health and Health Disparities Definitions*, <https://www.nimhd.nih.gov/resources/understanding-health-disparities/minority-health-and-health-disparities-definitions.html>.

<sup>13</sup> *Id.*

<sup>14</sup> U.S. Dept. of Health and Human Services, *Report of the Secretary’s Task Force on Black & Minority Health* (1985).

<sup>15</sup> *Id.*

<sup>16</sup> Louis W. Sullivan, *The Heckler Report: Reflecting on its beginnings and 30 years of progress* (May 21, 2015), <https://minorityhealth.hhs.gov/news/heckler-report-reflecting-its-beginnings-and-30-years-progress>.

study of racial health disparities in America.<sup>17</sup> The resulting 2003 report, *Unequal Treatment*, illustrated the persistence of racial disparities in medical treatment and concluded that, among other things, those disparities could be attributed in part to healthcare providers making decisions and offering care that was influenced by implicit bias.<sup>18</sup> *Unequal Treatment* was a landmark study; it has been cited over 11,000 times since its publication, and has been credited with inspiring research and conversation about racial disparities in healthcare and fostering thousands of studies on that and related topics.<sup>19</sup>

Those subsequent studies, including the National Academies' 2024 follow-up report *Ending Unequal Treatment*,<sup>20</sup> have confirmed and fleshed out how healthcare disparities continue to exist across a broad array of medical fields. As *Ending Unequal Treatment* put it, "inequities in access to care exist across all inpatient and outpatient health care settings, including primary care, specialty care, emergency department (ED) and other hospital-based care, and rehabilitative, long-term, and

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<sup>17</sup> See Inst. of Med., *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* 1 (Smedley et al. eds., 2003) (hereinafter "*Unequal Treatment*").

<sup>18</sup> *Id.* at 162-79.

<sup>19</sup> See Michael Blanding, *Revisiting the 'Unequal Treatment' report, 20 years later*, Harvard Public Health (Oct. 3, 2022), <https://harvardpublichealth.org/alumni-post/revisiting-the-unequal-treatment-report-20-years-later/>.

<sup>20</sup> *Supra* note 6.

prison care facilities.”<sup>21</sup> These disparities reflect the reality that the health of communities of color is negatively impacted by many factors.<sup>22</sup> Implicit bias, discussed more below, is among them. Others include the social determinants of health, or “the nonmedical factors that influence health outcomes,”<sup>23</sup> many of which are driven by the historical context of slavery and discrimination in the United States (the vestiges of which still exist today). For instance, studies have connected slavery to current health outcomes; Black people living in counties where enslavement persisted in 1860 experience higher current stroke mortality overall as compared to counties where slavery had ended by 1860.<sup>24</sup> Even present-day racial segregation in residential neighborhoods is linked to negative effects on health for Black people. Greater racial segregation is connected to lower life expectancy for Black

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<sup>21</sup> *Ending Unequal Treatment*, at 79.

<sup>22</sup> See Fred Clasen-Kelly & Renuka Rayasam, *Black Americans Still Suffer Worse Health. Here’s Why There’s So Little Progress*, KFF HEALTH NEWS (Oct. 28, 2024), <https://kffhealthnews.org/news/article/racist-policies-black-health-south-carolina/>.

<sup>23</sup> Centers for Disease Control and Prevention, *Social Determinants of Health (SDOH)*, (Jan. 17, 2024), <https://www.cdc.gov/about/priorities/why-is-addressing-sdoh-important.html>.

<sup>24</sup> Charles Esenwa et al., *Historical Slavery and Modern-Day Stroke Mortality in the United States Stroke Belt*, 49 *STROKE* 465, 466 (2018), <https://pubmed.ncbi.nlm.nih.gov/29335332/>.

neighborhood residents.<sup>25</sup> It is also linked to later-stage diagnosis of cancers and lower cancer survival rates.<sup>26</sup> And racially segregated neighborhoods often have lower quality schools, another factor linked to adverse health outcomes.<sup>27</sup> The impacts of these inequities are thus predictably widespread, and too voluminous to detail here.<sup>28</sup> But some representative examples include the following:

- Over half of Black adults have hypertension, which “is the highest prevalence among all racial and ethnic groups,” and “47% of Black adults have been diagnosed with cardiovascular disease, compared with 36% of white adults.”<sup>29</sup>
- Black and Mexican American adults are more likely to have a stroke, with Black adults “most likely to have a stroke compared with other racial and ethnic groups.”<sup>30</sup>

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<sup>25</sup> Sadiya S. Khan et al., *Associations Between Neighborhood-Level Racial Residential Segregation, Socioeconomic Factors, and Life Expectancy in the US*, 4 JAMA HEALTH FORUM e231805, at 2 (July 14, 2023), <https://pmc.ncbi.nlm.nih.gov/articles/PMC10349335/>.

<sup>26</sup> David R. Williams et al., *Racism and Health*, 40 ANN. REV. PUB. HEALTH 105, 108 (2019), <https://pubmed.ncbi.nlm.nih.gov/30601726/>.

<sup>27</sup> Paula Braveman et al., *What is health equity?*, 4 BEHAV. SCI. POL’Y 1, 5 (2018), <https://pmc.ncbi.nlm.nih.gov/articles/PMC3863701/>.

<sup>28</sup> See, e.g., *Ending Unequal Treatment*, at 86 (presenting a “brief overview of the racial and ethnic inequities in selected health conditions”).

<sup>29</sup> Cleveland Clinic, *How do Race and Ethnicity Play a Role in Cardiovascular Disease?* (May 15, 2022), <https://my.clevelandclinic.org/health/articles/23051-ethnicity-and-heart-disease> (hereinafter “*Cleveland Clinic*”); Tsion Zewdu Minas, et al., *An Overview of Cancer Health Disparities: New Approaches and Insights and Why They Matter*, CARCINOGENESIS (Nov. 13, 2020) <https://pmc.ncbi.nlm.nih.gov/articles/PMC7717137/>.

<sup>30</sup> See *Cleveland Clinic*.

- Black women are three to four times more likely than white women to die from pregnancy-related complications,<sup>31</sup> with implicit bias and discriminatory attitudes in healthcare contributing to the negative high maternal health outcomes experienced by Black women.<sup>32</sup>
- Even as “cancer incidence and mortality overall are declining in all population groups in the United States, some groups continue to be at increased risk of developing or dying from certain cancers.”<sup>33</sup> Black patients have the highest death rates and shortest survival of any racial group in the United States for most types of cancer.<sup>34</sup> Black women are 40 percent more likely to die of breast cancer than white women,<sup>35</sup> despite Black women “having slightly lower incidents rates of breast cancer.”<sup>36</sup> Black men are more likely than white men “to die of prostate cancer and continue to have the highest prostate cancer mortality rates among all US racial/ethnic groups.”<sup>37</sup> For cervical cancer, Latino, Black, and indigenous people experience “higher incidence rates . . . than women of other racial/ethnic groups, with Black/African

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<sup>31</sup> Elizabeth A. Howell, *Reducing Disparities in Severe Maternal Morbidity and Mortality*, CLINICAL OBSTETRICS GYNECOLOGY 387 (Jun. 2018) <https://pmc.ncbi.nlm.nih.gov/articles/PMC5915910/>.

<sup>32</sup> Bani Saluja & Zenobia Bryant, *How Implicit Bias Contributes to Racial Disparities in Maternal Morbidity and Mortality in the United States*, 30 J. WOMEN’S HEALTH 270 (Feb. 2, 2021), <https://doi.org/10.1089/jwh.2020.8874>.

<sup>33</sup> National Cancer Institute, *Cancer Disparities*, <https://www.cancer.gov/about-cancer/understanding/disparities> (Mar. 21, 2024) (hereinafter “*National Cancer Institute*”).

<sup>34</sup> See American Cancer Society, *Cancer Facts and Figures for African Americans 2019-2021* 1 (2021), <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-facts-and-figures-for-african-americans/cancer-facts-and-figures-for-african-americans-2019-2021.pdf>; *National Cancer Institute*.

<sup>35</sup> American Cancer Society, *Cancer Facts and Figures for African Americans*; American Association for Cancer Research, *Cancer Health Disparities* (2024), <https://www.aacr.org/patients-caregivers/about-cancer/cancer-health-disparities/>

<sup>36</sup> *National Cancer Institute*.

<sup>37</sup> *Id.*

American women having the highest rates of death from the disease.”<sup>38</sup> For these and other reasons, according to the American Cancer Society, “health care disparities can affect every step of cancer care—from prevention and screening to the quality of life after cancer treatment, which means disparities in care can affect who develops and dies from cancer.”<sup>39</sup>

Other disparities are attributable in part to false assumptions that Black and white people are biologically different. Take kidney disease, which disproportionately affects Black Americans. Despite making up about 13 percent of the population, they account for 35 percent of the people with kidney failure in the United States,<sup>40</sup> though even this high figure likely represents an underdiagnosis.<sup>41</sup> For decades, medical providers used equations to diagnose kidney disease that would be adjusted if a patient was Black, based on specious research about difference in muscle mass between non-Latino white people and Black people.<sup>42</sup> The wrongful

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<sup>38</sup> *Id.*

<sup>39</sup> American Cancer Society, *Cancer Disparities ACS Research Highlights*, <https://www.cancer.org/research/acs-research-highlights/cancer-health-disparities-research.html>.

<sup>40</sup> Nat’l Kidney Found., *Kidney Disease: Fact Sheet*, [https://www.kidney.org/about/kidney-disease-fact-sheet#:~:text=Black%2FAfrican%20American%20people%20are,acute%20kidney%20injury%20\(AKI\)](https://www.kidney.org/about/kidney-disease-fact-sheet#:~:text=Black%2FAfrican%20American%20people%20are,acute%20kidney%20injury%20(AKI)).

<sup>41</sup> Jennifer W. Tsai et al., *Evaluating the Impact and Rationale of Race-Specific Estimations of Kidney Function: Estimations from U.S. NHANES, 2015-2018*, 2021 *eClinicalMedicine* 42 (Dec. 2021), [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(21\)00478-8](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(21)00478-8).

<sup>42</sup> *Id.* at 2.

use of a race-based coefficient in these equations led to the systemic underdiagnosis of kidney disease among Black people, which in turn forced Black patients to wait longer and develop more advanced kidney failure before they could gain access to the same level of care as white patients.<sup>43</sup> One study examining data from over 9,500 Black patients found that if this equation were not used, nearly one third of Black patients would have been reclassified as having a more severe kidney condition, prompting advanced care.<sup>44 45</sup>

Recently, race and ethnicity “were important factors that contributed to health inequity during the pandemic.”<sup>46</sup> “Black and Hispanic groups had a higher risk of

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<sup>43</sup> Salman Ahmed et al., *Examining the Potential Impact of Race Multiplier Utilization in Estimated Glomerular Filtration Rate Calculation on African-American Care Outcomes*, 36 J. GEN. INTERN. MED. 464, 470 (Feb. 2021), <https://pubmed.ncbi.nlm.nih.gov/33063202/>.

<sup>44</sup> Prabhdeep Uppal et al., *The Case Against Race-Based GFR*, 31 DEL. PUBLIC HEALTH 86 (Aug.31, 2022) (citing Jennifer Bragg-Gresham et al., *Prevalence of Chronic Kidney Disease Among Black Individuals in the US After Removal of the Black Race Coefficient From a Glomerular Filtration Rate Estimating Equation*, JAMA NETWORK OPEN (2021)).

<sup>45</sup> Use of such equations in the medical profession is so widespread – and potentially harmful – that HHS this year promulgated a rule prohibiting the use of such equations to the extent they operate in discriminatory ways. 45 C.F.R. § 92.210.

<sup>46</sup> Nour Mheidly et al., *Emerging Health Disparities During the COVID-19 Pandemic*, 13 AVICENNA J. MED. 60 (December 23, 2022) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10038746/>.

COVID-19 infection and hospitalization compared to their [w]hite counterparts,”<sup>47</sup> and died from COVID-19 more than other racial groups.<sup>48</sup> This disparity can be attributed in part to the design of pulse oximeters. A study of over 20,000 patients hospitalized for COVID-19 from March 2020 and October 2021 showed that pulse oximeters consistently overestimated oxygen saturation for Black and Hispanic patients.<sup>49</sup> Consequently, such patients were less likely to be admitted to emergency rooms to be treated for COVID-19, were less likely to receive urgent treatment or supplemental oxygen, and if treated, often waited longer than white patients.<sup>50</sup>

This is all the tip of a very large iceberg. These racial health disparities, which span across areas of healthcare, persist even when controlling for factors such as a

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<sup>47</sup> Khanh Duong, et. al, *Disparities in COVID-19 Related Outcomes in the United States by Race and Ethnicity Pre-Vaccination Era: An Umbrella Review of Meta-Analyses*, FRONT. PUBLIC HEALTH (Sep. 7, 2023) <https://pubmed.ncbi.nlm.nih.gov/37744476/>.

<sup>48</sup> Thomas J. Bollyky et al., *Assessing COVID-19 Pandemic Policies and Behaviours and Their Economic and Educational Trade-offs Across US States from Jan 1, 2020, to July 31, 2022: An Observational Analysis*, 401 LANCET 1341 (2023), [https://www.thelancet.com/journals/lancet/article/PIIS01406736\(23\)00461-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS01406736(23)00461-0/fulltext).

<sup>49</sup> Ashraf Fawzy et al., *Clinical Outcomes Associated With Overestimation of Oxygen Saturation by Pulse Oximetry in Patients Hospitalized With COVID-19*, JAMA NETWORK OPEN 4-5 (Aug. 24, 2023), <https://pmc.ncbi.nlm.nih.gov/articles/PMC10450566>.

<sup>50</sup> Sylvia Sudat et al., *Racial Disparities in Pulse Oximeter Device Inaccuracy and Estimated Clinical Impact on COVID-19 Treatment Course*, 192 AM. J. EPIDEMIOLOGY 703 (May 5, 2023), <https://pubmed.ncbi.nlm.nih.gov/36173743/>.



patient's insurance status and income level.<sup>51</sup> Critically, and as explained below, implicit bias is a major driver of these disparities.

## **II. SIGNIFICANT RESEARCH SHOWS THAT IMPLICIT BIAS CONTRIBUTES TO AND PERPETUATES RACIAL HEALTH DISPARITIES, AND CAN BE ADDRESSED BY TRAINING OF MEDICAL PRACTITIONERS.**

The healthcare disparities affecting communities of color are explained by numerous factors, including the many “structural determinants of health” and false biological concepts of race referenced above. Implicit bias also plays a role in contributing to racial health disparities in America, for those biases are built into the attitudes, assumptions, and tools (such as clinical algorithms) used by the medical profession. As individuals operating within a society with implicit bias, healthcare providers often act on these implicit biases because they are unaware of them.<sup>52</sup> When providers act on their unconscious biases, the result is differential treatment (and thus outcomes) for patients. This phenomenon is well-documented – “[t]he literature on implicit bias in health care settings is robust, and has increased

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<sup>51</sup> See *Unequal Treatment* 1; see also Shirley A. Hill, *Inequality and African-American Health: How Racial Disparities Create Sickness*, 11, 22 (2016).

<sup>52</sup> See, e.g., Elizabeth N. Chapman, et al., *Physicians and Implicit Bias: How Doctors May Unwittingly Perpetuated Health Care Disparities*, 28 J. GEN. INTERN. MED. 1504 (2013), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3797360/> (“All of society is susceptible to these biases, including physicians.”).

significantly in the 20 years since *Unequal Treatment*”<sup>53</sup> – and, *amici* respectfully submit, its existence is not subject to reasonable dispute.

Likewise, research suggests that training of providers can ameliorate the effects of implicit bias. As *Ending Unequal Treatment* observed, “[e]ffective longitudinal interventions exist for reducing implicit bias toward people of color, and experts have called for more widespread implementation in health care settings.”<sup>54</sup>

**A. RESEARCH DEMONSTRATES THE PRESENCE AND EFFECTS OF IMPLICIT BIAS ON BLACK PATIENTS AND OTHER PATIENTS OF COLOR ACROSS A WIDE ARRAY OF MEDICAL FIELDS.**

Implicit bias has been documented throughout the medical process. For example, at the intake stage, it has been documented that Black and Latino children who visited emergency rooms were less likely to “have their care needs classified as immediate/emergent” and “experienced significantly longer wait times and overall visits as compared to white [children],” and that patients of color are less likely than white patients to receive preventive care and routine medical procedures.<sup>55</sup> Black

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<sup>53</sup> *Ending Unequal Treatment*, at 57.

<sup>54</sup> *Id.*

<sup>55</sup> *Unequal Treatment*, at 123; Matthew Wynia et al., *Collecting and Using Race, Ethnicity and Language Data in Ambulatory Settings*, 6 (2011); Dayna Bowen Matthew, *Just Medicine: A Cure for Racial Inequality in American Health Care* (2015) (hereinafter “*Just Medicine*”).

patients are also treated less often for pain than white patients.<sup>56</sup> And physicians refer white patients to a specialist almost twice as often as Black patients.<sup>57</sup>

Studies show that implicit bias drives these disparities. Among other things, those studies suggest that providers (1) express less empathy for Black patients compared with white patients; (2) are more likely to describe Black patients as uncooperative or noncompliant; (3) may prescribe less aggressive treatment because they do not trust Black patients to adhere to a treatment plan; and (4) are more likely to question the credibility of Black patients, use insensitive language, and rely on negative stereotypes of Black people.<sup>58</sup> The unconscious bias of providers thus drives Black patients (as compared to other patients) away from the care they need, leading to worse health outcomes.

In the area of maternal health, Black women are more likely to be tested for illicit drug use during labor and delivery than white women, regardless of their

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<sup>56</sup> Kelly M. Hoffman et al., *Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites*, 113 PNAS 4296 (2016), <https://pubmed.ncbi.nlm.nih.gov/27044069/>; *Just Medicine*, at 61, 95.

<sup>57</sup> Hill, *supra* note 51, at 91.

<sup>58</sup> Rachel L. Johnson et al., *Patient race/ethnicity and quality of patient-physician communication during medical visits*, 94 AM. J. PUBLIC HEALTH 2084 (Dec. 2004), <https://pubmed.ncbi.nlm.nih.gov/15569958/>; *see also* Hoffman, *supra* note 56, at 4299 (finding that 73 percent of “white medical students and residents . . . hold [false] beliefs about biological differences between” Black and white people”).

history of substance abuse, and even though they did not have a higher probability of testing positive than white women.<sup>59</sup> Indeed, pregnant Black women are more likely to say they were pressured into having a cesarean section or undergo other childbirth interventions, such as epidurals and labor induction, even when they sought to avoid them.<sup>60</sup> The issue persists even after birth, via a phenomenon called “physician-patient racial concordance” – that is, physicians and newborn infants sharing a racial identity “is associated with a significant improvement in mortality for Black infants.”<sup>61</sup>

Research also shows, at a more general level, how implicit bias plays a negative role in physician-patient outcomes. For example, a study published in the *Journal of Clinical Oncology* evaluated the implicit bias of providers, and then mapped those providers’ interactions with Black cancer patients. The results showed that providers with higher levels of implicit bias were less supportive of and spent less time with their patients than providers who measured lower in implicit bias.

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<sup>59</sup> Marian Jarlenski, et al., *Association of Race with Urine Toxicology Testing Among Pregnant Patients During Labor and Delivery*, *JAMA Health Forum* (2023), <https://pmc.ncbi.nlm.nih.gov/articles/PMC10105305/>.

<sup>60</sup> Rachel G. Logan, et al., *Coercion and non-consent during birth and newborn care in the United States*, 49 *BIRTH* 749 (June 13, 2022), <https://pubmed.ncbi.nlm.nih.gov/35737547/>.

<sup>61</sup> Brad N. Greenwood et al., *Physician-Patient Racial Concordance and Disparities in Birthing Mortality for Newborns*, 117 *PNAS* 21194 (2020), <https://doi.org/10.1073/pnas.1913405117>.

And the patients responded to this relative lack of attention—the patients had more difficulty remembering what their physicians told them, had less confidence in their treatment plans, and thought it would be more difficult to follow recommended treatments.”<sup>62</sup>

Cardiovascular disease provides another example. Black patients are more likely than white patients to receive older treatments, and less likely to be prescribed newer or more expensive therapies.<sup>63</sup> Black patients admitted to hospitals for a stroke were less likely than white patients to receive treatments to break up blood clots, even after adjusting for other patient characteristics.<sup>64</sup> And research suggests that implicit bias plays a role in driving these treatment differentials. For example, one study led by Harvard Medical School professors documented that physicians who scored higher on an implicit bias test were less likely to prescribe thrombolysis

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<sup>62</sup> Louis A. Penner et al., *The Effects of Oncologist Implicit Racial Bias in Racially Discordant Oncology Interactions*, 34 J. CLINICAL ONCOLOGY 24 (Aug. 2016), <https://doi.org/10.1200/JCO.2015.66.3658>.

<sup>63</sup> *Just Medicine*, at 57-58.

<sup>64</sup> Lee H. Schwamm et al., *Race/Ethnicity, Quality of Care, and Outcomes in Ischemic Stroke*, 121 CIRCULATION 1492, 1497 (2010), <https://doi.org/10.1161/circulationaha.109.881490>.

(a particular type of therapy to treat blood clots) to Black patients than to other patients.<sup>65</sup>

Indeed, research indicates that clinicians tend to measure “low in explicit and high in implicit” bias.<sup>66</sup> In other words, clinicians are generally not explicitly biased, and most do not intend to treat patients differently. However, they still harbor implicit bias that influences their behavior towards patients. The outcomes on patient interactions, therefore, are more subtle but more pervasive across the medical field. A study found that white clinicians have “less direct eye contact with Black [people] than with [w]hite [people],” and more generally are “more likely to experience anxiety and discomfort” around Black patients.<sup>67</sup>

Studies have also identified implicit bias at work in the medical education process. Medical admissions committee members have been shown to display “significant unconscious white preferences . . . despite acknowledging almost zero

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<sup>65</sup> Alexander R. Green et al., *Implicit Bias among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients*, 22 J. GEN. INTERNAL MED. 1231 (2007), <https://pmc.ncbi.nlm.nih.gov/articles/PMC2219763/>.

<sup>66</sup> Michelle van Ryn et al., *The Impact of Racism on Clinician Cognition, Behavior, and Clinical Decision Making*, 8 DU BOIS REV. 199, 204 (2011), <https://pmc.ncbi.nlm.nih.gov/articles/PMC3993983/>.

<sup>67</sup> *Just Medicine*, at 39.

explicit white preference.”<sup>68</sup> Medical textbooks – “often students’ first point of engagement with medical conditions” – “provide the foundation for the development of biases that affect future interactions.”<sup>69</sup> In one study, researchers reviewed over 4000 images across textbooks assigned in U.S. medical schools, and found that although “[t]extbooks approximate the racial distribution of the U.S. population,” “the skin tones represented . . . overrepresent light skin tone and underrepresent dark skin tone.”<sup>70</sup> In another study, researchers from the University of Virginia surveyed over 200 white medical residents and students, finding that more than one third of them falsely believed Black people had thicker skin than white people; about seven percent believed Black people had less sensitive nerve endings than white people, leading to less accurate pain treatment recommendations.<sup>71</sup> And after hearing negative comments about Black patients by other physicians, U.S. medical students

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<sup>68</sup> Jasmine R. Marcelin, et al., *The Impact of Unconscious Bias in Healthcare: How to Recognize and Mitigate It*, 220 J. INFECTIOUS DISEASES S62 (Sep. 15, 2019) [https://academic.oup.com/jid/article/220/Supplement\\_2/S62/5552356](https://academic.oup.com/jid/article/220/Supplement_2/S62/5552356).

<sup>69</sup> Aleena Virdee & Alisha Iyer, *The Role of Medical Schools in Propagating Physician Bias*, 384 N. ENG. J. MED. e97 (Jun. 16, 2021), <https://www.nejm.org/doi/full/10.1056/NEJMc2106008>.

<sup>70</sup> Patricia Louie, et al., *Representations of Race and Skin Tone in Medical Textbook Imagery*, 202 SOCIAL SCIENCE & MEDICINE 38 (Apr. 2018), <https://doi.org/10.1016/j.socscimed.2018.02.023>.

<sup>71</sup> Hoffman, *supra* note 56, at 4298.

exhibited significantly greater implicit racial bias in their fourth year of medical school, compared to their first year.<sup>72</sup>

These biases drive outcomes with tangible, real-world effects. To take one of many possible examples: last year, the New York Times published a series of interviews with Black women about how they have been stereotyped during medical appointments.<sup>73</sup> For instance, Ruhamah Dunmeyer Grooms, a Black 35-year-old business analyst and mother was asked, “Where’s your baby daddy?” by multiple medical providers. For Shamika Tozay, a 37-year-old pregnant woman, the nurse checking the fetal heart rate of Ms. Tozay’s baby boy referred to him as “a hoodlum.”<sup>74</sup> And Shalon Irving, a 36-year-old public health expert at the Center for Disease Control and Prevention, sought treatment no less than six times from an Atlanta hospital after she delivered her baby via cesarean section, but was sent home

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<sup>72</sup> Michelle van Ryn et al., *Medical School Experiences Associated with Change in Implicit Racial Bias Among 3547 Students: A Medical Student CHANGES Study Report*, 30 J. GEN. INTERN. MED. 1748, 1753 (Jul. 2015), <https://pubmed.ncbi.nlm.nih.gov/26129779/>.

<sup>73</sup> Roni Caryn Rabin, *How Unconscious Bias in Health Care Puts Pregnant Black Women at Higher Risk*, N.Y. TIMES (Dec. 12, 2023), <https://www.nytimes.com/2023/12/12/health/pregnant-black-women-bias.html>.

<sup>74</sup> *Id.*



each time.<sup>75</sup> Hours after being turned away again because the doctor was “too busy,” Irving collapsed and died due to complications from hypertension.<sup>76</sup>

Irving’s story illustrates how the results of implicit bias can have serious, even deadly, consequences for Black patients. When physicians act on their biases, they often deliver inferior treatment, and patients of color become sicker and die earlier as a result. Implicit bias goes beyond anecdotes: the literature tells a consistent story, namely that implicit biases in the American medical profession are real and prevalent, and have real-world impacts on care.

#### **B. RESEARCH SHOWS THAT TRAINING OF MEDICAL PROFESSIONALS CAN HELP ADDRESS IMPLICIT BIAS.**

It is against this backdrop that California enacted AB 241 “to provide specified healing arts licensees with strategies for understanding and reducing the impact of their biases in order to reduce disparate outcomes and ensure that all patients receive fair treatment and quality health care.”<sup>77</sup> Per AB 241, those strategies are to be provided by training components of CME courses. And research indeed indicates that implicit bias training can “bring individual implicit biases to

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<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

<sup>77</sup> Cal. Bus. & Prof. Code § 2190.1.

the forefront and facilitate identifying, reflecting on, and addressing them”<sup>78</sup> in order to reduce disparities. This reflects that a person’s bias can often only be addressed once that person has a conscious awareness of the issue and is equipped to address their bias.

Appellants’ interpretation of implicit bias misunderstands the important role that trainings can play in effectively reducing bias. Studies show that implicit bias training is most productive when study participants learn about practical strategies to counteract implicit bias.<sup>79</sup> Beyond simply raising awareness, effective training methods to address racial bias in the healthcare context incorporate “interactive, in-depth discussions that teach providers about racism/structural inequities and provide them with tools to address it within their health care organizations.”<sup>80</sup> A review of over fifty studies about implicit bias instruction in medical education concluded that

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<sup>78</sup> American College of Physicians, *Understanding and Addressing Disparities and Discrimination in Education and in the Physician Workforce* (2021), at 7.

<sup>79</sup> This is consistent with research outside of the medical education context; in a composite study involving 17,021 participants, researchers observed that interventions featuring intentional strategies to overcome biases were consistently among the most effective methods to reduce implicit biases. Calvin K. Lai et al., *Reducing Implicit Racial Preferences: I. A Comparative Investigation of 17 Interventions*, 143 J. EXP. PSYCHOL.: GEN. 1765 (Aug. 2014), <https://doi.org/10.1037/a0036260>.

<sup>80</sup> *Ending Unequal Treatment*, at 191.

implicit bias should take a “skills-based, behavior approach” focused on “improv[ing] patient outcomes.”<sup>81</sup>

Studies exploring particular strategies against implicit bias bear this out. For example, in a study led by the University of Wisconsin, participants were provided with strategies to mitigate implicit bias.<sup>82</sup> Furthermore, they considered how they would use those strategies in their daily lives.<sup>83</sup> After considering these strategies, students reported decreased implicit bias even eight weeks after the session.<sup>84</sup> In another study led by the University of Minnesota, medical residents and faculty were provided practical, applied strategies to address implicit bias in practice.<sup>85</sup> Four months after the intervention, study participants reported that they were continuing to implement the strategies that they had learned.<sup>86</sup> As described by the National

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<sup>81</sup> Cristina M. Gonzales et al., *Implicit bias instructions across disciplines related to the social determinants of health: a scoping review*, 28 *ADVANCES IN HEALTH SCIENCE EDUCATION* 541, 574 (May 28, 2023), <https://pubmed.ncbi.nlm.nih.gov/36534295/>.

<sup>82</sup> Patricia G. Devine et al., *Long-term reduction in implicit race bias: a prejudice habit-breaking intervention*, 48 *J. EXP. SOC. PSYCHOL.* 1267 (Nov. 2012), <https://pmc.ncbi.nlm.nih.gov/articles/PMC3603687/>.

<sup>83</sup> *Id.*

<sup>84</sup> *Id.*

<sup>85</sup> Michelle D. Sherman et al., *Implicit Bias Training in a Residency Program: Aiming for Enduring Effects*, 51 *FAM. MED.* 677 (2019), <https://pubmed.ncbi.nlm.nih.gov/31509218/>.

<sup>86</sup> *Ending Unequal Treatment*, at 190 (citing Sherman, *supra*); see also Jeff Stone et al., *Testing active learning workshops for reducing implicit stereotyping of*

Academies, these two studies represent “promising interventions” for “sustained changes” in healthcare providers’ behavior.<sup>87</sup>

AB 241 goes beyond raising awareness of implicit bias. In California, physicians must complete at least 50 hours of CME every 2 years to remain licensed to practice medicine in California.<sup>88</sup> Under AB 241, all training hours that “include a direct patient care component” must incorporate implicit bias training.<sup>89</sup> Thus, the law not only ensures that physicians attend multiple implicit bias trainings but also ensures that the training is tailored to the content of the CME course—consistent with emerging best practices for effective implicit bias training.<sup>90</sup>

While research into effective implicit bias interventions continues, and it is no doubt true that some training methods are more effective than others, the weight of the research shows that training can be effective at addressing implicit bias. Absent such trainings, Black patients will continue to be harmed by the inadequate care they receive when medical providers are not attuned to and aware of their biases. AB 241’s requirement that CME courses provide “strategies to address . . . unintended

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*Hispanics by majority and minority group medical students*, 5 STIGMA HEALTH 94 (2020), <https://pmc.ncbi.nlm.nih.gov/articles/PMC7597671/> (control of stereotypes in part due to training focused on provider skills).

<sup>87</sup> *Ending Unequal Treatment*, at 190.

<sup>88</sup> Cal. Code Regs. Tit. 16, § 1336.

<sup>89</sup> Cal. Bus. & Prof. Code § 2190.1(d)(2).

<sup>90</sup> *Id.* at 189.

biases in decisionmaking” and “examples of how implicit bias affects perceptions and treatment decisions”<sup>91</sup> is consistent with this considerable and growing body of scientific research.

## CONCLUSION

Extensive research shows that implicit bias in medicine is a real, observed phenomenon that causes tangible, real-world harms, and that training of medical practitioners can form part of an effective response. *Amici* respectfully ask this Court to consider the scientific record as it resolves this appeal.

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<sup>91</sup> Cal. Bus. & Prof. Code § 2190.1.

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE]**

1. This brief complies with the type-volume limitations of Federal Rule of Appellate Procedure 29(a)(5) because it contains 5,962 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f).

2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the tpestyle requirements of Federal Rule of Appellate Procedure 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Office Word for Office 365 in Times New Roman 14-point font.

October 30, 2024

/s/ Stanley J. Brown  
Stanley J. Brown

## **CERTIFICATE OF SERVICE**

I certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on October 30, 2024. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

October 30, 2024

/s/ Stanley J. Brown  
Stanley J. Brown