Enacting Relational Public Health: Federally Qualified Health Centers During the COVID-19 Pandemic

Danielle Pacia¹, Johanna Crane², Carolyn Neuhaus¹, Nancy Berlinger¹, and Rachel Fabi³

1. THE HASTINGS CENTER, GARRISON, NEW YORK, USA. 2. ALDEN MARCH BIOETHICS INSTITUTE, ALBANY, NEW YORK, USA. 3. SUNY UPSTATE MEDICAL UNIVERSITY, SYRACUSE, NY, USA.

Keywords: COVID-19, FQHCs, Relational Public Health, Vaccine Equity, Community Health

Précis: Federally Qualified Health Centers (FQHCs) proved to be critical points of access for people of color and other underserved populations during the COVID-19 pandemic, administering 61% of their COVID-19 vaccinations to people of color, compared to the 40% rate for the overall United States' vaccination effort. To better understand the approaches and outcomes of FQHCs in pandemic response, we conducted semi-structured interviews with FQHC health care providers and outreach workers and analyzed them using an inductive qualitative methodology.

he COVID-19 pandemic shone a bright light on health inequities in the United States. Throughout the pandemic, Black and Hispanic people experienced (and continue to experience) higher rates of infection and death than white people, as well as lower rates of vaccine and booster uptake.¹ These disparities can be traced, in part, to a health care

Danielle Pacia, M.B.E., is a Research Associate at The Hastings Center in Garrison, New York. Johanna Crane, Ph.D., is an Associate Professor at the Alden March Bioethics Institute in Albany, New York. Carolyn Neuhaus, Ph.D., is a Research Scholar at The Hastings Center in Garrison, New York. Nancy Berlinger, Ph.D., is a Research Scholar at The Hastings Center in Garrison, New York. Rachel Fabi, Ph.D., is an Associate Professor at the Center for Bioethics and Humanities at SUNY Upstate Medical University in Syracuse, NY.

system that often perpetuates existing inequalities, including unequal access not just to health care but also to things like economic, housing, and food security.² It is the role of a public health system to protect the health of all members of society, but when a public health system fails to adequately address inequity, other stakeholders within the health system may step up to fill that role. During the COVID-19 pandemic, Federally Qualified Health Centers (FQHCs) proved to be one such set of stakeholders.

An FQHC is a type of community health center and non-profit organization that receives grant funding from the Health Resources and Services Administration (HRSA) to provide primary care to medically underserved areas and populations.3 These health centers maintain an "open door" policy and will serve people who are underinsured and uninsured, resulting in a higher proportion of patients who are poorer than the general population.4 In 2016, 92% of health center patients had incomes at or below 200% of the federal poverty level, including 70% who had incomes at or below 100% of the federal poverty level. Furthermore, over half of health center patients are people of color.⁵ Between 2007 and 2014, the proportion of patients of color at FQHCs grew, specifically among Black, American Indian, and Hispanic American populations.6

Recognizing that primary care clinics like FQHCs were positioned to play an important role in vaccine distribution, due in part to their familiarity with community-level vaccination outreach and processes, the White House initiated a policy of direct allocation of COVID-19 vaccines to FQHCs in February 2021.⁷ In a retrospective cohort study with survey data from January 8 to July 2, 2021, it was found FQHCs had administered 61.4% of their COVID-19 vaccines to

patients of color compared with 40% administered to people of color in the general US population.⁸

To analyze the role FQHCs played in ensuring equitable access to COVID-19 vaccines, we conducted semi-structured interviews with FQHC administrators, clinicians, and outreach workers at two FQHC networks (HS1 and HS2). Two teams of two people each coded the interviews using an iterative emergent thematic coding approach and reconciled coding discrepancies by consensus. A detailed reporting of the methods and findings of this work is reported elsewhere; in this paper, we draw on those findings. A relational public health ethics framework which we describe below, we argue that, in response to the

values and rights. Baylis et al. emphasize three interrelated, overlapping values: relational personhood, social justice, and relational solidarity. Using the relational account developed by Baylis et al., we highlight the unique ways that FQHCs perform the necessary functions of public health through their focus on relationality, social justice, and solidarity.

Relational Personhood

The first core value of public health that Baylis et al. identify is relational personhood, a concept that focuses on humans' sociality and interconnectedness rather than independence and separateness from one another.¹² Humans live within social and political con-

To analyze the role FQHCs played in ensuring equitable access to COVID-19 vaccines, we conducted semi-structured interviews with FQHC administrators, clinicians, and outreach workers at two FQHC networks (HS1 and HS2). Two teams of two people each coded the interviews using an iterative emergent thematic coding approach and reconciled coding discrepancies by consensus. A detailed reporting of the methods and findings of this work is reported elsewhere; in this paper, we draw on those findings. Using a relational public health ethics framework, which we describe below, we argue that, in response to the demands of COVID-19, FQHCs performed key roles that are necessary in a well-functioning public health system and offer valuable insight into pandemic policies that support health equity.

demands of COVID-19, FQHCs performed key roles that are necessary in a well-functioning public health system and offer valuable insight into pandemic policies that support health equity.

In the midst of fighting a pandemic, FQHCs became essential health care infrastructure, shoring up a fractured public health system. Given that Americans tend to value individual rights more than communitarian and relational values, FQHCs provide an important case study on both the feasibility and benefits of public health approaches and policies rooted in relationality within the US context.¹⁰

Relational Public Health Ethics and FQHCs

In their paper "A Relational Account of Public Health Ethics," Françoise Baylis, Nuala P. Kenny, and Susan Sherwin propose a public health ethics framework that is relational, meaning the ethics framework focuses on relationships, rather than individualistic texts; we develop our preferences and values through interactions with others. Thus, a relational approach to public health understands that the social and political realities that individuals experience beyond health care encounters are relevant to health and to providing health care.

Compared to other health care institutions, FQHCs and their staff pay especially close attention to the lived realities of their patients by building relationships with their patients and community, often attending events outside their health center. One FQHC provider underscored this: "We build up relationships. You cannot imagine the number of Christenings, First Communions, baby showers, everything that I go to [laughing] every week" (HS1-6).

In one interview, a provider described asking for help from a community church leader to help fill vaccination appointment slots: "We called one of our community stakeholders and she's a lady that's very

SPRING 2024 35

connected to her church, and she brought her whole congregation, and everybody got vaccinated. Because she knew everybody, she could do this" (HS1-5). FQHCs leveraged these connections within the community to perform a core function of a public health system, supporting vaccination efforts at a critical point.

Social Justice

Social Justice, the second value of Baylis et al.'s relational account of public health, compels us to scrutinize how political and social conditions are created, maintained, and changed.13 While relational personhood prompts us to see beyond mere individuals, social justice urges correction of injustice among and between groups, seeking to alleviate disparities and disadvantages. Although there are many conceptions of social justice, Baylis et al. draw most on the account developed by Ruth Faden and Madison Powers in their 2006 book fittingly titled Social Justice: The Moral Foundations of Public Health and Health Policy. 14 Powers and Faden argue that social justice is concerned with recognizing and addressing the fact that an individual's well-being "is generally a function of the status, standing, and position within densely woven patterns of systematic disadvantage of the groups of which they are a part."

Other scholars of social justice have made similar arguments. For instance, in her pioneering paper "Health Law as Social Justice," legal scholar Lindsay Wiley develops a conception of "health justice," that resonates with Powers and Faden and views health law as an instrument of social justice.15 Wiley argues that health justice is committed to (1) the view that access to health care is one among many social determinants of health; (2) the view that bias on the basis of race, class, and other social/cultural characteristics influences "the design and implementation of measures to reduce health disparities"; and (3) "collective action grounded in community engagement and participatory parity." Both of these conceptions of social justice resonate with Baylis et al.'s relational account of public health, which requires "that particular attention must be paid to identifying and unraveling complex webs of privilege and disadvantage."16

Federally Qualified Health Centers, which were a product of the Civil Rights movement, often explicitly acknowledge justice as a value in their mission and leadership statements.¹⁷ During the 1964 Freedom Summer voting rights campaign in Mississippi, activist doctors and medical students cared for injured civil rights workers and sought ways to provide care for Black people in rural Mississippi, who were often

refused care by hospitals. Their efforts resulted in the establishment of community-based care centers in Mississippi and Boston, providing local, essential primary care. Neighborhood Health Centers, as FQHCs were originally known, soon received federal funding as part of President Johnson's War on Poverty after years of grassroots organizing by community members. 19

This history was reflected nearly 60 years later, at the beginning of the COVID-19 pandemic, as many FQHCs were cognizant of potential disparities in vaccine allocation deriving from densely woven patterns of disadvantage and took steps to help ensure equitable access to vaccines.20 FQHCs exemplified social justice values by paying careful attention to patient populations that experience systemic barriers to vaccine access, including travel and time barriers.²¹ FQHC providers we spoke with described holding weekend clinics to help increase access for those who could not leave work to get vaccinated. Providers often explained how they arranged transportation for their patients using public transportation or a car service. One described how "those are the individuals that can't just take an Uber or take a bus to our facility, but I've been able to actually make the calls and schedule their transportation" (HS1-16).

Providers demonstrated a commitment to social justice through intentional outreach to specific parts of the community with high levels of poverty: "We spoke with churches, we spoke with daycares, we spoke with nonprofits in various zip codes... where poverty levels were high, resources were low — a lot of Black and Brown communities in those neighborhoods. And we said, 'Hey, how can we help get your folks connected to vaccine clinic" (HS1-7)? Because of their commitment to social justice, FQHCs were able to identify and fill an access gap, thereby fulfilling another key function of a public health system that prioritizes relationality.

Relational Solidarity

Baylis et al. identify their last value as relational solidarity. ²² Solidarity is still an evolving notion in bioethics and philosophy that can be conceptualized in several different ways, and Baylist et al. provide an insightful critique of the ways it is often deployed. They observe that some conceptions of solidarity rely on intimate connections to a few loved ones, while others hinge upon shared identities forged through a common struggle. Relational solidarity, however, rejects these conceptions in favor of a *relational* understanding of solidarity that would "eschew a vague concern for all of humanity and replace it with one that is cognizant of, and responsive to, the particular types of needs

experienced by those who are socially and economically disadvantaged."²³ They explain:

Relational solidarity values interconnections without being steeped in assumptions about commonality or collective identity. What matters is a shared interest in survival, safety and security — an interest that can be effectively pursued through the pursuit of public goods and through ongoing efforts to identify and unravel the complex webs of privilege and disadvantage that sustain and foster an 'us' versus 'them' divide. ²⁴

FQHCs' mission is to uplift the marginalized members of the communities they serve, which was reflected in the strategies they employed during the COVID-19 vaccine rollout. Through these targeted strategies, FQHCs embodied the value of relational solidarity by ensuring that disadvantaged populations' time, resources, and health status were accounted for during outreach. For example, agricultural workers, especially those who are migrants, were known to be a population who were made particularly vulnerable during COVID-19.25 One FQHC provider explained how the center has a specific program for Hispanic outreach, which visited farms during the pandemic to help reserve vaccines for migrant workers: We go out to the farms to do outreach, we take note of their name... and we have them come in as soon as the vaccines are available" (HS2-18). Another community health worker mentioned a colleague that went directly to farms to do pop-up clinics at farms: "She's their go-to person. The other day she took a van full of vaccines and said 'Alright, when you have a 15-minute break, go by the van, go get your lunch, and then get back to work" (HS2-5). This outreach embodies relational solidarity by being sensitive to the resource constraints that migrant workers face to receiving the COVID-19 vaccine, building strategies to accommodate them.

A similar demonstration of relational solidarity is apparent in how FQHCs reserved vaccine doses for people who were unhoused. An FQHC provider we spoke to described this strategy: "We reserved 20 slots for individuals without homes, because one of the community stakeholders emailed me and said, 'We got 20 people who want this but no there are appointments available'" (HS1-3). Additionally, FQHCs sought to lower the barriers to vaccine access for people without internet access by scheduling many appointments by phone. An FQHC provider explained the importance of using phone booking in addition to an internet system: "We're moving to having a phone queue that peo-

ple can go to request appointments. [W]e have noted that it's difficult for people, particularly older populations, and again, homeless people to access online" (HS1-1).

These strategies, through their deliberate acknowledgement of disadvantage coupled with corrective strategies, are solidaristic in nature, helping to counter unjust systems that ultimately disadvantage us all. This outreach to the community was crucial in helping slow the spread of COVID-19 and lower rates of death.

Lessons Learned: FQHCs as a Blueprint for Relational Public Health

FQHCs offer lessons into how relational approaches are enacted, despite the widespread individualism that is pervasive in the US and the American health care system. ²⁶ It is crucial that the American health care system learn and implement the lessons FQHCs can teach us about pandemic preparedness and response, and that those insights are reflected in policies and funding allocation. Here, we highlight important insights that we observed throughout our project that can help advance equity in future pandemic policy.

First, prioritizing relationship-building can generate trust in public health interventions.

Federally Qualified Health Centers have demonstrated throughout the pandemic that their longstanding relationships with their patients, community leaders, and other organizations are integral to their success in vaccination. Long before the pandemic, FQHC outreach workers attended milestone events in patients' lives and spoke with patients about their values beyond just their medical care. This practice of showing up for patients proved indispensable to establishing trust during a crisis, helping providers navigate meaningful conversations about COVID-19 vaccine safety and efficacy.

Being sensitive to the long history of racism is imperative to effective relationship building. This history of racism includes being subject to unethical medical experimentation, unequal treatment through withholding pain medications, and lower admission rates compared to white counterparts. In order to achieve effective public health outcomes, trust building is especially important for patient populations that have historically been exploited, ignored, and wronged by the health care system.

Throughout the pandemic, the Biden Administration allocated large sums of vaccines to drug stores like CVS and Walgreens.²⁷ Allocating vaccines to these drug stores undoubtedly helped with accessibility; however, many primary care providers and public health schol-

SPRING 2024 37

ars commented on this decision, noting widespread distrust of COVID-19 vaccines and the idea that primary care providers may be particularly well-positioned to allay concerns because of their long-standing patient relationships.²⁸ Several FQHC providers we spoke with mentioned that it was their goal to leverage their community and patient connections, ensuring that their patients were administered vaccines.

Good public health will leverage relationships in times of crisis and also work to continuously build trusting, strong relationships over time. Recognizing the importance of these relationships, as FQHCs did, can be crucial to supporting future public health measures like regular vaccination appointments and community-responsive pandemic planning.

Second, a good public health system must acknowledge inequities and seek to correct them. Policy infused with social justice requires an understanding of the structural and social causes of disparities and the actions necessary to correct them. The disproportionate impact of COVID-19 morbidity and mortality on people of color is well documented.²⁹

During the COVID-19 pandemic, many FQHCs demonstrated a social justice and relational solidarity orientation in the ways that they facilitated access to appointments for medically underserved communities, understood and alleviated transportation barriers, and made concerted efforts to target high-risk populations. As a result, FQHCs provided crucial access to COVID-19 vaccination for people of color and other underserved populations. This was made possible, in part, by the structure and governance of FQHCs, which are designed to facilitate an exchange of information between the community and the health center. By law, FQHCs are governed by boards that comprise at least 51% patients who are served by the FQHC, and who must represent the patient population served in terms of their racial, ethnicity, and gender identities.³⁰ By seeking out and listening to the needs of the community they serve, FQHCs can be responsive to local needs.

As Baylis et al. discuss, it is not accurate to conceptualize public health as an enterprise that intervenes at the individual patient level, but rather as one that necessitates collective effort, understanding, and coordination.³¹ Federally Qualified Health Centers provided an indispensable blueprint for policies and practices in the future to ensure that social justice is an integral value. The communicable and interconnected nature of public health requires policymakers to ensure that populations that have been made vul-

nerable due to structural and social stressors are cared for and that disparities are alleviated.

Third, solidarity is a necessary but underutilized value in public health.

As Wiley argues, social justice in practice must seek to implement measures that reduce disparities.³² The implementation of public health initiatives imbued with social justice can foster solidarity by acknowledging vulnerabilities across groups, and can help move beyond the "us versus them" divide that Baylis et al. warn against.³³ Enacting solidarity at the population level requires appreciating a shared interest in helping people who have been made vulnerable, and it takes partnerships, coordination, deep understanding, and collaboration among a variety of sectors and actors to achieve community immunity. Through their careful strategies that prioritized vulnerable populations during the COVID-19 pandemic, FQHCs foster solidarity in public health. Such an approach can be used as an inspiration and example of the potential that broader US public health plans can achieve when meaningfully partnering with and supporting their patient community.

Looking Ahead: Relational Public Health Policy

Taking these lessons together, relational public health ethics supports a change in how governments organize resources to achieve an equitable distribution of vaccines or other interventions. Policy that is cognizant of FQHCs' relational approach to public health will ensure that necessary resources are allocated to FQHCs and other medical centers aligned with a relational model of public health. These policy changes can be in the form of Medicaid payment formulas, as health centers tend to rely on payment from Centers for Medicare & Medicaid Services (CMS) more than medical facilities that are not community health centers.³⁴

The Affordable Care Act (ACA) established a Medicaid and Medicare Prospective Payment System, a unique payment system for FQHCs.³⁵ In order for FQHCs to receive payment, there must be a specific payment formula for the treatment or service established by CMS. However, during the pandemic there was not a payment formula that was tailored for FQHC vaccine efforts. As a result, some FQHCs were reportedly not compensated for the administration of at least 1 million vaccine doses in California, Michigan, and Mississippi alone.³⁶ When FQHCs provided only a vaccine, without additional routine care, receiving payment for the administration of each individual dose became extremely difficult and time-intensive, in

part because CMS had not created a payment formula to determine how much the administration of each shot within a health center would cost.

Prior to the receipt of federal funds dedicated to FQHC vaccination programs, health centers organized and ran vaccination clinics with staff volunteers, making it "a whole other line of work for us that for which there has not been attached revenue" (HS2-15). Although some FQHC health care workers were uncompensated, these weekend vaccine clinics were instrumental in helping populations access the vaccination — particularly for those who work full time on weekdays.

The same provider who commented on weekend vaccination clinics noted that these primary care centers became critical infrastructure in an emergency public health response: "Until three months ago, this wasn't our business. In a country whose public health institutions were gutted a long time ago, that doesn't have a coherent health care system, we stepped in as community health centers to say, 'We will play the role of the public health system.' Because most communities don't have a public health department that could do this. So we said, 'We are it.'" (HS2-15).

During a crisis, financial, human, and other resources are likely to be constrained. Going forward, identifying and addressing community health centers' resource deficiencies before a crisis breaks, rather than midstream, can help ensure resource gaps in health care are addressed quickly and efficiently at a time when reaching community immunity is critical. Further research is needed to understand what supports health centers like FQHCs may need during a pandemic, such as adjusting payment models to ensure FQHCs are compensated properly for their equity-focused pandemic response work. Indeed, a relational public health model not only compels an acknowledgment of inequities, but also requires a correction of past injustices and mitigation of further disproportionate harms.

To meet these obligations, funders of public health programming must continue to support the paradigm shift in how FQHC resource needs during a pandemic are anticipated. This paradigm shift began in early February 2021, three months after vaccines became available through tiered eligibility, when HRSA established the Health Center COVID-19 Vaccine Program, which received funding from President Biden's American Rescue Plan.³⁷ Since this program's launch, health centers have held over 60,000 vaccination events across the US in partnership with community organizations.²³ Other initiatives like the Health Center COVID-19 Vaccine Program could help

support FQHCs' community-based outreach during non-pandemic times as well by providing them with the resources, support, and flexibility to continue their relational approach to health care. While the Health Center Vaccine Program was specific to the COVID-19 pandemic, policymakers within HRSA and those in charge of congressional appropriations can acknowledge the benefits of the program, using it as an example to approach future public health efforts, emergency or otherwise, involving health equity. Another lesson that could be drawn from this work relates to the governance of FQHCs. The mandate that FQHC boards comprise at least 51% patients who represent the community they serve helps support the exchange of information regarding community needs and priorities.38 The board is tasked with several key administrative duties for the health center, including creating bylaws; ensuring Federal, State, and local laws and regulations are met; approving the CEO or project director; and allocating funding across the organization. Other public health organizations could benefit from a similar mandate to help ensure that policies and programming are responsive, appropriate, and reflective of commitments to relationship personhood, social justice, and relational solidarity.

In this paper, we drew on interview data to examine how FQHCs function as health organizations that successfully embody a relational ethics framework, despite the emphasis on individualism that is pervasive in the US. More work will be necessary to translate FQHCs' successes in relational approaches to pandemic response into policies that permeate the American public health system. Furthermore, we argue that FQHCs have become an indispensable part of our public health infrastructure that may require different resources and support from federal and state governments, given their social justice focus and relational approach to patient care.

Acknowledgments

This research was made possible by the Gilbert S. Omenn and Martha A. Darling Fund at The Hastings Center.

References

- S. Haldar, "Latest Data on COVID-19 Vaccinations by Race/ Ethnicity," KFF (blog), available at https://www.kff.org/coronavirus-covid-19/issue-brief/latest-data-on-covid-19-vaccinations-by-race-ethnicity/ (last visited February 23, 2024).
- L. Lopez, L. H. Hart, and M. H. Katz, "Racial and Ethnic Health Disparities Related to COVID-19," JAMA 325, no. 8 (2021): 719, https://doi.org/10.1001/jama.2020.26443.
- "FQHC PPS | CMS," available at https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/FQHCPPS>(last visited February 23, 2024).
- S. Rosenbaum, et al., "Community Health Centers: Growing Importance in a Changing Health Care System - Issue Brief," KFF (blog), (2018), available at https://www.kff.org/report-

- section/community-health-centers-growing-importance-in-a-changing-health-care-system-issue-brief/> (last visited February 23, 2024).
- KFF, "A Profile of Community Health Center Patients -Demographic Characteristics," available at https://www.kff.org/report-section/a-profile-of-community-health-center-patients-demographic-characteristics/ (last visited February 23, 2024).
- 6. J. B. Nath, S. Costigan, and R. Y. Hsia. "Changes in Demographics of Patients Seen at Federally Qualified Health Centers, 2005-2014," *JAMA Internal Medicine* 176, no. 5 (2016): 712, https://doi.org/10.1001/jamainternmed.2016.0705.
- HRSA, "Ensuring Equity in COVID-19 Vaccine Distribution," U.S. Health Resources & Services Administration, February 7, 2021, available at https://www.hrsa.gov/coronavirus/health-center-program (Last visited November 16, 2022).
- M. B. Cole et al., "Assessment of Administration and Receipt of COVID-19 Vaccines by Race and Ethnicity in US Federally Qualified Health Centers," JAMA Network Open 5, no. 1 (2022): e2142698.
- 9. J. T. Crane, et al., "We're Here to Take Care of Our Community': Lessons Learned From the U.S. Federal Health Center Covid-19 Vaccine Program," Health Promotion Practice, January 23, 2023, 152483992211511, https://doi.org/10.1177/15248399221151178.
- D. Oyserman, H. M. Coon, and M. Kemmelmeier, "Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analyses," *Psychological Bulletin* 128, no. 1 (2002): 3–72.
- F. Baylis, N. P. Kenny, and S. Sherwin, "A Relational Account of Public Health Ethics," *Public Health Ethics* 1, no. 3 (2008): 196–209.
- 12. See Baylis et al., supra note 11.
- 13. See Baylis et al., supra note 11.
- M. Powers and R. R. Faden, Social Justice: The Moral Foundations of Public Health and Health Policy, Issues in Biomedical Ethics (New York: Oxford University Press, 2006): 61.
- L. F. Wiley, "Health Law as Social Justice," Cornell Journal of Law and Public Policy 24, no. 1 (2014): 47–105.
- 16. See Baylis et al., *supra* note 11.
- 17. A. B. Katz, "A Long and Winding Road: Federally Qualified Health Centers, Community Variation and Prospects Under Reform," Center for Studying Health System Change 21 (2011): 1-9; "Cahaba Medical Care," Cahaba Medical Care, available at https://www.cahabamedicalcare.com (last visited November 16, 2022); "Mission & Overview," Howard Brown Health, available at https://howardbrown.org/about/mission/ (last visited November 16, 2022); "Leadership Statement," Open Door Health Center, available at https://odhc.org/leadership-statement/ (last visited November 16, 2022).
- B. Lefkowitz, Community Health Centers: A Movement and the People Who Made It Happen, Critical Issues in Health and Medicine, (New Brunswick, N.J: Rutgers University Press, 2007): 1–10.
- 19. See Lefkowitz, supra note 18.
- J. T. Crane, et al., "Advancing COVID Vaccination Equity at Federally Qualified Health Centers: A Rapid Qualitative

- Review." Journal of General Internal Medicine 37, no. 4 (2022): 1012–13, https://doi.org/10.1007/s11606-021-07273-8.
- 21. A. Njoku, J. Marcelin, and R. Felix. "Changing the Narrative: Structural Barriers and Racial and Ethnic Inequities in COVID-19 Vaccination." *International Journal of Environmental Research and Public Health* 18, no. 18 (2021): 9904, https://doi.org/10.3390/ijerph18189904.
- 22. See Baylis et al., supra note 11.
- 23. See Baylis et al., supra note 11.
- 24. See Baylis et al., *supra* note 11.
- B. Kistnasamy, "Migrant Workers and Covid-19," Safety and Health at Work 13 (2022): S53, https://doi.org/10.1016/j. shaw.2021.12.892.
- 26. C. Chinchih, C. Benedikt Frey, and G. Presidente, "Culture and Contagion: Individualism and Compliance with COVID-19 Policy," *Journal of Economic Behavior & Organization* 190 (2021): 191–200.
- 27. "COVID-19 Vaccination Federal Retail Pharmacy Partnership Program | CDC," June 9, 2022, available at https://www.cdc.gov/vaccines/covid-19/retail-pharmacy-program/index.html (last visited November 16, 2022).
- S. Ratzan et al., "Missing the Point How Primary Care Can Overcome Covid-19 Vaccine 'Hesitancy," New England Journal of Medicine 384, no. 25 (2021): e100.
- K. Mackey et al., "Racial and Ethnic Disparities in COVID-19– Related Infections, Hospitalizations, and Deaths: A Systematic Review," Annals of Internal Medicine 174, no. 3 (2021): 362–73.
- "Chapter 20: Board Composition | Bureau of Primary Health Care," available at https://bphc.hrsa.gov/compliance/com-pliance-manual/chapter20 (last visited November 16, 2022).
- 31. See Baylis et al., *supra* note 11.
- 32. See Wiley, supra note 15.
- 3. See Baylis et al., supra note 11.
- 34. B. Wright et al., "Will Community Health Centers Survive COVID 19?" The Journal of Rural Health 37, no. 1 (2021): 235–38.
- "FQHC PPS," available at https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/FQHCPPS (last visited November 16, 2022).
- 36. R. Pradhan Bluth Rachel, "Community Clinics Shouldered Much of the Vaccine Rollout: Many Haven't Been Paid," *Kaiser Health News*, October 11, 2021, *available at* https://khn.org/news/article/community-clinics-shouldered-much-of-the-vaccine-rollout-many-havent-been-paid/ (last visited November 16, 2022).
- 37. "FY 2021 American Rescue Plan Funding for Health Centers (H8F) | Bureau of Primary Health Care," October 5, 2022, available at https://bphc.hrsa.gov/funding/coronavirus-related-funding/fy-2021-american-rescue-plan-funding-health-centers-h8f (last visited November 16, 2022).
- 38. "Chapter 19: Board Authority | Bureau of Primary Health Care," available at https://bphc.hrsa.gov/compliance/compliance-manual/chapter19> (last visited February 23, 2024).