critical mass forged ahead despite resistance. After much conversation and debate, the concept of institutional racism was no longer distant, abstract, or someone else's problem. As a result, our department has funded two projects with a goal of remedying the inequities in heart-failure care that were discovered. One project involves surveying physicians to elucidate the drivers of admitting decisions; the other seeks to improve the quality of heart-failure care on the general medicine service.

Physicians must engage with social movements if we expect to contribute meaningfully to improving health by addressing its social and structural determinants. We should proceed with caution, however, since our profession hasn't always been supportive of social movements, as illustrated by the history of the American Medical Association and the civil rights movement.[5]

An audio interview with Dr. Morse is available at NEJM.org

In fact, our clinical training has the potential to create a mindset that directly conflicts with the visions espoused by social movements. Clinical training creates a mindset of urgency; a focus on short-term goals and on fixing and curing; an expert identity, sometimes with distaste for being challenged; and risk aversion. These attributes are, for the most part, necessary and desirable in clinicians, but they can be counterproductive in the context of social movements. The social transformation that movements seek requires long-term vision, building power for enacting change over time rather than implementing rapid solutions, humility, a willingness to take chances despite uncertainty, and a learning mindset.

Our experience shows that institutional change in health care is possible. We are moving toward becoming an antiracist institution; however, it's easy to lose momentum as attention and headlines shift to other urgent issues. Such loss of momentum most likely led to the withering of prior institutional efforts related to racial equity. Capitalizing on the urgency generated by the Black Lives Matter movement was a powerful strategy through which to align interests and focus attention at a large, often slow-to-change institution. Sadly, the recent murder of George Floyd has demonstrated the persistence of structural racism.

The next frontier for health justice at our institution is that of structural and policy change. Taking on these challenges will require the continued and expanded engagement of institutional leadership in order to directly address the ways in which racial inequities in health are structurally produced. In the words of famed author Ibram X. Kendi, "There are only two reasons for racial inequity: the policies or the people." We firmly believe that it is the policies that create inequities, unintentional though they may be, and we will continue to advance actions at our institution to change them.

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Racial Health Disparities and Covid-19 — Caution and Context

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In early April, Wisconsin and Michigan released data showing stark racial disparities in rates of Covid-19 cases and deaths. In those states, many media outlets noted that the percentages of affected people who were black were more than twice as high as the proportion of blacks in the overall population. Similar disparities have since been reported elsewhere, sometimes along with overrepresentation of additional racial minority groups.

Racial disparities have thus become central in the national conversation about Covid-19. Front-page headlines in the *New York*

Times and the *Los Angeles Times* have highlighted the issue, as have elected officials at all levels of government. U.S. Senator Elizabeth Warren (D-MA) and Representative Ayanna Pressley (D-MA) have called for more thorough collection of racial data, and in an open letter they fault the government for "currently failing to collect and publicly report on the racial and ethnic demographic information of patients tested for and affected by Covid-19." Soon after their statement, several states and municipalities began releasing data sets incorporating this demographic detail.

To gain a maximally precise picture of how vulnerability is distributed, it is indeed crucial to collect more data along these lines. The experience of past epidemics — and recent natural disasters — suggests that the most socially marginalized populations will suffer disproportionately.

It is equally important, however, that in documenting Covid-19 racial disparities, we contextualize such data with adequate analysis. Disparity figures without explanatory context can perpetuate harmful myths and misunderstandings that actually undermine the goal of eliminating health inequities. Such clarifying perspective is required not just for Covid-19 but also for future epidemics. There are several key dangers of insufficient contextualization, but researchers, journalists, public health officials, and policymakers can take a few important steps to address them when discussing racial disparities, especially in the public sphere.

First, data in a vacuum can give rise to biologic explanations for racial health disparities. Such explanations posit that congenital qualities unique to specific racial minorities predispose them to higher rates of a particular disease. Lundy Braun, a professor of pathology and laboratory medicine as well as Africana studies, has, for example, documented an enduring strand of medical discourse that assumes there are biologic differences between the respiratory organs of black people and white people.[1] A well-established, multidisciplinary critique of biologic definitions of race has shown that remnants of such thinking persist into the present.

Second, lone disparity figures can give rise to explanations grounded in racial stereotypes about behavioral patterns. During tuberculosis outbreaks in the turn-of-the-20th-century urban South, black people as a group were frequently described by public officials as hopelessly "incorrigible" — that is, they disavowed hygienic guidelines and were vice-ridden and therefore were more prone to behaving in ways that made them more likely to contract disease.[2] Similar totalizing depictions of Chinese, Japanese, and Mexican Americans in Los Angeles circulated during the same period.[3] Today, racialized characterization of behavior is common in popular media discussions of conditions such as obesity, a coexisting condition that increases one's risk for developing severe Covid-19.

Third, geographic disaggregation of Covid-19 data is welcome but requires caution. Recent data drill down to the city level, and Milwaukee, Chicago, New Orleans, and Detroit feature prominently in early media reports. It is likely that race-specific data on Covid-19 will be increasingly available at a neighborhood level as well. Granularity of data allows more fine-grained analyses, including multilevel spatial modeling. But presented by themselves, such granular data can reinforce what the sociologist Loïc Wacquant has dubbed "territorial stigmatization," whereby resource-deprived neighborhoods suffer from "blemish of place" and are thought to be "composed essentially of poor people, minorities and foreigners," many of whom have already been marginalized by the broader society.[4] News reports about racial disparities in Covid-19 deaths in Washington, D.C., for example, have highlighted three wards with large percentages of black residents, and similar dispatches on neighborhoods in Queens and the Bronx have focused on their density and racial composition.

In the case of Covid-19, place-based stigma might be further amplified by association with sickness and could in turn lead to blaming of local residents' allegedly deviant behavior, repressive forms of surveillance, calls for demolition, or simply neglect by a society that wishes to distance itself from such areas. All these responses have ample and alarming historical precedents.

All three of these dangers may feed into a fourth one. In the recent past, the perception (however erroneous) that certain social problems are primarily "racial" — and therefore of concern only to supposed minority interest groups — has been used to rationalize neglect and funding cuts. Backlash against welfare policy is but one recent example. Although Covid-19 is currently affecting a wide enough swath of the U.S.

population to make this kind of reaction unlikely in the near term, in the future, the communities that are least able to buffer themselves against infection may find their ranks disproportionately represented in Covid-19 data, and the door may be opened to all-too-familiar mobilizations of racialized rhetoric.

Fortunately, there are a few effective ways of preempting these dangers even as one draws attention to Covid-19 racial disparities. Data on socioeconomic status (SES) should be collected alongside racial data or imputed if not directly available. One possible approach builds on the Harvard Public Health Disparities Geocoding Project. Outlined by Jarvis Chen and Nancy Krieger, it uses publicly available Census data on poverty, level of household crowding, racial composition, and segregation to analyze Covid-19 data along multiple axes of inequality, down to the level of the ZIP Code tabulation area. Complementary SES information will clarify how racial and class forces are intertwined — and when they are not — in the case of Covid-19. In general, members of minority populations are disproportionately likely to have low SES and are likely to have the most undesirable health outcomes. By highlighting connections between racial disparities and upstream forces such as economic inequality, which carry widespread societal consequences, we can also guard against future cynical — and dangerous — political attempts to frame Covid-19 as largely a problem of minorities.

In addition, when SES is controlled for and does not explain all Covid-19 racial disparities, we should clearly state why that might be the case. One possible explanation is the role of stress and what public health researcher Arline Geronimus has termed "weathering," or advanced aging caused by bodily wear and tear from fight-or-flight responses to external stressors, especially racial discrimination.[5] Weathering has been linked, in turn, to cardiovascular disease and diabetes, two conditions that have been associated, in preliminary research, with elevated risk for severe Covid-19.

Finally, to counter territorial stigmatization, one can highlight place-based risks and resource deficits that might explain spatial distribution, along racial lines, of Covid-19. Examples include the uneven geographic distribution of preventive care services or the concentration of respiratory hazards and toxic sites in low-SES, minority-heavy areas.

In sum, to mitigate myths of racial biology, behavioral explanations predicated on racial stereotypes, and territorial stigmatization, Covid-19 disparities should be situated in the context of material resource deprivation caused by low SES, chronic stress brought on by racial discrimination, or place-based risk.

Fortunately, there are signs that the holistic analysis promoted here is occurring. Another part of the letter by Warren and Pressley notes that "socioeconomic factors may further contribute to racial disparities in Covid-19 outcomes . . . . Moreover, unemployment, food insecurity and unstable or substandard housing conditions may further perpetuate disparities in health outcomes for people infected by the coronavirus, most specifically among low-income communities of color." More analysis in this vein will not only allow for more robust explanations of the patterns that have ignited so much commentary over the past few weeks, but will also guard against the dangers we have outlined here.

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