The coronavirus disease 2019 (COVID-19) pandemic has impacted vulnerable populations disproportionately, including those affected by socioeconomic disadvantage, racial discrimination, low health literacy, immigration status, and limited English proficiency. African Americans, Hispanics, and Native Americans are dying at considerably higher rates across the country than whites. These differences mirror existing disparities in other preventable health conditions and stem from risks that are rooted in the social determinants of health. Socioeconomic disadvantage with disparate living and working conditions has likely increased the risk of acquisition and spread of COVID-19 in vulnerable communities. Pre-existing disparities in chronic diseases that are associated with worse COVID-19 outcomes and less access to health care have resulted in a higher case-fatality rate.

Current evidence and our experience suggest that community engagement may be a strategy for addressing the disproportionate prevalence and mortality of COVID-19 in minority communities, which are manifestations of long-standing structural and societal inequities. Community engagement, “the process of working collaboratively with and through groups of people… to address issues affecting the well-being of those people,” can help empower communities in promoting COVID-19 prevention and containment. In community-engaged research (CEnR) partnerships, community members and researchers collaborate through all phases of research. These partnerships are thus uniquely poised to assess and respond to the pandemic with community partners. They have the organizational and technical experience to reach vulnerable community members and address unmet needs. Authentic CEnR partnerships foster credibility with vulnerable communities through existing trusting relationships, which is needed for real-time collaboration during crises. Herein, we describe some of the CEnR approaches used at Mayo Clinic in response to the needs of medically underserved and socioeconomically disadvantaged communities. The approaches are undergirded by principles of community engagement as well as frameworks for socioeconomic issues and social determinants of health.

Critical to the design of effective CEnR interventions are bidirectional communication, colearning, and understanding of unmet needs and existing assets. Mayo Clinic CEnR partnerships have observed several factors that negatively affected local communities. Although credible COVID-19 information had been translated into many languages and was widely available, that information was not reaching immigrant communities. The problem was exacerbated in some communities by a legacy of mistrust of health care institutions. Community partners observed disruption of health care for populations with pre-existing systemic barriers to using telehealth during the rapid shift to virtual-visit platforms. We then learned that these populations lacked access to testing and rapid results, which would reduce virus transmission, and that people and organizations in some minority communities, including faith-based organizations and health centers, were unprepared for the effects the virus would have in their communities. These barriers were compounded by unstable working conditions that often resulted in unsafe situations for vulnerable populations who comprise a disproportionate share of essential workers in some sectors or...
in layoffs, making access to health care even more complicated. Neighborhoods with higher housing density, more housing insecurity, and more multigenerational households made social distancing difficult. Additionally, multiple partners across Mayo Clinic catchment areas communicated concerns about the tendency of youth to be less attentive to social-distancing guidelines.

To address the needs, the first CEnR project used a crisis and emergency risk communication (CERC) approach in the Rochester Healthy Community Partnership, a CEnR partnership with 15 years of participatory research experience with immigrant groups in Southeast Minnesota. We adapted the Centers for Disease Control and Prevention CERC framework to co-create an intervention to address COVID-19 prevention, testing, and socioeconomic effects. Through bidirectional communication between communication leaders from six language groups and community members within their social networks, the partnership refined messages, leveraged resources, and advised policy makers. Components of this framework were adapted by JAX Saludable in Northeast Florida. Communication leaders were selected from a partnering community cohort of leaders trained through the Hispanic Outreach & Patient Engagement en Español program. The risk communication framework was also adapted by the Fostering African-American Improvement in Total Health Program Partnership and others to communicate with faith-based organizations. Communication leaders were selected from an established academic-community partnership with a network of churches and diverse community-based organizations. Adaptations were also used in Arizona within the Coalition of Blacks Against Breast Cancer.

Among other examples, CEnR partnerships with the Native American Research Outreach allowed Mayo Clinic to provide Native Americans access to testing from its reference laboratories. Through existing partnerships, a research protocol was established to enhance the capacity of a federally qualified health center to expand access to testing for their patients. For the African-American community, an adaptation of the CERC model evolved into a virtual town hall, which was hosted by a cross-sector team of clinicians, researchers, policy leaders, and community leaders.

Several lessons are emerging from this work. CEnR is important but not sufficient. We continue to learn about social consequences of the crisis and know that a rapid, coordinated, and sustained response is needed across sectors and disciplines that places community voice at its center. For example, community health center partners needed telehealth infrastructure support to provide ongoing care, but this was not feasible within the CEnR framework. We have also learned that a virtual environment must evolve to maintain ongoing engagement with community members, even though making the change may be disruptive at first. Early in the crisis, we paused many community engagement activities because of the need for social distancing and the disruption of institutional operations. The disparities that emerged suggested that community engagement activities should have been accelerated instead. An opportunity was also missed to shorten response time by having the partnerships do more to promote greater general awareness of the potential for pandemic and the need for preparedness. Thus, a multidisciplinary team is essential, given the scale of the pandemic and the pervasive health and social consequences. Clear communication with institutional leaders is also important to ensure that they understand needs of the underserved, even as they grapple with fiscal and operational challenges in their institutions.

The social and structural determinants of health have been understood for decades, and such determinants are also relevant to the disparities in health care that are exacerbated by the current COVID-19 crisis. The focus of multisector collaboration and community engagement should be to inform programs and policies that will eliminate the disproportionate impact of pandemics on
vulnerable communities. Indispensable to such initiatives are collaborative, community-led solutions in removing structural barriers to health equity that currently exist.

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Abbreviations and Acronyms: CEnR = community-engaged research; CERC = crisis and emergency risk communication; COVID-19 = coronavirus disease 2019

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