Reforming Care to Address Medical and Social Needs: Lessons from the COVID-19 Pandemic to Improve Diabetes Care and Reduce Disparities

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MERCK FOUNDATION
THE UNIVERSITY OF CHICAGO
BRIDGING THE GAP
REDUCING DISPARITIES IN DIABETES CARE

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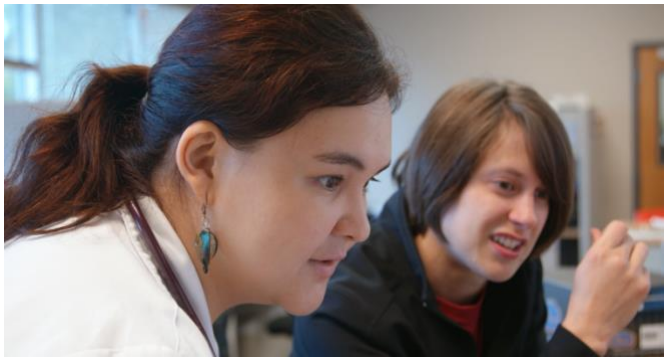


Executive Summary

Across a frayed social safety net and public health infrastructure, COVID-19 has had a devastating impact on vulnerable populations, compounding existing economic inequalities and health disparities. The suffering from this pandemic should galvanize permanent reforms that mitigate inequality and comprehensively address medical and social needs. The authors provide recommendations based on models of care from the Bridging the Gap: Reducing Disparities in Diabetes Care initiative. As part of the initiative, grantees submitted program data and process measures relating to changes and lessons learned during the COVID-19 pandemic. Comprehensive care for populations with diabetes both during and after COVID-19 should prioritize opportunities to: 1) augment programs for patients' unique needs and circumstances; 2) invest in a diversified workforce and team-based care; 3) implement social needs screening and referral activities; 4) offer access to telemedicine and telemonitoring to support continuity of care; 5) improve health information technology (IT) to address social needs; 6) support mental health needs; 7) expand access to health insurance; 8) strengthen public health infrastructure; 9) reform and align payment models to address social needs; and 10) build trustworthy institutions.

The Need for Comprehensive Care for Medical and Social Needs During and After COVID-19

The health and economic consequences of COVID-19 are especially severe among populations that have been economically and socially marginalized.[1,2] Across a frayed social safety net and public health infrastructure, COVID-19 has compounded existing economic inequalities and health disparities.[3,4] Historically marginalized and underrepresented groups (e.g., Black, Latino/a/x, Native American, Asian Americans, and Pacific Islanders), are vulnerable due to preexisting social and economic conditions shaped by persistent and longstanding structural inequalities (e.g., racism).[5] These conditions in which people live and work create environments that shape inequitable distribution of health conditions (e.g., diabetes, hypertension), and heightened risk of exposure to COVID-19.[6] The suffering from this pandemic should galvanize permanent reforms that mitigate inequality and comprehensively address medical and social needs.[7]

Constrained Options to Prioritize Health and Safety

Coronavirus prompted many states to issue directives in March 2020 to encourage residents to stay at home to limit the pandemic.[8] While states and localities have alternatively taken steps to mitigate the virus through business restrictions, mask mandates, and stay-at-home orders amid rising case counts[9], many individuals have constrained choices to prioritize safety and health. Public health recommendations emphasized steps to mitigate risk or vulnerability through personal responsibility (e.g., personal hygiene, social distancing, masking), failing to account for the context of structural racism and occupational class structures that are both racialized and gendered.[6,10]

Structural racism (i.e., differential access to goods, services, and opportunities by race) places disadvantaged groups (e.g., racial and ethnic minorities, people with disabilities, low-income people, non-citizens and people in families with mixed immigration status) at risk for COVID-19 through both individual risk and place-based risk.[1,11] Structural racism has created persistent inequities in education, employment, income, policing and incarceration, health care access, chronic stress, and multiple other factors that affect health.[12,13] For example, mitigating risk has been impossible for individuals confined in detention centers and jails who cannot sufficiently access cleaning products or practice social distancing.[14,15] Incarcerated and detained individuals, including older adults with conditions like diabetes, heart failure, and COPD, have been exposed to an environment where viral spread is dangerous.[16]

Additionally, essential work positions have conditions that can place individuals at increased risk for contracting COVID-19 due to proximity to infected individuals, infected environments, or the virus itself. People of color are at increased risk of infection since they are disproportionately represented in occupations considered essential during the pandemic (e.g., front-line work).[17] More than half of all Black, Native American, and Hispanic/Latinx workers have essential or nonessential jobs that must be done in person and close to others, they may be more likely to be exposed to the coronavirus traveling to work due to public transportation to commute to work, and are less likely to have health insurance coverage than white workers.[18] Women of color are employed in essential jobs that have been on the frontlines of the COVID-19 crisis, including nursing assistants, home health aides, and child care workers providing emergency child care.[19]

Organization Seeking to Address Health Disparities

We highlight these examples based on our experience with Bridging the Gap: Reducing Disparities in Diabetes Care, a 5-year Merck Foundation-supported initiative. Eight organizations within the initiative are improving access to high-quality diabetes care and reducing health disparities for vulnerable populations. They bring together health care and community-based organizations from diverse sectors to address complex medical and social needs of patients with diabetes.[20,21] These organizations developed site-specific intervention strategies to serve specific populations and outlined activities that fit within two domains: diabetes care transformation and community-based population health strategies. We have detailed the organization types, intervention strategies, populations, care transformations, and community-based activities of each grantee in Table 1. In this report, we feature the activities and strategies of each grantee organization and outline critical lessons learned during the pandemic that can improve diabetes care into the future.

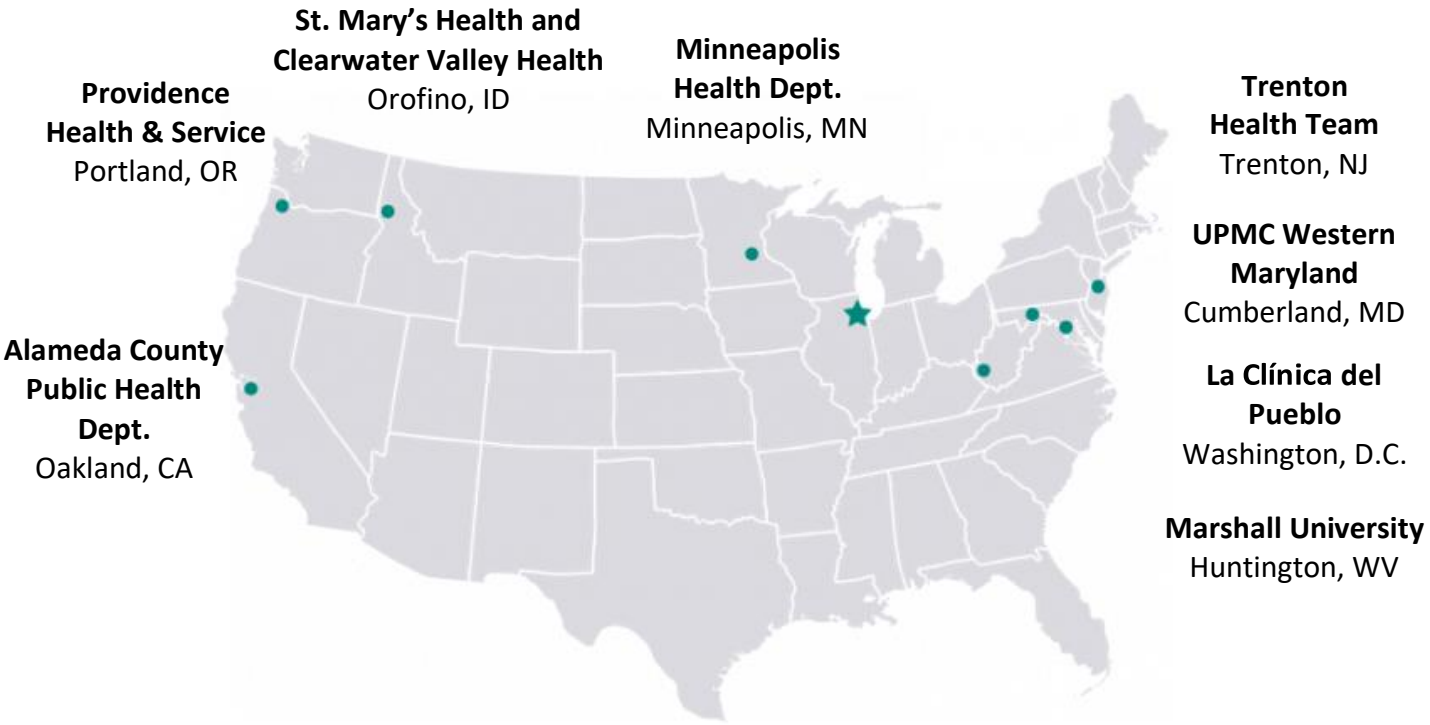


Table 1A. Intervention Strategies, Populations, Care Transformations, and Community-Based Activities

Organizations	Trenton Health Team	Marshall University	Minneapolis Health Department	Alameda County Public Health Department
Organization Type	Non-profit, public health collaborative	Academic Partner	Public Health Department	Public Health Department
Intervention Strategy and Target Population	Improve care and health outcomes among vulnerable, low-income populations in the Trenton, NJ area through a city wide, comprehensive approach to diabetes care tailored to individual patient needs.	Implement and sustain an equitable payment model for CHW services for high-risk Appalachian patients with diabetes.	Enhance the delivery of diabetes care and increase patient engagement among patients with diabetes who are at high risk for diabetes related complications. Collaborate with local FQHCs that serve low income African American, Native American and Latino patients throughout the Minneapolis-area.	Build local clinic capacity to provide peer-led diabetes self-management education. Improve care and reduce diabetes-related hospitalizations among low-income African Americans and Latinos in Alameda County, CA.
Diabetes Care Transformation Activities	Develop and disseminate culturally relevant, diabetes education to support self-management and offer peer support. Improve access to diabetes retinopathy screening in the primary care setting. Improve medication access through direct collaboration with MCOs to provide quarterly formulary updates to providers and pharmacists.	Implement a sustainable CHW care coordination model that includes home visits and linkage to community services that address the social determinants of health and support diabetes self-management.	Pilot new care team roles (e.g., community pharmacists, CDEs) to support providers and patients with chronic care management. Facilitate referrals to community-based CHWs who navigate patients to community resources for healthy food, physical activity, and self-management support.	Integrate peer educators and patient navigators into care teams at two local area community health centers to support patients with individualized diabetes management goals.
Community-based Population Health Activities	Establish a community-wide, social needs screening and referral platform to streamline social needs screening and referral activities across healthcare and community-based organizations. Convene a cross- sector food stakeholder group to increase access to healthy food through meal delivery, community gardens, farmers markets, and food pantries.	Coordinate with local area social service agencies and food stakeholder groups to better align resources and expand the availability of food access resources and reduce transportation barriers in rural communities.	Collaborate with a grocery co-op to support nutrition education and work with an external CHW organization to navigate patients to resources to address unmet social needs.	Develop cross-sector partnerships to address gaps in services and available resources, including access to healthy food, options for physical activity, and programs to support other unmet social needs (e.g., housing, public benefits, employment).

Acronyms: CDE - Certified Diabetes Educator, CHW - Community Health Worker, FQHC - Federally Qualified Health Center, MCO - Managed Care Organization

Table 1B. Intervention Strategies, Populations, Care Transformations, and Community-Based Activities

Organizations	La Clínica del Pueblo	Providence Health & Services	St. Mary's Health and Clearwater Valley Health	UPMC-Western Maryland
Organization Type	FQHC	Integrated health delivery system	Integrated health delivery system; Critical Access Hospital	Community Hospital
Intervention Strategy and Target Population	Improve health outcomes for low-income, Latinx immigrant patients in the Washington D.C. metro area by providing access to high-quality diabetes care that is tailored to language and culture.	Improve care, reduce health disparities, and strengthen coordination between clinical and social services at three local family medicine clinics in the Portland, OR area that serve low-income individuals with diabetes.	Strengthen the quality of care and address the social determinants of health for low-income people with diabetes who live in sparsely populated and geographically isolated areas in frontier Idaho.	Transform primary care for low-income populations with diabetes and other chronic conditions in rural, Western Maryland who often face geographic barriers to care.
Diabetes Care Transformation Activities	Provide nurse-led care coordination that is tailored to the needs of patients. Care teams include PCPs, nurse care managers, care coordinators, and CHWs who provide culturally relevant services and navigate patients through healthcare and social care.	Identify gaps in care (e.g., missed appointments, no recent lab values) and deploy multidisciplinary teams to address them. Three pilot clinics embed full time community resource specialists who are multilingual, multicultural, and trained in motivational interviewing and trauma-informed care to provide referrals to local resources, social services, and benefit programs.	Integrate population health team members, including care managers, behavioral health workers, a dietitian and CHWs, into patient centered medical home teams to better coordinate care and connect both community residents and patients with diabetes to healthcare and community resources for support.	Embed diabetes care coordinators in a dedicated outpatient chronic disease resource center. Staff utilize telemonitoring to promote communication between vulnerable patients and care providers, offer diabetes self-management education, and address unmet social needs (e.g., food insecurity, transportation) that impact diabetes self-management.
Community-based Population Health Activities	Collaborate with organizations that share values to create safe spaces and address specific needs (e.g., food insecurity, access to health insurance and healthcare) of immigrant patients who are often excluded from social welfare programs (e.g., SNAP, Medicaid). Partner with legal service providers to address legal needs.	Partner with a local social service organization that embeds community resource specialists at family medicine clinics to assess and address unmet social needs. Partner with a local transportation agency to pilot innovative solutions to address transportation and food access barriers for patients and community members.	Collaborate with food banks and local food distribution sites to conduct community-based social need screenings, provide health screenings (e.g., blood pressure, depression), and offer referrals to primary care and local organizations for frontier residents with unmet medical and social needs who may not access care.	Collaborate with community organizations that support social needs including social isolation, medication access, food access, and transportation to ensure social need are addressed with medical needs.

Acronyms: CHW - Community Health Worker, FQHC - Federally Qualified Health Center, MCO - Managed Care Organization, PCP - Primary Care Provider, SNAP - Supplemental Nutrition Assistance Program

Lessons Learned during the COVID-19 Pandemic

1. Augment Programs for Patients' Unique Needs and Circumstances
2. Invest in a Diversified Workforce and Team-based Care
3. Identify and Address Social Needs
4. Implement Telemedicine and Telemonitoring
5. Improve Health Information Technology to Address Social Needs
6. Support Mental Health
7. Expand and Sustain Access to Health Insurance
8. Strengthen Public Health Infrastructure
9. Reform and Align Payment Models to Address Social Needs
10. Build Trustworthy Institutions

1. Augment Programs for Patients' Unique Needs and Circumstances

Patients need accessible messages about prevention, hygiene and symptoms of COVID-19, as well as information on stigma and discrimination, stress and coping, and self-care and solidarity. Consider the care of immigrant patients who are concerned about when and where to seek health care services due to their immigration status.

La Clínica del Pueblo in Washington, D.C. tailors services to the needs of low-income, Latinx patients from Central America.[22] The clinic's patients encounter barriers to health care due to language barriers, exclusion from government programs, and challenges navigating eligibility for mixed-status families. La Clínica intentionally hires health educators and promotors de salud who are community members.[18] Due to La Clínica's strengths as an organization working to identify and address social needs, the organization was well- positioned to remotely assess and support the needs of vulnerable patients at the onset of the pandemic. Staff rapidly designed and implemented patient outreach and engagement strategies that reached 671 patients with chronic diseases, including 34% with diabetes and 24% with hypertension. Clinic staff proactively conducted 1,113 phone calls and supported patients with resources for the following needs: food insecurity (23%), access to medications for chronic conditions (27%), and information about COVID-19 (29%).

2. Invest in a Diversified Workforce and Team-Based Care

Providers and nurses have been overwhelmed with acute patient needs during the COVID-19 pandemic.[23] Health systems need a range of staff to care for patients during and after the pandemic. A diverse workforce with community health workers (CHWs), peer navigators, and care coordinators can support patients and address critical social needs.

CHWs serve as a bridge between clinical teams, patients, and community organizations. Marshall University supports Appalachian clinics like Mountain Comprehensive Health Corporation in rural Kentucky with CHW models to engage high-risk patients with diabetes. CHWs support self-management, address stress and coping, identify unmet social needs like food insecurity, and connect patients to community resources. Implementation of a CHW-supported care coordination program for high-risk rural patients with diabetes has yielded promising outcomes, including average hemoglobin A1c reduction of 2.2% per patient with 75% of patients receiving support from local community programs to support diabetes self-management (e.g., walking program, cooking class, Food Farmacy).

3. Identify and Address Social Needs

Many individuals with chronic conditions who are employed in sectors that have been deeply affected by COVID-19 (e.g., food services, retail, hospitality) are experiencing economic hardship.[24] Clinics should support patients with resources to address medication access, rental assistance, insurance enrollment, food security, and other needs.[25-27]

Screening for social needs identifies non-medical factors that contribute to poor health outcomes. To improve health for patients with a history of incarceration, diabetes navigators at Roots Community Health Center in Oakland, CA, begin their collaborative work with patients by first assessing social needs, goals, and priorities for patients. In a cohort of 21 patients with diabetes, patients report housing needs (76%), poverty/other material needs (52%), employment needs (33%), and legal needs (33%). Roots has a patient population that is 82% African-American and 51% men and their employees mirror the population they serve (81% African-American, 48% men). Navigators bring lived experience to their work with patients, and they are skilled with identifying supportive resources to address medical and social needs. Navigators connect patients to job training programs and employment opportunities, including Clean360, a soap factory designed to provide light manufacturing training and living wage employment opportunities for those who have been disconnected from the workforce. Clean360 focuses on didactic instruction, basic skills training, job experience and removing barriers to employment for individuals with a history of incarceration. The Roots Health Careers Ladder is designed to support participants in their health career pathway through on-the-job training, skill building, and scholarships. Roots is committed to addressing patients' economic needs as a fundamental step towards improving health. In the absence of addressing poverty and material needs, standard interventions like dietary changes and prescribing medications will have limited impact for many patients.

4. Implement Telemedicine and Telemonitoring

As COVID-19 spreads, health care organizations have rapidly scaled telehealth services. Telehealth improves continuity of care and collaboration with patients and decreases risk for infection.

UPMC Western Maryland utilizes remote technology to monitor blood pressure and blood glucose for patients between routine office visits and support patients with abnormal values. Frontier health systems like St. Mary's Health and Clearwater Valley Health in Idaho use behavioral health and psychiatric care telehealth visits to overcome geographic access barriers. During the early months of the pandemic, St. Mary's Health and Clearwater Valley Health were able to implement telehealth services to address barriers to care due to COVID-19 restrictions. Between April 2020 and March 2021, St. Mary's Health and Clearwater Valley Health providers conducted 632 tele-behavioral health visits. After infrastructure improvements (e.g., implementation of telehealth platform for behavioral health; new clinical site for behavioral health services), St. Mary's Health and Clearwater Valley Health nearly doubled the number of behavioral health visits (April 2020 to March 2021: 2051) they provided from the previous year (April 2019 to March 2020: 1121).

5. Improve Health Information Technology (IT) to Address Social Needs

Health IT is critical to facilitate communication about medical and social needs.28 A Health Information Exchange (HIE) provides access to integrated patient records in real-time to support treatment decisions as well as insight into health trends and needs at both individual and population levels during and after a pandemic.

Trenton Health Team in New Jersey operates the Trenton HIE and has worked with key health partners to integrate NowPow into the HIE. NowPow is a platform that supports social needs screening, identifies community resources, and connects bi-directional referrals to address needs. These innovations enable providers and community partners to identify patterns in utilization, understand community-level trends, convene health care and community organizations, address social needs, and improve population health. Trenton Health Team has engaged community stakeholders utilizing the NowPow platform to support social needs screening and referral processes. As of the end of 2020, Trenton Health Team has contracted with 44 different organizations (e.g., faith-based, health care, social service, government) and trained over 300 end-users to utilize the platform. In 2020, 356 screenings were completed, 198 (56%) of screenings identified needs. The total number of needs identified were 687. The top three social needs identified through screenings in 2020 were mental health (23%), food insecurity (16%), and education (11%).

6. Support Mental Health

The enduring mental health effects of the COVID-19 pandemic encompass anxiety and depression from economic uncertainty, isolation, social distancing, grief, and loss.[29] Health care organizations must improve their capacity to address mental health needs.

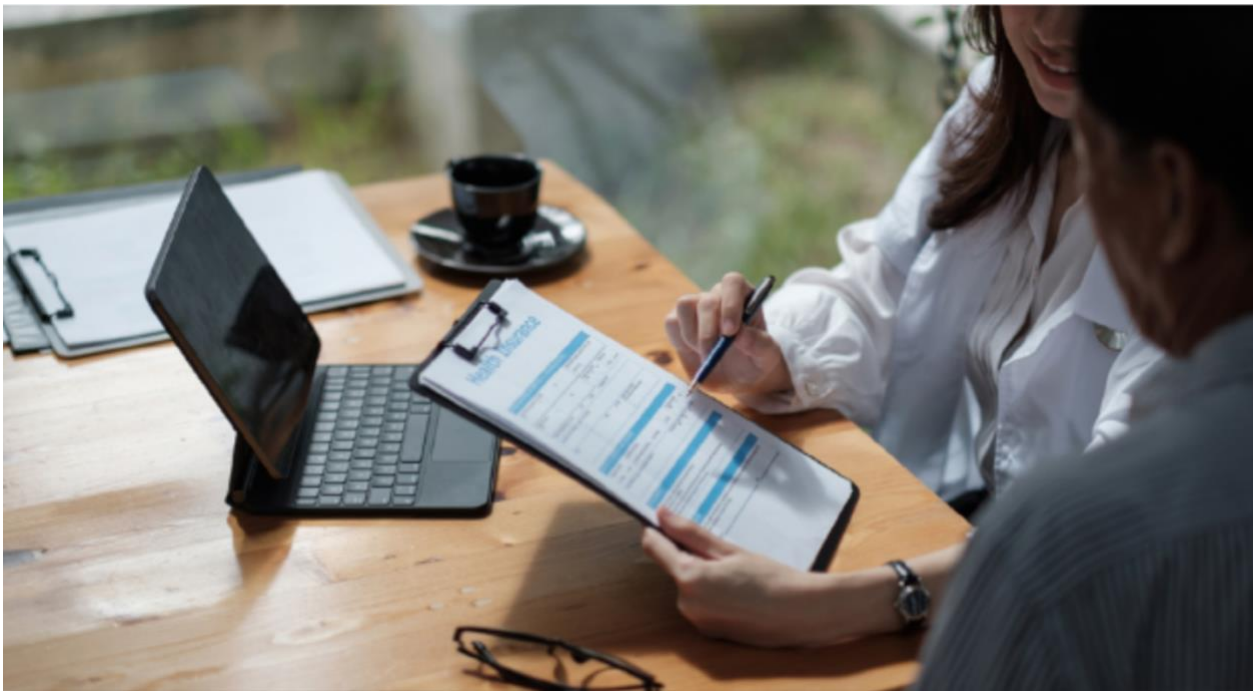
Social workers and other behavioral health providers are key members of the care team at multiple sites within the initiative. Sites like Providence Health & Services (Providence) in Oregon train and educate clinic staff on trauma-informed and empathic inquiry principles to support social needs screening during behavioral health assessments and how to engage in sensitive conversations with patients. As part of an effort to improve access across their system, Providence transitioned from annual PHQ-2 screening to screening each visit and connected patients to behavioral health services as needed.

After evaluating a variety of behavioral health models and support systems, St. Mary's Health and Clearwater Valley Health placed behavioral health therapists in their primary care practices and clinics to improve access for patients and offer an integrated behavioral health and primary care service model. Establishing this model allowed St. Mary's Health and Clearwater Valley Health to rapidly increase access to behavioral services via telehealth early in the pandemic during a time when access to any in-person services was limited.

7. Expand and Sustain Access to Health Insurance

We must improve access to health insurance. The policy decision not to open the healthcare.gov marketplaces for a special enrollment period during the early months of the pandemic undoubtedly had devastating health consequences for some.[30] Uninsured patients may not seek care when struggling to manage symptoms of COVID-19. Others may forego medications to address acute needs like food security and their chronic conditions could deteriorate.

La Clínica del Pueblo organizes with local residents and community partner organizations to advocate for a 12-month renewal requirement for the DC Healthcare Alliance Program, a public health insurance program available to District residents regardless of immigration status.[31] The 6-month in-person renewal requirement places unnecessary burdens on patients including loss of time, loss of income, and loss of coverage.[32,33]



8. Strengthen Public Health Infrastructure

COVID-19 revealed a weakened public health infrastructure that unable to comprehensively and aggressively coordinate a response to the pandemic after years of insufficient support (e.g., persistent underinvestment, a lack of political will, reactionary interventions instead of strategic capacity building, priorities for health care provision over prevention).[34]

Public health agencies working with community-based clinics can bolster cross-sector partnerships with community-based organizations that address medical and social determinants of health. The Minneapolis Health Department and three federally qualified health centers (FQHCs) are implementing enhanced diabetes care models. Their partnership connects CHWs from a community-based agency to support patients with self-management, address social needs, and access community-based resources. The pandemic galvanized FQHCs to coordinate resources with community partner organizations to support new and emerging social needs among patients in their Minneapolis communities.

Southside community health services, an FQHC that partners with the Minneapolis Health Department on a variety of public health and chronic disease prevention efforts, needed to mobilize quickly in the early phases of the pandemic to strengthen and complement existing public health services available including COVID-19 testing centers and a dedicated COVID-19 vaccination clinic. Collaboration between clinic staff, volunteers, and paid temporary employees was an integral part of creating necessary workflows to ensure patient care. When space became limited due to expanded operations, staff coordinated space rental with a local community center near the clinic. The space not only allowed for additional vaccination capacity but also enhanced the collaboration with the community center which allowed expanded access to the elderly population they provide support for.

9. Reform and Align Payment Models to Address Social Needs

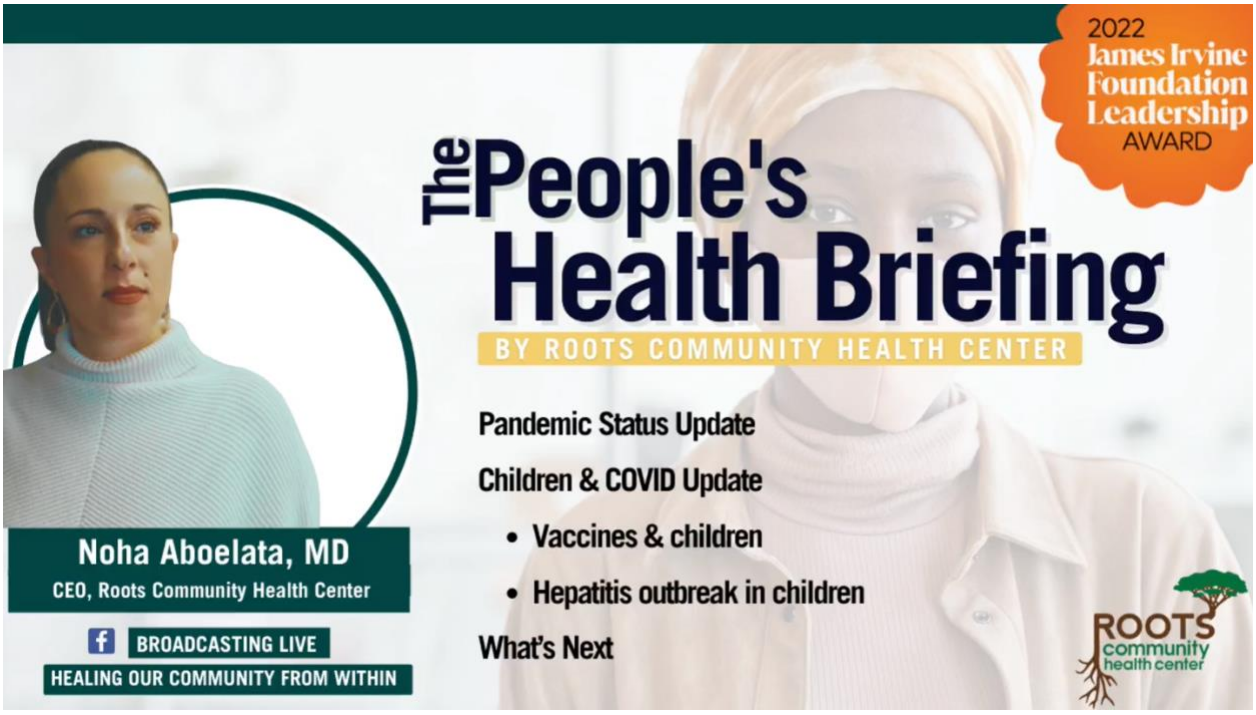
The COVID-19 pandemic demonstrates that our medical and social safety nets are inadequate or non-existent for many. Reformed payment systems that support and incentivize health care organizations to address medical and social needs are essential to drive action.[35]

Under Maryland's Total Cost of Care model, health systems like UPMC Western Maryland are held accountable for all health care costs of the surrounding service area, and thus have powerful incentives for addressing medical and social needs and working with community partners to reduce costly hospitalizations.[36] UPMC-Western Maryland developed the Center for Clinical Resources (CCR) to integrate chronic disease management across their system and to more effectively support the medical and social needs of high-risk patients. Among patients followed by the CCR, UPMC-Western Maryland was able to reduce hospital admissions by 12% for patients with diabetes, 27% for patients with congestive heart failure, and 64% for anticoagulation patients. Within the first 24 months of operation, the CCR resulted in a $9.6 million cost avoidance.[37] Marshall University has worked with private payers to support a CHW-based chronic care management program that serves high-risk patients at FQHCs in Appalachia. Grant funding supports the startup costs of the CHW model; as savings are realized, payers have agreed to share the savings with FQHCs to ensure the program continues.[38]

10. Build Trustworthy Institutions

COVID-19 vaccine hesitancy is present due to mistrust of the government's pandemic response, vaccine development at an unprecedented pace, propagation of misinformation, vaccine-specific concerns, a need for more information, anti-vaccine attitudes or beliefs, and a lack of trust in health care systems and providers.[39] Vaccine distribution plans must recognize and understand the myriad reasons for vaccine hesitancy and earn the public's trust to receive the COVID-19 vaccine. Health care organizations must demonstrate that they are worthy of trust, given the historical and ongoing exploitation and harm of minoritized racial and ethnic groups carried out by American physicians, researchers, and health care systems.[40,41]

Since July 2020, Roots Community Health Center has hosted the weekly People's Health Briefing through social media to provide information as a trusted voice for COVID-19 updates in Oakland, East Oakland, and Alameda County in California. The weekly briefing integrates data and perspectives from experts on the frontlines of the COVID-19 crisis, with topics including re- opening standards set by the state of California, the mental health implications of the pandemic, contact tracing, best practices for essential workers, and vaccine development, efficacy, and safety.



Conclusion

To reduce persistent structural inequalities that are heightened by the pandemic, we must reconstruct health care services and foster cross-sector collaboration to better address the medical and social needs of our most historically marginalized patients and communities.[10,42]

State agencies, health care organizations, and community-based programs will have to pivot to address post-COVID-19 realities. Public health leaders, mental health providers, FQHC staff, community-based organizations, and advocates have known for far too long that our current systems do not adequately support the medical and social needs of our communities. Health care organizations need to collaborate with community-based organizations, non-health-sector institutions, policy makers, and payers to shape and sustain long-term strategies to advance health equity.

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