Invited Commentary

Moving Beyond Intent and Realizing Health Equity

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The arrival of new medical technology has been associated with increased inequality in health outcomes: the most well-off individuals are best able to capitalize on the benefits of medical innovation. This recurrent pattern, which manifests whether the new technology is scarce or not, implicates a range of barriers to accessing health care and information that are most often faced by lower-income or historically marginalized populations. In recent years, there have been growing calls by clinicians, health systems, and policymakers to reduce inequities in access to new advances in health care. However, it remains unclear exactly how this goal will be achieved.

In a study published in this issue of JAMA Health Forum, McCreary and colleagues report on a landmark effort at the University of Pittsburgh Medical Center (UPMC) to distribute equitably a scarce monoclonal antibody resource, tixagevimab with cilgavimab, for COVID-19 preexposure prophylaxis in immunocompromised individuals. In December 2021, UPMC received an allotment of 450 doses of tixagevimab with cilgavimab from the Pennsylvania Department of Health to cover a large health system with 35 hospitals and 800 outpatient facilities through February 2022. In an ex ante effort to mitigate health disparities and respond to guidance from the Commonwealth of Pennsylvania to allocate scarce resources in a manner that accounts for multiple ethical objectives, UPMC convened an advisory group of clinicians, community stakeholders, and experts in community outreach.

In a collaborative process, these parties developed a procedure to identify patients who were severely immunocompromised and would benefit most from tixagevimab with cilgavimab and use a lottery to equitably allocate drugs within this patient population. The lottery was constructed using the Area Deprivation Index (ADI) to ensure that patients in highly disadvantaged neighborhoods had an equal opportunity to access tixagevimab with cilgavimab. Patients living in neighborhoods with ADIs above a specific cutoff that has been shown to best target less affluent, rural, and Black patients received 2 entries in the lottery, compared with 1 entry for patients in more advantaged neighborhoods. In their study, McCreary and colleagues found that this process resulted in equitable access: similar proportions of individuals in more advantaged and more disadvantaged neighborhoods (about 28% in each group) received tixagevimab with cilgavimab during the study period, although Black patients who were allocated the drug in the lottery were significantly less likely to receive it compared with White patients (7.3% vs 29.4%).

This study represents an important advance for health equity research and practice. There is much to learn from it, both in terms of improving access to new innovations and achieving equitable health outcomes, more generally. A critical strength of the approach used by UPMC was to involve patient advocates and community groups at the beginning of the process. Bringing in multiple stakeholder perspectives in the early design phase allowed the health system to explicitly codify, in a manner consistent with the community’s preferences, what health equity meant in this context—equal opportunity to access tixagevimab with cilgavimab—and implement a strategy deemed fair by all parties to achieve it. Other health systems and government agencies seeking to address health disparities will similarly need to engage community stakeholders and be explicit about what health equity means within their populations, as the lack of a clear and specific goal precludes the design and implementation of effective interventions.

The findings in this study also highlight the importance of higher-resolution data for equity-focused interventions. On one hand, the study suggests that equitable outcomes, at least across certain population dimensions, may be achievable even with the relatively coarse data on patients’.
exposure to structural barriers that health systems currently have access to. Having identified its patient population, UPMC required only patient addresses as well as publicly available data on ADIs to implement the lottery intervention. The ADIs are defined at the census block group level, which include about 1000 residents on average. Thus, UPMC was able to achieve equitable opportunity to access tixagevimab with cilgavimab across small localities with very different socioeconomic profiles.

On the other hand, higher-resolution data that specifically measure the types of intersecting, reinforcing, and cumulative disadvantages faced by historically marginalized groups may be needed to achieve equitable outcomes across other dimensions, such as race and ethnicity. Within census blocks, patients assigned the same ADI levels but who may have faced relatively fewer structural barriers compared with Black patients or patients receiving Medicaid—namely, commercially insured and White patients—were more likely to access tixagevimab with cilgavimab conditional on being allocated to receive it in the lottery. This finding suggests that investing in data to track multiple or more comprehensive measures of disadvantage, or individual- rather than group-level measures, may be more successful in reaching marginalized populations. Ensuring that data are accurate for all population groups will also be important. For example, among Black patients who were allocated but did not receive the drug, difficulty contacting patients and incorrect initial eligibility assessments may have served as key reasons for lack of uptake, bolstering arguments that addressing racial disparities in electronic health record data will be important for achieving health equity. Obtaining these additional data and ensuring their relevance and accuracy over time may be expensive, but the findings in this study highlight where the potential benefits could accrue.

The lower rates of drug receipt among Black patients also underscores the importance of complementary investments and operational decisions to address additional structural barriers to accessing medical technology. McCreary and colleagues highlight several such investments and decisions that were undertaken by UPMC, including developing an electronic health record dashboard, revisiting historically used exclusion criteria, establishing infusion centers, providing transportation (or even home infusion) to reduce financial and opportunity costs from travel, addressing potential language barriers, and centralizing the allocation process rather than relying on physician referral (for which access may be unequal). The persistence of racial inequalities in access despite these health care–focused investments underscores the need for concomitant social investments, such as bolstering socioeconomic circumstances in patient communities (eg, medical-financial partnerships, improving pay for low-wage workers, and avoiding business practices that may have adverse effects on patient finances and wages), increasing trust between patients and health systems, and boosting the political power held by marginalized communities. Such investments will require greater coordination between health systems, community organizations, and local policymakers, as well as streams of financing that enable these partnerships and investments. The returns on such investments—both on their own and together—will need to be rigorously studied. However, they are likely to be essential to mitigating these access gaps in the future.

Clinicians, researchers, and health system leaders have thus far been successful in describing health inequities, but less effective in addressing them. The study by McCreary and colleagues represents the type of courageous and rigorous work that is needed to chart a path forward in determining how best to bridge the access gap for leading-edge medical technology. Future work would benefit from the same type of clarity demonstrated in this study by including clear definitions for how equity should be operationalized, attempting to address fragmentation between clinical services and services that address social drivers of health, aligning incentives, and addressing historical barriers that have made it difficult to achieve health equity. The study by McCreary and colleagues represents a welcome change from the status quo, providing fresh, detailed insights on how the health care sector can act now to translate stated interests in health equity into meaningful action.
ARTICLE INFORMATION
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