

et al.,

*Plaintiffs,*

National Medical Association is a non-profit entity and has no parent corporation. No publicly owned corporation owns 10% or more of the stocks of NMA.

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American College of Physicians is a non-profit entity and has no parent corporation. No publicly owned corporation owns 10% or more of the stocks of ACP.

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*Amici* are leading medical, health equity, and social science experts as well as organizations with direct experience on the frontlines of the COVID-19 pandemic, including in New York. *Amici* submit this brief to underscore the substantial medical and scientific literature that supports the New York Department of Health’s and the New York City Department of Health and Mental Hygiene’s acknowledgment that “longstanding systemic health and social inequities” have contributed to an increased risk of severe illness. (New York City Department of Health and Mental Hygiene, 2020)

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severe illness.

For two years, the COVID-19 pandemic has wreaked havoc in communities across the country, upended the lives of countless families, and killed more than 69,000 New Yorkers.<sup>3</sup> Although the COVID-19 pandemic has taken a toll on all New Yorkers, it has disproportionately impacted minoritized populations. For example, Latinx populations have experienced higher rates of SARS-CoV-2 infection than white populations, and BIPOC populations have experienced higher rates of severe COVID-19 symptoms, serious illness requiring hospitalization, and death from COVID-19 than whites.

Minoritized populations have experienced disproportionately high rates of death from COVID-19.<sup>4</sup> Based on data collected through March 7, 2021, Black individuals have died from COVID-19 at 1.4 times the rate of white individuals.<sup>5</sup> One study found that, among individuals aged 25–54, the *Black and Latinx populations lost nearly 7 times, and the Indigenous population lost nearly 9 times, as many years of life before age 65 from COVID-19 as the white population.*<sup>6</sup> “[W]hile Asian Americans make up a small proportion of COVID-19 deaths in the USA, they

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<sup>3</sup> N.Y. State Dep’t of Health, *COVID-19 Fatalities Tracker*, on.ny.gov/3HINh4j (last visited Feb. 28, 2022).

<sup>4</sup> See, e.g., Zirui Song et al., *Racial and Ethnic Disparities in Hospitalization Outcomes Among Medicare Beneficiaries During the COVID-19 Pandemic*, JAMA Health Forum, Dec. 23, 2021, doi.org/10.1001/jamahealthforum.2021.4223

<sup>5</sup> COVID Tracking Project, The Atlantic, *The COVID Racial Data Tracker*, <https://bit.ly/3KZDOSk> (last visited Feb. 28, 2022).

<sup>6</sup> Mary T. Bassett et al., *Variation in racial/ethnic disparities in COVID-19 mortality by age in the United States: A cross-sectional study*, PLOS Med., Oct. 20, 2020, at 10, [bit.ly/3v1xHYk](https://bit.ly/3v1xHYk).

experience significantly higher excess all-cause mortality (3.1 times higher), case fatality rate (as high as 53% higher), and percentage of deaths attributed to COVID-19 (2.1 times higher) compared to non-Hispanic Whites.”<sup>7</sup> The disproportionately higher mortality rates for BIPOC people remain even after accounting for differences in level of education.<sup>8</sup> The inequity is stark:

If all groups had experienced the same mortality rates as college-educated non-Hispanic White individuals, there would have been 48% fewer COVID-19 deaths among adults aged 25 years or older overall, including 71% fewer deaths among racial and ethnic minority populations and 89% fewer deaths among racial and ethnic minority populations aged 25 to 64 years.<sup>9</sup>

In New York State, according to a 2020 study, Black individuals comprised 16% of the population but made up 22% of COVID-19 deaths statewide;<sup>10</sup> Latinx individuals comprised 19% of state residents, but made up 24% of statewide COVID-19 deaths.<sup>11</sup> By contrast, whites comprised 55% of New York State’s population, but made up 43% of statewide COVID-19 deaths.<sup>12</sup> According to recent data from New York State, the COVID-19 death rate for whites has been 155 per 100,000, whereas the death rates for Asian American, Black, and Latinx people has been 186, 349, and 269 per 100,000, respectively.<sup>13</sup> Outside of New York City, the age-adjusted

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<sup>7</sup> Brandon W. Yan, *Death Toll of COVID-19 on Asian-Americans: Disparities Revealed*, 36 J. Gen. Internal Med. 3547, 3545 (Aug. 4, 2021), doi.org/10.1007/s11606-021-07003-0.

<sup>8</sup> Justin M. Feldman & Mary T. Bassett, *Variation in COVID-19 Mortality in the US by Race and Ethnicity and Educational Attainment*, JAMA Network, Nov. 23, 2021, at 1, bit.ly/3sirmVs.

<sup>9</sup> *Id.*

<sup>10</sup> Laurens Holmes Jr. et al., *Black–White Risk Differentials in COVID-19 (SARS-COV2) Transmission, Mortality and Case Fatality in the United States: Translational Epidemiologic Perspective and Challenges*, 17 Int’l J. Env’t Rsch. & Pub. Health 4322, 4328 (2020), doi.org/10.3390/ijerph17124322.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> COVID-19 Health Equity Interactive Dashboard, Emory University, *COVID-19 Outcomes in New York*, covid19.emory.edu/36 (last visited Feb. 28, 2022). Plaintiffs assert that “the rate of death for white non-Hispanic individuals exceeds the rate for any other group in New York.” Pl. Mem. Of Law at 1; *see also id.* at 12. Yet the data at the URL plaintiffs cite, *see id.* at 1 n.5, 12 n.15, is inconsistent with data at the URL cited in this footnote, as well as with data reported elsewhere. *See, e.g., supra* notes 3, 10–12; *see also infra* note 16. In any case, data that has been adjusted for age most accurately reflects racial disparities in COVID-19 deaths. *See infra* note 16.

death rate “is double or even quadruple for [Black], Latinx, and Asian New Yorkers” relative to white New Yorkers.<sup>14</sup> In fact, after adjusting for age, *New York is the state with the highest COVID-19 mortality rate among its Black residents.*<sup>15</sup> Age-adjusted racial and ethnic disparities in death rates in New York and New York City have persisted throughout the pandemic.<sup>16</sup>

Indeed, from the earliest days of the COVID-19 pandemic, minoritized individuals have been disproportionately impacted. In New York City, the initial epicenter of the pandemic, the COVID-19 case rates in majority Black, Latinx, and other communities marginalized by systems and structures was between 24% and 110% higher than those in majority white communities<sup>17</sup> before leveling out, although Latinx communities still experience significantly higher infection rates than whites.<sup>18</sup>

More significantly, BIPOC people experience disproportionately higher rates of severe illness from COVID-19.<sup>19</sup> As of March 2021, the COVID-19 hospitalization rate of Asian

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<sup>14</sup> Amanda Dunker & Elisabeth Ryden Benjamin, *How Structural Inequalities in New York’s Health Care System Exacerbate Health Disparities During the COVID-19 Pandemic: A Call for Equitable Reform*, Cmty. Serv. Soc’y (June 4, 2020), [bit.ly/3KZ7JtZ](https://bit.ly/3KZ7JtZ).

<sup>15</sup> APM Research Lab, *The Color of Coronavirus: COVID-19 Deaths by Race and Ethnicity in the U.S.* (Mar. 15, 2021), [bit.ly/3uqm5NU](https://bit.ly/3uqm5NU).

<sup>16</sup> See N.Y. State Dep’t of Health, *COVID-19 Fatalities Tracker*, *supra* note 3 (providing link to age-adjusted death rates by race/ethnicity in New York State); [nychealth/coronavirus-data](https://nychealth.github.io/coronavirus-data/), GitHub (last visited Feb. 28, 2022), <https://bit.ly/35p3k34> (displaying age-adjusted hospitalization and death rates by race); see also CDC, *Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity*, at n.3 (updated Feb. 1, 2022) <https://bit.ly/34P9b1T> (“Adjusting by age is important because risk of infection, hospitalization, and death is different by age, and age distribution differs by racial and ethnic group. If the effect of age is not accounted for, racial and ethnic disparities can be underestimated or overestimated.”).

<sup>17</sup> D. Phuong Do & Reanne Frank, *Unequal burdens: assessing the determinants of elevated COVID-19 case and death rates in New York City’s racial/ethnic minority neighbourhoods*, 75 J. Epidemiology & Cmty. Health 321, 323 (Mar. 10, 2021), [bit.ly/3GFw4kU](https://bit.ly/3GFw4kU).

<sup>18</sup> NYC Health, *COVID-19: Data, Case, Hospitalization, and Death Rates*, <https://on.nyc.gov/3BHGPT5> (last visited Feb. 28, 2022).

<sup>19</sup> See, e.g., Anna M. Acosta et al., *Racial and Ethnic Disparities in Rates of COVID-19–Associated Hospitalization, Intensive Care Unit Admission, and In-Hospital Death in the United States From March 2020 to February 2021*, JAMA Network, Oct. 21, 2021, [bit.ly/36otGCW](https://bit.ly/36otGCW).



Americans, Latinx, and Black New Yorkers was 2.5, 3.8, and 4.2 times that of white New Yorkers,

of undiagnosed medical conditions (including diabetes),<sup>24</sup> thus increasing the likelihood of having a risk factor that goes undetected. And among people diagnosed with medical conditions such as diabetes or heart disease, BIPOC people experience higher rates of more severe cases, disease-related complications, and premature death from those diseases, than their white counterparts.<sup>25</sup> Consistent with this evidence, a study found that “racial disparities in COVID-19 outcomes exist despite comparable ECIs [comorbidities] among” patients.<sup>26</sup> The researchers calculated that Black patients in the sample had 1.72 times the odds of invasive ventilator dependence than white patients, and Indigenous patients had 2.06 times the odds of death than white patients.<sup>27</sup>

Studies have found that Black and Latinx people experience higher rates of certain serious COVID-19 related complications than white individuals. For example, according to one study of several hospitals in and around New York City, 37% of patients hospitalized for COVID-19 develop acute kidney injury, which significantly increases the likelihood of death.<sup>28</sup> The study further found that Black patients were more likely than white patients to develop acute kidney

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<sup>24</sup> See CDC, *Prevalence of Both Diagnosed and Undiagnosed Diabetes*, *supra* note 23.

<sup>25</sup> See Shirley A. Hill, *Inequality and African-American Health: How Racial Disparities Create Sickness* 11, 60 (2016) [hereinafter *Inequality and African-American Health*]; Dayna Bowen Matthew, *Just Medicine: A Cure for Racial Inequality in American Healthcare* 57 (2015) [hereinafter *Just Medicine*]; Matthew Wynia et al., *Collecting and using race, ethnicity and language data in ambulatory settings: A white paper with recommendations from the Commission to End Health Care Disparities*, Comm’n to End Health Care Disparities, at 6–7 (2011), [bit.ly/3omfD6R](https://bit.ly/3omfD6R); Ctrs. for Medicare & Medicaid Servs. (CMS), *Racial and Ethnic Disparities in Diabetes Prevalence, Self-Management, and Health Outcomes among Medicare Beneficiaries*, at 1–2, 9–11 (2017), [go.cms.gov/3s2Ettq](https://go.cms.gov/3s2Ettq).

<sup>26</sup> Fares Qeadan et al., *Racial disparities in COVID-19 outcomes exist despite comparable Elixhauser comorbidity indices between Blacks, Hispanics, Native Americans, and Whites*, *Scientific Reports*, Apr. 22, 2021, at 6, [doi.org/10.1038/s41598-021-88308-2](https://doi.org/10.1038/s41598-021-88308-2).

<sup>27</sup> *Id.*

<sup>28</sup> CDC, *Disparities in Hospitalizations*, [bit.ly/3ufveJj](https://bit.ly/3ufveJj) (last updated Feb. 16, 2022); Jamie S. Hirsch et al., *Acute kidney injury in patients hospitalized with COVID-19*, 98 *Kidney Int* 209, 210, 211 (2020), [bit.ly/3sO3ZTP](https://bit.ly/3sO3ZTP).









healthcare services is also restricted in racially segregated neighborhoods.

*ii. Access to healthcare as a social driver of health.*

communities “were not included in vaccine priority plans crafted by the state and city.”<sup>59</sup> For example, a study showed that “early COVID-19 vaccination efforts in NYC [were] focused primarily in White, middle-to-upper class neighborhoods, with the greatest access occurring in those areas.”<sup>60</sup> The vaccine rollout in New York City was “plagued by stark racial disparities, with Black and Latino residents receiving far fewer doses than white residents.”<sup>61</sup> Gaps in New York City’s COVID-19 response policy resulted in inadequate access to COVID-19 testing to communities of color.<sup>62</sup> A September 2021 study in New York City observed that “racial disparities in access to [COVID-19] testing remain as of today, despite the need for testing in communities that experience a large number of essential workers living in crowded realities.”<sup>63</sup>

Treatment options may also be limited in racially segregated communities. Despite experiencing higher rates of severe illness and death from COVID-19, BIPOC patients have been less likely than white patients to receive monoclonal antibody therapies (mAb). A recent large-scale study that included several healthcare facilities in New York found that Latinx, Black, Asian American, and other patients of color received mAb 58%, 22%, 48%, and 47% less often,

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<sup>59</sup> Ethan Geringer-Sameth, *Why Didn’t New York’s Hardest Hit Communities Receive Covid Vaccine Priority?*, Gotham Gazette (Jan. 17, 2021), [www.gothamgazette.com/state/10075-why-didnt-new-york-hardest-hit-communities-of-color-covid-vaccine-priority](http://www.gothamgazette.com/state/10075-why-didnt-new-york-hardest-hit-communities-of-color-covid-vaccine-priority).

<sup>60</sup> Natasha Williams et al., *Assessment of Racial and Ethnic Disparities in Access to COVID-19 Vaccination Sites in Brooklyn, New York*, JAMA Network, June 18, 2021, at 3, [bit.ly/3oDirwt](https://bit.ly/3oDirwt).

<sup>61</sup> Emma G. Fitzsimmons, *Black and Latino New Yorkers Trail White Residents in Vaccine Rollout*, N.Y. Times (Sept. 29, 2021), [nyti.ms/34JRD7m](https://nyti.ms/34JRD7m).

<sup>62</sup> Wil Lieberman-Cribbin et al., *Disparities in COVID-19 Testing and Positivity in New York City*, 59 Am. J. Preventive Med. 326 (2020), [doi.org/10.1016/j.amepre.2020.06.005](https://doi.org/10.1016/j.amepre.2020.06.005); John Kelly & Stephen Cioffi, *Testing centers in many non-white neighborhoods likely to be more crowded*, [v\(ghbo5\( \)Tj-0.002](https://www.ghbo5.com/Tj-0.002). TD[(S.aoods)-1 -6dzs)-1 (t)-2 [(di)-10 (21))2 (c9 (w)-3 ( Y8.1 (s)-0.9 (par)(c)4 (e)4 (n 0 Td



respectively, than white patients.<sup>64</sup> The study concluded that, “as a consequence of [BIPOC people’s] higher prevalence of preexisting conditions,” the mAb treatment inequity “amplif[ies] the increased risk for severe COVID-19–associated outcomes, including death among these groups.”<sup>65</sup> The CDC identified several access-related factors as potential explanations for the documented racial and ethnic inequities in COVID-19 mAb treatment, including “systemic factors such as limited access to testing and care because of availability constraints, inadequate insurance coverage, and transportation challenges; lack of a primary care provider to recommend treatment; variations in treatment supply and distribution; potential biases in prescribing practices; and limited penetration of messaging in some communities about mAb availability and effectiveness to prevent disease progression.”<sup>66</sup>

*iii. Working conditions as a social driver of health.*

Racial and ethnic inequities in employment opportunities lead to adverse health outcomes for several reasons. Overall, individuals in minoritized groups have disproportionately lower-paying jobs, leaving them with less money to spend on healthcare.<sup>67</sup> They are also more likely to work in jobs that cannot be done remotely from home, such as health care, service and retail occupations, and to have longer commute times on public transportation, increasing their exposure to infectious diseases like COVID-19.<sup>68</sup>



exposure to discrimination and segregation during juvenile years predicts adult inflammation by age 28, and that the effect was “considerably more robust than that of traditional health risk factors such as diet, exercise, smoking, and low [socioeconomic status].”<sup>76</sup> Racial discrimination need not be intended: “[e]vidence has revealed that unconscious bias in interpersonal interactions is strong, widespread and deeply rooted, and could potentially take a heavy toll on health.”<sup>77</sup>

v. *Incarceration and homelessness as social drivers of health.*

Incarceration and homelessness are two additional social determinants of health that disproportionately impact people of color. Black individuals have higher rates of incarceration than white individuals who commit the same offense.<sup>78</sup> In New York, Black individuals are imprisoned at a rate that is over three times their percentage of the state’s population.<sup>79</sup> Imprisoned people are exposed to more infectious diseases and to significant stress, yet prisons rarely “provide much beyond the most basic medical care.”<sup>80</sup> The increased likelihood of having disease while imprisoned does not end upon release; a history of incarceration also “strongly increases the

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<sup>76</sup> Ronald L. Simons et al., *Discrimination, segregation, and chronic inflammation: Testing the weathering explanation for the poor health of Black Americans*, 54 *Developmental Psych.* 1993, 1994 (2018), doi.org/10.1037/dev0000511; see also Christopher W. Kuzawa & Elizabeth Sweet, *Epigenetics and the embodiment of race: Developmental origins of US racial disparities in cardiovascular health*, 21 *Am. J. of Hum. Biology* 2, 2 (2009), bit.ly/3pkYoDJ (“[E]nvironmentally responsive phenotypic plasticity, in combination with . . . acute and chronic effects of social-environmental exposures,” better explains the “persistence of [cardiovascular disease] disparities between members of socially imposed racial categories” than does genetics.).

<sup>77</sup> Paula Braveman et al., *supra* note 31, at 5.

<sup>78</sup> See, e.g., pmentth .1 (i)-2f2b Tf4 (l)-2 (e)4 (xpos-2 (e)4.Y-2 (h .14.Y-2 J( )T-6 ( al)-6 (G)-4 (h)- -0 0 824 (es6

chances of severe health limitations after release.”<sup>81</sup> Prisons have been epicenters of COVID-19 outbreaks since the beginning of the pandemic.<sup>82</sup> Additionally, people experiencing homelessness in New York experienced higher rates of death from COVID-19 in both congregate shelter and unsheltered settings.<sup>83</sup> Minoritized people are disproportionately represented among homeless populations.<sup>84</sup>

- vi. *Social drivers of health have led to disproportionately high rates of serious illness and death from COVID-19 for BIPOC people.*

Researchers have repeatedly concluded that social determinants of health contribute to BIPOC peoples’ disproportionate rates of severe illness and death from COVID-19, across the country and in New York.<sup>85</sup> An individual’s job opportunities and work conditions, access to

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<sup>81</sup> *Id.*; see also Elizabeth M. Viglianti et al., *Mass Incarceration and Pulmonary Health: Guidance for Clinicians*, 15 *Annals Am. Thoracic Soc’y* 409, 409–12 (2018), [bit.ly/3rvWosf](https://bit.ly/3rvWosf) (identifying lung-related conditions that disproportionately affect incarcerated persons).

<sup>82</sup> See, e.g., Laura Hawks et al., *COVID-19 in Prisons and Jails in the United States*, 180 *JAMA Int’l Med.* 1041, 1041 (2020), [bit.ly/3fqrpZb](https://bit.ly/3fqrpZb).

<sup>83</sup> Coal. for Homemem83s0 Tc 0 ( VsaB10.63 0 T (a)4 (Ag (m)-1 1.89 0 Td(.).5 5.03 Tw 0.33 0 ld[(19 i

healthcare, exposure to racism, and segregated living conditions often go hand in hand, leading to a cumulative increase in risk of severe illness or death from COVID-19 associated with a person's BIPOC race or ethnicity.<sup>86</sup> For an individual, inequitable social determinants of health may manifest, for instance, in high blood pressure, increased inflammation, and earlier onset of, and more severe forms of, medical conditions such as heart disease, thereby compounding the risk of getting severely ill or dying from COVID-19 in a way that is not captured by consideration of the presence of heart disease alone. At bottom, "conditions of marginalization led, before COVID-19, to higher morbidity and mortality among Black Americans, which then resulted in a higher burden of underlying vulnerability to COVID-19, manifesting in disproportionate disease severity and death."<sup>87</sup> The same is true of other minoritized populations.<sup>88</sup>

received by racial and/or ethnic minorities even when access to care is equal.”<sup>90</sup> Numerous studies show that BIPOC patients receive lower quality treatment by healthcare providers, “even when variations in such factors as insurance status, income, age, co-morbid conditions, and symptom expression are taken into account.”<sup>91</sup> The research links these racial and ethnic differences in treatment to adverse health outcomes for BIPOC individuals. The following sample of racial and ethnic healthcare inequities illustrates their severity:

- Black patients and other minoritized patients are less likely than whites to receive preventive care and routine medical procedures.<sup>92</sup>
- Black patients are treated less for pain than white patients.<sup>93</sup> For example, “sickle-

are to refer Black patients.<sup>98</sup>

- Black and Latinx individuals are less likely to receive appropriate cardiac medication or to undergo cardiac bypass surgery than whites.<sup>99</sup> Although Black individuals are three times as likely to develop cardiovascular disease than whites, and twice as likely to die from it, they are more likely than whites “to receive older conservative coronary treatments than newer or more expensive therapies . . . [which are] more readily available to whites.”<sup>100</sup>

Extensive research shows that healthcare inequities are due not to intrinsic clinical factors, but to exposure to racism within the medical system.<sup>101</sup> One recent study found, for example, that “many white medical students and residents”—73% of the study sample—“hold beliefs about biological differences between blacks and whites, many of which are false and fantastical in nature, and that these false beliefs are related to racial bias in pain perception.”<sup>102</sup> Another study found that among children who visited emergency departments, Black and Latinx children were less likely to “have their care needs classified as immediate/emergent” and “experienced significantly longer wait times and overall visits as compared to whites.”<sup>103</sup> The researchers concluded the “difference could not be fully explained by possible confounding factors available in the dataset, such as demographic, socioeconomic, or clinical variables.”<sup>104</sup> Additionally, “Black newborns have significantly lower mortality if they’re cared for by Black doctors rather than white ones.”<sup>105</sup> Another study of 495 largely white, male physicians found that they were less likely to prescribe

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<sup>98</sup> *Id.* at 91.

<sup>99</sup> *Unequal Treatment*, *supra* note 38, at 2–3.

<sup>100</sup> *Just Medicine*, *supra* note 25, at 57–58.

<sup>101</sup> *See, e.g.*, Press Release by AMA, *supra* note 89; Mathieu Rees, *Racism in healthcare: What you need to know*, Med. News Today (Sept. 16, 2020), [bit.ly/3okjoK6](https://www.mednewstoday.com/story/news/health/2020/09/16/racism-in-healthcare-what-you-need-to-know/3060066).

<sup>102</sup> Kelly M. Hoffman, *supra* note 93, at 4299.

<sup>103</sup> Xingyu Zhang et al., *Racial and Ethnic Disparities in Emergency Department Care and Health Outcomes Among Children in the United States*, *Frontiers in Pediatrics*, Dec. 19, 2019, at 1, [doi.org/10.3389/fped.2019.00525](https://doi.org/10.3389/fped.2019.00525).

<sup>104</sup> *Id.* at 5.

<sup>105</sup> Akilah Johnson & Nina Martin, *supra* note 46; *see also* Brad Greenwood et al., *Physician-patient racial concordance and disparities in birthing mortality for newborns*, 117 *PNAS* 21194, 21194 (2020), [bit.ly/3gkmg5m](https://doi.org/10.1073/pnas.2008051117).

an aggressive HIV treatment to Black men than white men due to negative racial bias.<sup>106</sup>

In 2007, researchers produced “the first evidence of unconscious (implicit) race bias among physicians, its dissociation from conscious (explicit) bias, and its predictive validity.”<sup>107</sup> The researchers concluded that physicians’ implicit bias contributed to racial and ethnic disparities in the use of medical procedures such as thrombolysis for myocardial infarction.<sup>108</sup> The study also showed that as physicians’ IAT (implicit bias) scores increased, their likelihood of treating Black patients with thrombolysis decreased. A 2015 systematic review of 15 studies measuring implicit bias and health outcomes confirmed that healthcare professionals hold the same level of implicit bias against Black, Latinx, and dark-skinned people as the general population, and that “implicit bias was significantly related to patient–provider interactions, treatment decisions, treatment adherence, and patient health outcomes.”<sup>109</sup> A 2017 systematic review of 37 studies confirmed the substantial evidence of “pro-White or light-skin/anti-Black, Hispanic, American Indian or dark-skin bias among a variety of [healthcare professionals] across multiple levels of training and disciplines.”<sup>110</sup>

Research has shown that a person can “hold strongly negative implicit biases” even where they express no explicit bias and believe themselves to be race-neutral.<sup>111</sup> Studies show that

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<sup>106</sup> *Just Medicine*, *supra* note 25, at 132; *see also* Laura M. Bogart, *Factors Influencing Physicians’ Judgments of Adherence and Treatment Decisions for Patients with HIV Disease*, 21 *Med. Decision Making* 28, 34 (2001), doi.org/10.1177/0272989X0102100104.

<sup>107</sup> Alexander R. Green et al., *Implicit Bias among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients*, 22 *Soc’y of Gen. Internal Med.* 1231, 1231 (2007), bit.ly/3gODyHQ.

<sup>108</sup> *Id.*

<sup>109</sup> William J. Hall et al., *Implicit Racial/Ethnic Bias Among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review*, 105 *Am. J. Pub. Health* e60, e60 (2015), http://doi.org/10.2105/AJPH.2015.302903.

<sup>110</sup> Ivy W. Maina et al., *A decade of studying implicit racial/ethnic bias in healthcare providers using the implicit association test*, 199 *Soc. Sci. & Med.* 219, 219 (2018), bit.ly/3rXSGJy.

<sup>111</sup> *Just Medicine*, *supra* note 25, at 46.



implicit bias influences behavior more directly than conscious bias does.<sup>112</sup> The evidence reveals that “implicit race biases are as prevalent among professionals in the health care industry as they are among the American public generally.”<sup>113</sup> Most healthcare professionals, like most whites, “are low in explicit and high in implicit” bias.<sup>114</sup> In other words, many healthcare professionals unconsciously hold negative biases against BIPOC groups, and these negative biases may cause them to provide—entirely unintentionally—

wealth of evidence supports the Prioritization Guidance's and the Health Advisory's

increased risk of developing heart failure,<sup>122</sup> increased risk of inflammation, or any of the other increased risks associated with their race that do not apply to a similarly situated white COVID-19 patient. Given these risks and the increased rates of severe illness and death from COVID-19 associated with BIPOC race or ethnicity, it is appropriate for healthcare professionals to take that information into account

increased prevalence is similar to the increase in risk of patients with obesity and patients with a history of smoking,<sup>126</sup> two other risk factors under the Prioritization Guidance. Medical practitioners

inappropriately influence healthcare professionals' prioritization decisions. Incorporating equity into "scarce resource allocation protocols," as the Prioritization Guidance does, also accords with researchers' and CDC's recommendations,<sup>129</sup> and medical professional organizations' principles of patient-centered care.<sup>130</sup> COVID-19's disproportionate impact on BIPOC individuals is

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Respectfully submitted,

