

## VIEWPOINT

# Responding to the COVID-19 Pandemic

## The Need for a Structurally Competent Health Care System

**Jonathan M. Metzl, MD, PhD**

Department of Medicine, Health, and Society, Vanderbilt University, Nashville, Tennessee.

**Aletha Maybank, MD, MPH**

Chief Health Equity Officer, American Medical Association, Chicago, Illinois.

**Fernando De Maio, PhD**

Center for Health Equity, American Medical Association, Chicago, Illinois; and Department of Sociology, DePaul University, Chicago, Illinois.

**The coronavirus disease 2019** (COVID-19) pandemic has exposed the consequences of inequality in the US. Even though all US residents are likely equally susceptible to infection with SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), the virus that causes COVID-19 disease, the resulting illness and the distribution of deaths reinforces systems of discriminatory housing, education, employment, earnings, health care, and criminal justice.<sup>1,2</sup> The patterns of COVID-19 illuminate centuries of support systems that the US did not build and investments it did not make.

Each stage of the pandemic, from containment, to mitigation, to reopening, highlights the extent to which certain populations were rendered vulnerable long before the virus arrived. As a result, marginalized, minoritized, and communities of low wealth have been at highest risk, with disproportionate death rates among African American, Latinx, and Native American populations across the US.<sup>3,4</sup>

Sociodemographic differences in COVID-19 morbidity and mortality highlight an unavoidable reality facing the US health care system as it strives to fulfill its mission to promote health and well-being, and to treat disease. At its core, the practice of medicine is based on individual-level interactions among clinicians, patients, and families. Yet the pandemic highlights the extent to which illness for many people results from larger structures, systems, and economies.<sup>1,2</sup>

### The COVID-19 pandemic is also a clear reminder that the US health care system cannot treat its way out of public health problems with therapeutic methods alone.

Understanding how these processes operate requires not only acknowledging the social determinants of health, but more important, moving farther upstream to address the structural drivers that generate poverty and other aspects of social disadvantage.

For example, rates of adverse outcomes related to COVID-19, including deaths, can be mapped onto zip codes.<sup>2,5</sup> COVID-19 morbidity and mortality patterns highlight ways that persons from certain groups disproportionately lack housing security or live in multifamily or multigenerational housing where physical distancing is not an option. Persons in these communities often work jobs that expose them to the virus, or earn incomes that render access to adequate medical care exceedingly difficult. The pandemic illustrates the effects of what Pirtle has referred to as COVID-related racial capitalism, a system that constructs the

harmful social conditions that fundamentally shape pandemic patterns.<sup>6</sup>

Over the coming months and years, the US health care system will struggle to adapt to new, postpandemic norms. In this moment of crisis, however, the US health care system has a generational imperative to begin to address the inequities made even more apparent by the COVID-19 crisis. The opportunity exists to reimagine and redesign the health care delivery and education systems through a lens of health equity and racial justice. By so doing, during a pandemic that highlights the extent to which no one is safe until everyone is safe, health outcomes can be improved more broadly.

Increasing numbers of US medical students and physicians are already acclimated to understanding the importance of confronting inequities because many have been trained to understand the social determinants of health and its clinical adaptation, structural competency. Structural competency calls on methods from sociology, economics, urban planning, and other disciplines to systematically train health care professionals and others to “recognize ways that institutions, neighborhood conditions, market forces, public policies, and health care delivery systems shape symptoms and diseases.”<sup>7</sup> Structural competency is also relevant for identifying the often invisible networks that support health, ranging from supply chains, to food delivery networks, to transit systems.

Over the past 6 years, structural competency courses and modules have emerged in medical, nursing, and social work schools and residency programs, and in several undergraduate prehealth programs, in response to the growing need to understand the structural drivers of health inequity and the subsequent need to address them.<sup>8</sup> These interventions build on a 5-part model that includes recognition of how social structures “shape clinical interactions,” development of “extracurricular language” of structure, rearticulating “cultural” presentations in structural terms, planning “structural interventions,” and development of “structural humility.”<sup>7</sup> Whether these courses and interventions ultimately help to reduce health inequality is unknown.

The pandemic highlights the importance of turning this analysis into action. Broad institutional leadership is needed to support medical interventions that reduce inequities. The crisis calls for radical change to how many health centers and hospitals operate, and in ways that ensure the health of individuals by also maintaining the health of communities, structures, and environments.

Four domains of intervention emerge from a structural competency analysis.

**Corresponding**

**Author:** Jonathan M. Metz, MD, PhD, Department of Medicine, Health, and Society, Vanderbilt University, 300 Calhoun Hall, Nashville, TN 37235 (jonathan.metzl@vanderbilt.edu).

### Promote Truth and Reconciliation

The US health care system needs to form far-ranging commissions that take full account of the systems exposed and strained by the pandemic and that show why, despite heroic efforts by clinicians, those systems failed people and communities in their time of greatest need. A national "structural vulnerability" analysis, based on a framework that operationalizes the negative health outcomes imposed by poverty, inequality, racism, and discrimination, could highlight weakened structures that contribute to devastating outcomes in vulnerable populations.<sup>9</sup> The analysis should also consider the full breadth of communities made vulnerable by inadequate infrastructures and policies, from first responders endangered by inadequate production and supply chains for personal protective equipment or coronavirus tests, to rural communities put at higher risk of medical bankruptcies because their states have not expanded Medicaid. Such analysis also needs to include self-reflection regarding the structural disparities created and sustained by the US health care system.

### Reimagine Infrastructure

The US health care system needs to build more structurally competent community health centers and hospitals that address patients' social needs in addition to their medical ones. Such rethinking has long been part of medical attempts to address inequities, from Geiger's Mississippi clinics that wrote prescriptions for food in the 1960s, to numerous community health centers around the US, and Health Leads, which provides access to essential resources alongside medical care today.

Such efforts need to be built out systemwide, substantially expanded in collaboration with communities, and funded and reimbursed through vast new public-private partnerships that can support a diverse array of potential commitments and collaborations. Structurally competent health centers could, for instance, ensure internet access (for expanded telemedicine), provide food and housing assistance (in cases of food or housing insecurity), deliver resources (protective equipment), and create new medical-financial-legal partnerships (helping people with rental issues, labor concerns, immigration). Ongoing, community- and meta-level assessment could then coordinate and evaluate services, track potential overlap, and innovate and develop future partnerships.

### Democratize Information

It is essential that the US health care system build and sustain robust channels of communication with affected communities, ultimately valuing community-level intelligence to inform health system strategies for emergency preparedness and response. Doing so means markedly expanding the public voice of the medical and health care professions more broadly, such as by partnering with media, social media, and other platforms and with communities to co-create health messaging and response strategies that are antiracist, relevant, and rooted in science. Such platforms could promote structurally competent information about systemic inequities and ways to mobilize responses to them. These networks also could provide powerful channels to help counteract the misinformation and extremism that have been promulgated on social media during the pandemic.<sup>10</sup>

### Educate

The US health care system needs a new, structurally competent Flexner Report, a new Hippocratic Oath, and a new set of board examinations. Health equity could be promoted by educating physicians about social inequality, training more clinicians to consider and treat the upstream structural, social, and environmental conditions that often underlie disease. This also means training a workforce of public health-qualified clinicians who understand the social, structural, and political basis of disease, and embrace joining medical care with public health in ways that facilitate system redesign that aligns the two fields instead of segregates them.

Ultimately, structural competency challenges the US health care system to address the lasting lesson of the pandemic: that health and illness are political. The US response to the COVID-19 pandemic has thrown into stark relief the need for medicine to have an explicit political voice. The current crisis has also shown that a new approach with new politics based in advocating for structural equity is necessary to mitigate the burden of existing health inequities that affect marginalized communities, and to better prepare the US for future pandemics.

The COVID-19 pandemic is also a clear reminder that the US health care system cannot treat its way out of public health problems with therapeutic methods alone. COVID-19 is a disease of communities and networks, a pathogen that floats along the infrastructures of human relations. Only by better strengthening networks and supporting all communities will anyone, and everyone, return to well-being.

#### ARTICLE INFORMATION

**Published Online:** June 4, 2020.  
doi:10.1001/jama.2020.9289

**Conflict of Interest Disclosures:** None reported.

#### REFERENCES

- Bailey ZD, Krieger N, Agénor M, et al. Structural racism and health inequities in the USA: evidence and interventions. *Lancet*. 2017;389(10077):1453-1463. doi:10.1016/S0140-6736(17)30569-X
- Williams DR, Cooper LA. COVID-19 and health equity—a new kind of "herd immunity". *JAMA*. Published online May 11, 2020. doi:10.1001/jama.2020.8051
- Waldstein D. As Georgia reopens, virus study shows Black residents may bear brunt. *New York Times*. Accessed May 11, 2020. <https://www.nytimes.com/2020/04/30/health/coronavirus-georgia-african-americans.html>
- Wadhwa RK, Wadhwa P, Gaba P, et al. Variation in COVID-19 hospitalizations and deaths across New York City boroughs. *JAMA*. Published online April 30, 2020. doi:10.1001/jama.2020.7197
- Hauck G, Nichols M, Marini M, Pantazi A. Coronavirus spares one neighborhood but ravages the next. Race and class spell the difference. *USA Today*. Accessed May 11, 2020. <https://www.usatoday.com/in-depth/news/nation/2020/05/02/coronavirus-impact-black-minority-white-neighborhoods-chicago-detroit/3042630001/>
- Pirtle WNL. Racial capitalism: a fundamental cause of novel coronavirus (COVID-19) pandemic inequities in the United States. *Health Educ Behav*. Published online April 26, 2020. doi:10.1177/1090198120922942
- Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med*. 2014;103:126-133. doi:10.1016/j.socscimed.2013.06.032
- Metzl JM, Petty J, Olowojoba OV. Using a structural competency framework to teach structural racism in pre-health education. *Soc Sci Med*. 2018;199:189-201. doi:10.1016/j.socscimed.2017.06.029
- Bourgeois P, Holmes SM, Sue K, Quesada J. Structural vulnerability: operationalizing the concept to address health disparities in clinical care. *Acad Med*. 2017;92(3):299-307. doi:10.1097/ACM.0000000000001294
- Yancy CW. COVID-19 and African Americans. *JAMA*. Published online April 16, 2020. doi:10.1001/jama.2020.6548