

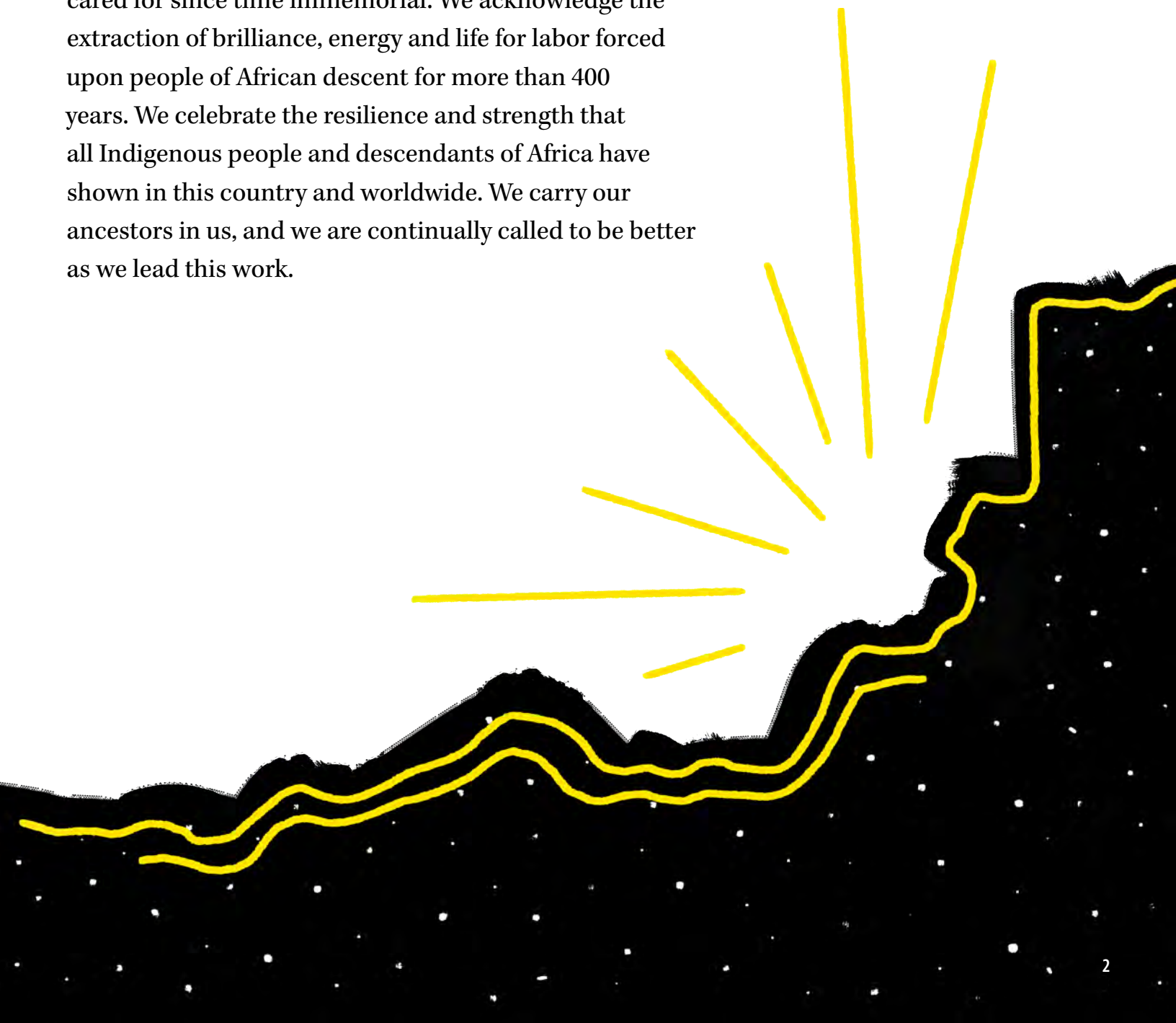


Embedding Equity in Crisis Preparedness and Response in Health Systems



Land and Labor Acknowledgment

We acknowledge that we are all living off the stolen ancestral lands of Indigenous peoples, which they have cared for since time immemorial. We acknowledge the extraction of brilliance, energy and life for labor forced upon people of African descent for more than 400 years. We celebrate the resilience and strength that all Indigenous people and descendants of Africa have shown in this country and worldwide. We carry our ancestors in us, and we are continually called to be better as we lead this work.



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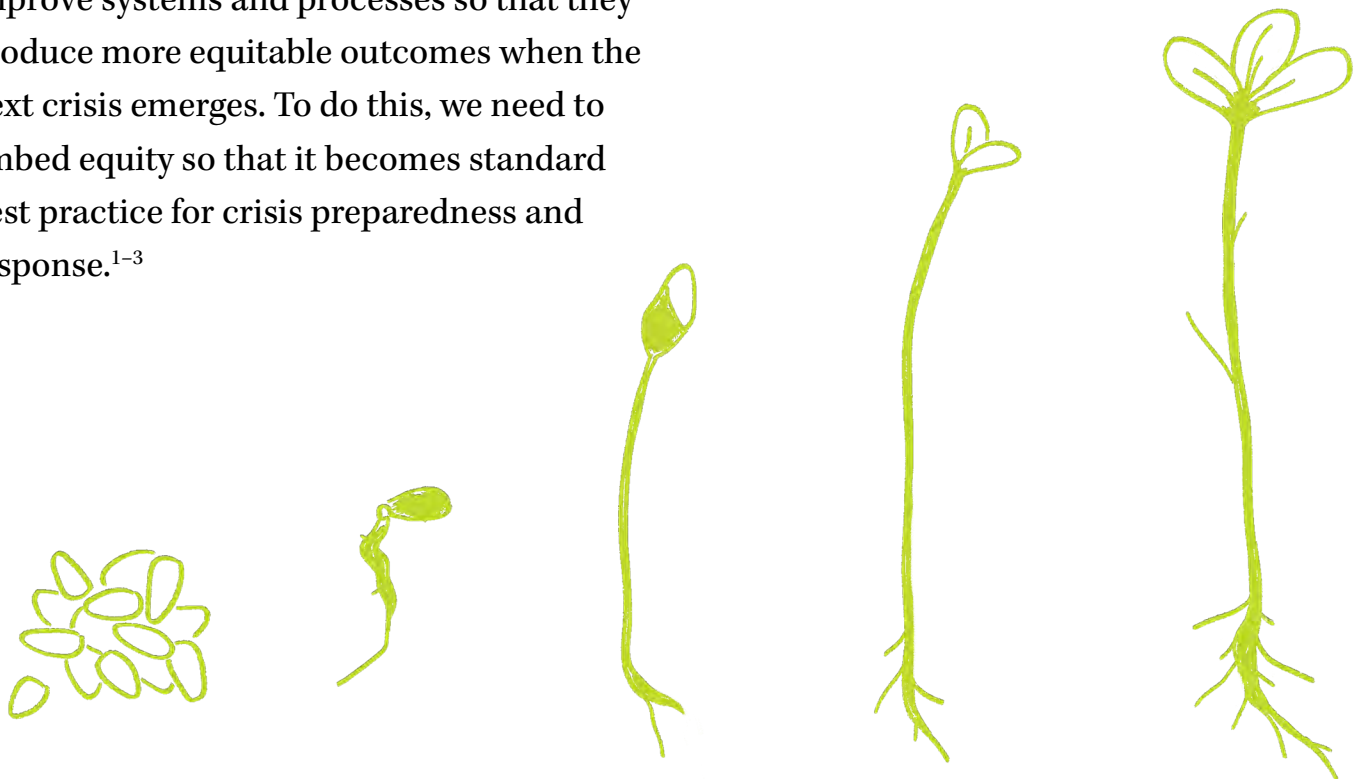
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Introduction

We set out to create a Guide to support health care organizations embed equity during crises, with a specific focus on racial justice. We offer lessons grounded in case studies from around the country, including the Brigham and Women's Hospital, the Veterans Affairs Pittsburgh Healthcare System, the Massachusetts Department of Corrections, the Long Beach Department of Health, the Dade County Street Response Team, the New York City Health Department's Center for Health Equity and Community Wellness, the Chicago Racial Equity Rapid Response Team, and more. There is urgency to this work; a need to improve systems and processes so that they produce more equitable outcomes when the next crisis emerges. To do this, we need to embed equity so that it becomes standard best practice for crisis preparedness and response.¹⁻³

Embedding equity in crisis preparedness and response is the work of all, including and especially organizational executive leadership. We wrote this guide, therefore, with a broad audience in mind: anyone who has a role within a health system that can influence the actions and processes of that system. However, this guide is especially critical for senior leaders (e.g., C-suite, Board members) who have the power to make health equity a strategic organizational priority (including crisis preparedness and response) and to ensure sustainable resource allocation to support those leading the work.⁴



Embedding equity involves changing structures and policies, redistributing resources, and valuing the experiences of people most impacted by the issues at hand.⁵ It involves recognizing the harmful consequences of the status quo, understanding that inequitable outcomes are produced by design. Embedding equity also calls for intentional action grounded in an approach focused on improving systems.

“Any organization that wants to improve equity must be prepared to fundamentally change the current system that is producing disparities in health outcomes. Thus, any health care organization that prioritizes decreasing health disparities must be prepared to make health equity a system property—that is, a system-level priority at all levels of the organization—and to profoundly alter the current system that is producing inequitable results. This is not an issue that can be delegated; addressing health equity requires a major commitment from top-level leadership.”⁴

— Institute for Healthcare Improvement,
Achieving health equity: A guide for health care organizations

Why we need this guide

Many people have described how COVID-19 struck along the fault lines of society.^{6–8} COVID-19, like other epidemics, emergencies, and crises before it, compounded the burden of disease experienced by certain communities. COVID-19 thrived on pre-existing political and economic arrangements that generated advantage for some, and disadvantage and vulnerability for others.

We have seen this time and time again. In the 1918 flu pandemic, Jim Crow policies restricted the care Black people could receive in the South.^{9,10} In 1995, a heat wave in Chicago killed more than 700 people, disproportionately in Black and low-income communities.¹¹ The recent histories of the Zika virus, Mpox, and Hurricanes Katrina, Harvey, Irma, and many others reveal similar patterns—every catastrophe or crisis harms communities along lines pre-mapped by structural racism and the systems, policies, organizations, and people who uphold it.

To really move towards equity, we must consider the historical context of how our

systems and institutions have come to be the way they are in the first place; we must ask ourselves, “What has happened in my organization over time that may have excluded people and created harm?”.

- Part 3, based on Dr. Camara Jones’ influential allegory of the *Gardener’s Tale*,¹³ offers practical step-by-step guidance for embedding equity in crisis preparedness and response.

It is incumbent on all of us to challenge these norms deliberately and routinely. In this way, we recognize that we exacerbate inequities when we avoid examining our organizations and ourselves. In crises, if health care organizations do not intentionally address these structures (inequitable laws and policies), we will cause added harm, as we all have before. To break that cycle, we recognize that we have a collective opportunity to do something different; to embed equity. Every crisis harms people who face discrimination and oppression; every crisis is an opportunity to do better. Recognizing that equity is not a zero-sum game, we have an opportunity to improve systems and produce better outcomes for all.¹²

This guide is structured in three parts.

- Part 1 presents overarching recommendations for embedding equity in crisis preparedness and response in health systems.
- Part 2 is a series of case studies, illustrating key concepts and experiences from around the country.



Recommendations



**Recommendations
for embedding equity
in crisis preparedness
and response in
health systems**

Recommendation

#1

Shift to race and identity-explicit approaches that promote equitable crisis response processes and outcomes.



Recommendation

1

Shift to race and identity-explicit approaches that promote equitable crisis response processes and outcomes.

Practice 1:

Promote inclusion of race and ethnicity as proxies for racism, not genetic or biological ancestry, in all policies, practices, and algorithms related to crisis response.

Practice 2:

Identify policies and practices that, by ignoring race or other markers of identity, perpetuate (and exacerbate) structural inequities in crisis response.*

Practice 3:

Develop and use standard processes for partnering with historically marginalized communities to understand community strengths, opportunities, challenges, inequities, and needs to inform and guide priorities and foster accountability for impact.

*Such policies and practices have usually been described as “colorblind,” both by proponents and opponents. Recent critiques of this term have explored its ableist connotations. For example, Annamma et al. point out that “Though the conceptualizing and critiquing of the racial ideology of color-blindness is an essential step in troubling white supremacy... conceptualizing the refusal to recognize race as ‘color-blindness’ limits the ways this ideology can be dismantled... Color-blindness, as a racial ideology, conflates lack of eyesight with lack of knowing. Said differently, the inherent ableism in this term equates blindness with ignorance. However, inability to see is not ignorance... The goal here is not to scold or to police the language of race scholars but to instead suggest that if we use an intersectional framework, we can all strengthen our critique of a racial ideology that rejects the recognition of race through confronting the (un)spoken norms lurking within concepts of race and racism. By naming this racial ideology as color-evasiveness, we demonstrate the social construction of race and ability while simultaneously confronting the social and material consequences of racism and ableism.”¹⁴

Recommendation

#2

Systematically integrate equity into all existing crisis response education and training.



Recommendation #2

Systematically integrate equity into all existing crisis response education and training.

Practice 1:

Require foundational racial justice and equity education as part of crisis response training.

Practice 2:

Increase funding and provision of trauma-informed care and behavioral health training for all crisis response team members (including first responders).

Recommendation

#3

Design a diverse crisis response team across identities (including race and ethnicity, gender identity, disability status, and language fluency) and roles (including executive leadership, professional staff, and support staff).



Recommendation #3

Design a diverse crisis response team across identities (including race and ethnicity, gender identity, disability status, and language fluency) and roles (including executive leadership, professional staff, and support staff).

Practice 1:

Advance sustainable short- and long-term strategies to diversify your health care workforce.

Practice 2:

Ensure adequate support for historically marginalized staff participating in crisis response teams; avoid overburdening them with additional but uncompensated requests related to diversity, equity, and inclusion.

Practice 3:

Prioritize representation in crisis response teams across roles, with special attention to including representation of staff from lower-wage employee groups.

Recommendation

#4

Embed equity in all emergency response structures (e.g., operations, communications, governance) across the organization.



Recommendation #4

Embed equity in all emergency response structures (e.g., operations, communications, governance) across the organization.

Practice 1:

Start by embedding equity into key crisis response structures, such as incident command and quality and safety, to ensure reliable identification, timely escalation, effective response, and adequate resourcing for addressing inequities.

Practice 2:

Ensure professional translation, transcription, and other such language services in the development of clinical guidance, communications (internal and external), and outreach strategies.

Practice 3:

Create ongoing real-time bi-directional communication channels that allow community partners on the ground to inform strategies; provide funding for community partners to engage in this level of collaboration.

Practice 4:

Direct hiring or contracting with local community organizations and/or Minority/Women-Owned Business Enterprises (M/WBE) small businesses.

Recommendation

#5

Improve collection of demographic and social needs data and infrastructure to reliably detect, measure, and evaluate inequities in crisis preparedness and response.



Recommendation #5

Improve collection of demographic and social needs data and infrastructure to reliably detect, measure, and evaluate inequities in crisis preparedness and response.

Practice 1:

Ensure appropriate data safeguards, including:

- Self-identified demographic data.
- Careful use of data imputation, as necessary.
- Anti-discrimination and data privacy
- Informed consent.

Practice 2:

Stratify key quality, safety, patient experience and other patient-reported outcome data, employee and social needs data by relevant sociodemographic factors (e.g., race and ethnicity, language proficiency, disability status, sexual orientation, and gender identity) to systematically identify harmful variation in crisis response.

- Prioritize hiring of data analysts with expertise in equity to support crisis preparedness and response phases.

Recommendation

#6

Take action at a systems-level to prevent and/or address inequities in crisis preparedness and response.



Recommendation #6

Take action at a systems-level to prevent and/or address inequities in crisis preparedness and response.

Practice 1:

Address harmful variation in care provided, including inpatient and ambulatory medical services, and social needs services:

- Monitor for differential (and inequitable) access to core health care services during a crisis, such as elective ambulatory clinical and ancillary services, non-emergent hospital diagnostic and outpatient services.
- Provide robust social services and home/community care upon discharge.
- Ensure access for those with public or no health insurance.

Practice 2:

Develop strategies to measure future pandemic impacts across diverse populations and to support equitable allocation and prioritization of resources.

Practice 3:

Participate in advocating for, developing, and/or implementing locally-, state-, or federally-funded or administered governance and technical mechanisms (e.g., 911 data, bed boards, resource finders) to support load balancing (e.g., ambulance redirection, interfacility transfers) and stockpile distribution (e.g., ventilators, personal protective equipment) that help match patient volume and facility capacity.

Recommendation

#7

Align, invest, and advocate for and with historically marginalized communities.



Align, invest, and advocate for and with historically marginalized communities.

Practice 1:

Advocate for and support implementation of expanded access to comprehensive care for historically marginalized populations during and between public health emergencies.

Practice 2:

Advocate for and support people who are undocumented.

- Prohibit U.S. Immigration and Customs Enforcement (ICE) from accessing health care facilities, shelters, quarantine facilities, and alternate care sites.
- Contract with community-based organizations to support immigrant populations.

Practice 3:

Advocate for and align with efforts from community-based organizations that address structural and social drivers of health, particularly efforts to support groups who have been made vulnerable and put at risk by structural violence.¹⁵

Align, invest,
and advocate
for and with
historically
marginalized
communities.

Practice 4:

Directly provide or contract with local community organizations or M/WBE small businesses to supply basic needs (e.g., food, toiletries, clothing) and prevent job loss or becoming homeless for patients in quarantine.

Practice 5:

Advocate for and direct patients to free meal pick-up at school meal programs that have been converted to distribution sites during public health emergencies.

Practice 6:

Train, reassign, and/or hire staff or contract with local community organizations to increase enrollment in nutrition assistance and health insurance and applications for tax credits and eviction prevention.

Practice 7:

Increase accessible care for people with disabilities in the event that normal support systems are disrupted (combination of transportation, delivery, and telehealth).

Case Studies



**A look at the
implementation
of recommendations
through real-world
examples**

Case Studies

#1 Establishing an equity team to support all staff, Brigham and Women's Hospital (BWH), Boston, MA

#2 Integration of equity into the incident command team, Brigham and Women's Hospital (BWH), Boston, MA

#3 Engaging with partners to leverage data and co-create a community-wide response, Chicago Racial Equity Rapid Response Team, Chicago, IL

#4 Ensuring equity and access to health care, Massachusetts Department of Corrections, Framingham, MA

#5 Creating infrastructure for equity, Long Beach Department of Health, Long Beach, CA

#6 Leading with trauma-informed practices for staff well-being, Minnesota Department of Health, Minnesota

#7 Understanding the people, history and communities that your organization serves, Dade County Street Response, Dade County, Florida

#8 Facilitating access and connections to care, East Boston Neighborhood Health Center, Boston, MA

#9 Supporting patients with intellectual and developmental disabilities and their families during a crisis, University of California Leadership Education in Neurodevelopmental Disabilities Clinic, Los Angeles County, CA

#10 Leveraging existing data systems during times of crises, Veterans Affairs Pittsburgh Healthcare System, Pittsburgh, PA

#11 Building equity capacity via fiscal and administrative readiness, Milwaukee Health Care Partnership, Milwaukee, WI

#12 Embedding health equity in a public health emergency response, New York City Department of Health and Mental Hygiene, New York City, NY

Case study

#1

Establishing an equity team to support all staff



**Brigham and Women's
Hospital (BWH)**

 **Boston, MA**

Establishing an equity team to support all staff



#1

When the COVID-19 pandemic hit, the first thing Brigham and Women's Hospital in Boston did was establish an Equity Team to monitor patient care during the impending crisis. Almost immediately, they found that the inequities inside their massive hospital system were also eroding staff morale.



“It crystallized for me when we got the data that frontline workers were getting sicker, faster,”

— **Normella Walker,**

executive director of Diversity, Equity, and Inclusion at Brigham Health



In the earliest stages, some essential workers didn't know they needed protective gear. Those who knew and asked were sometimes refused, due to the national PPE shortage.

“There's a power dynamic there,” Walker explains. “If you're an environmental staff worker and a nurse is telling you, ‘no, these

masks are not for you, they're for doctors and nurses,’ you're not going to [argue].

Further, Walker's team found that the workload was unevenly distributed. Those who had enough job and income security to stay home did. Few frontline workers had such luxury. Many lived in the hardest-hit communities and were at high risk of contracting COVID-19 no matter where they were. Some came in sick because they needed the hours. Conversely, some who didn't have to come in did anyway, because they lacked computers and/or high-speed internet access to work from home.

Communication was a critical focus for equity. Leadership was relying on virtual spaces to share vital information—a potential barrier for some employees. Language access had also become a problem, as many multilingual staff members were not English proficient. Even when bulletins were translated, employees with low literacy skills were not considered.

There was a lot to address. The Equity Team began with standing meetings at the top of each shift—open to all but aimed at the front-line workers. There, PPE was

Establishing an equity team to support all staff

#1

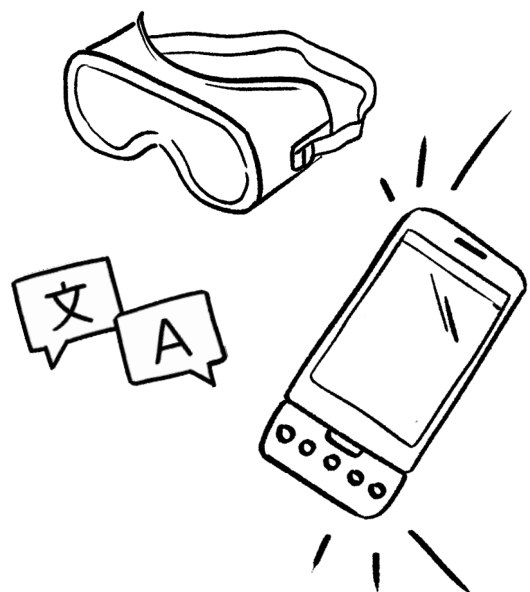
distributed, and staff were updated on the latest news, protocols, and resources they could access. It was also an open forum where people made connections, uncovered additional inequities, and voiced their needs and concerns to leadership. “The more meetings we had, the more information we got. People warmed up,” Walker says. “Fears around power and hierarchy in our organization slowed down our response, but as people felt cared for and supported, they shared more.”

Action steps:

- ✓ Established standing meetings aimed at frontline workers.
- ✓ Distributed PPE at top of each shift.
- ✓ Secured volunteers to interpret and translate for non-English speaking staff.
- ✓ Established a text system for news and updates.

Walker’s Equity Team also secured volunteers to interpret and translate for non-English speaking staff and led the hospital in establishing a text system for news and updates. Hospital leadership petitioned elected officials for more PPE and ventilators, and established partnerships and government funding to create an internal socioeconomic safety net. There was an emergency fund for the lowest-paid employees, reduced-cost (and eventually, free) childcare, and access to food pantries.


There were stronger relationships, more honest communication, and a more equitable work environment, too.



Establishing an equity team to support all staff

#1

Given this experience, the following tips are recommended for health care leaders to prioritize equity for both patients and staff:



- Cultivate a transparent, collaborative work environment where it is safe to speak up.
- Use empathy, but don't make assumptions or make decisions for employees. Ask what they need and invite them into the decision-making process.
- Always think about equity. Think about whose voice is missing.
- Ensure there are multiple channels of communication and that all communication is accessible (e.g., sign language interpreting and captioning as needed, be sure to include written versions of all communication); think about the people who exist outside your organization's usual communication channels.
- Pay attention to morale. Offer encouragement and gratitude in person, often.
- Set up a team. Doing this work separately can have an isolating effect.
- Be nimble and open to transformation. The way we have always done things may not be the way we need to do it now.

Case study

#2

Integration of equity into the incident command team



**Brigham and Women's
Hospital (BWH)**

 **Boston, MA**

Integration of equity into the incident command team

#2

The COVID-19 outbreak in the United States has magnified and reinforced long-standing inequities rooted in structural racism and other forms of structural discrimination. Not surprisingly, data emerging from the pandemic highlight the disproportionate impact that inequitable trends in illness and mortality have on Black, Indigenous, and nonwhite Hispanic communities. It is important to be aware of, highlight, and act to eliminate these inequities.

Most hospitals around the country have a task force or incident command (IC) system for COVID-19 emergency preparedness and response. IC systems provide an organized structure to focus on, and quickly respond to, issues during a crisis. To ensure health care does not further contribute to inequities, it is crucial that COVID-19 incident command teams understand and address equity issues.

When the COVID-19 pandemic hit Brigham and Women's Hospital (BWH), the staff quickly recognized the need to address inequities exacerbated by COVID-19 at the system-level. As such, they created a process in which the real-time information of what

is happening on the ground is connected to the process at the hospital-level incident command center, which then is connected to the process at the health system-level incident command center.

BWH is part of a larger health system, known as Mass General Brigham. To ensure system-wide coordination, there are hospital-level IC teams and a larger health system level IC team, which includes representatives from all hospitals.



Integration of equity into the incident command team

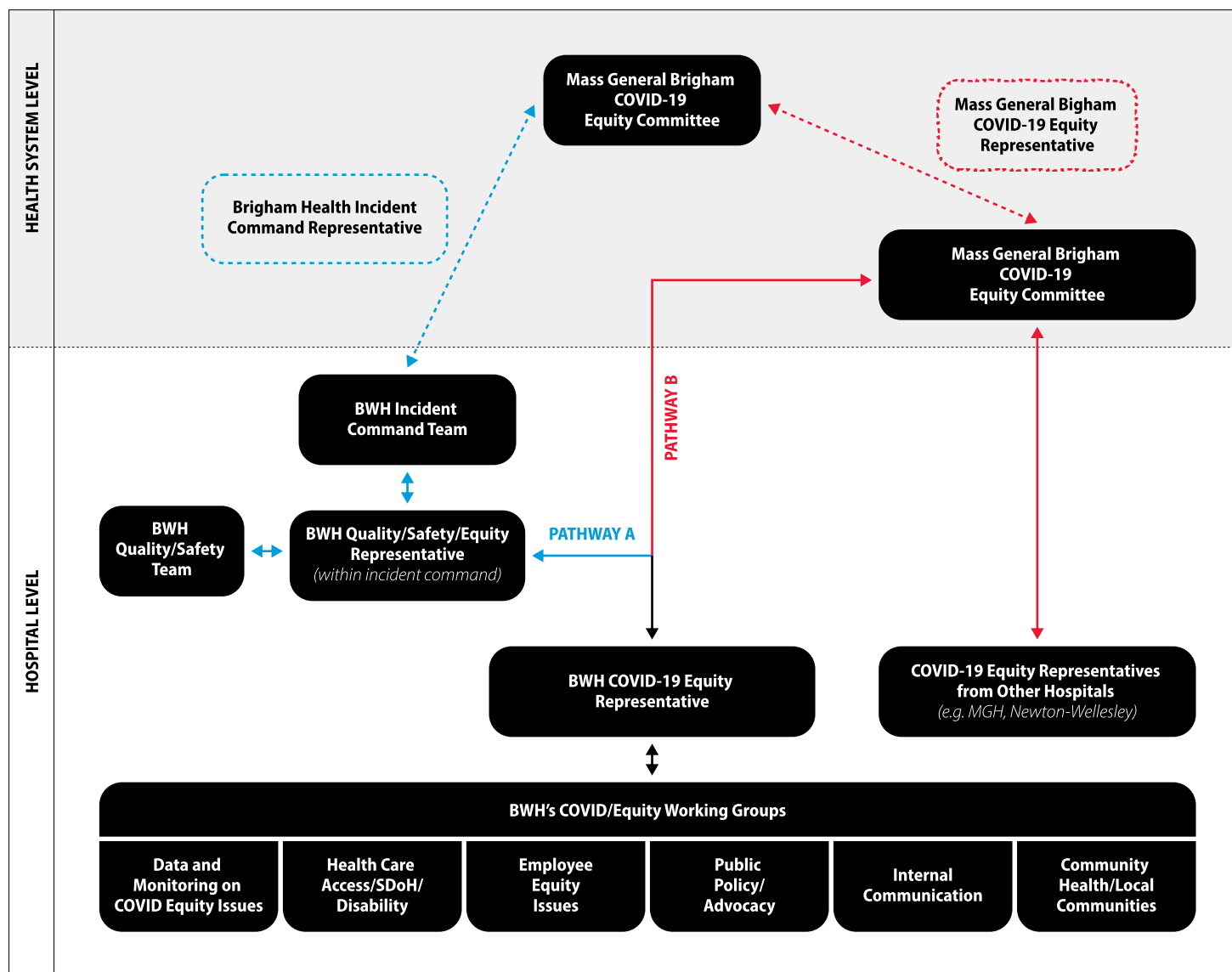


Figure 2.1: Structure for Integration of Equity into Incident Command Teams

Integration of equity into the incident command team



#2

On the hospital-level, in anticipation of a surge of COVID-19 patients, six COVID-19/Equity working groups (see Figure 2.1) were convened focused on: 1) data and monitoring COVID equity issues, connected to the existing quality and safety infrastructure; 2) access, social determinants of health, and disability; 3) employee equity issues; 4) public policy and advocacy; 5) internal communication; and 6) community health and the local community the hospital serves.

Leads for the COVID-19/equity working groups convene daily for a 30-minute huddle to coordinate planning and strategy.

Issues or concerns that cannot be solved at the COVID/Equity working group level are collected by the BWH COVID-19 equity representative. This representative then shares the learnings, themes, and recommendations from the workgroups through two pathways:

- **Pathway A:** This representative reports to the BWH Quality/Safety/Equity representative, who is a senior leader within the BWH IC team. BWH's Quality and Safety team also reports quality and safety issues with an equity theme

to this senior leader. The senior leader then brings the information to the BWH IC team to review. The BWH IC team comprises the top six leaders of the hospital. Actions and investigations that can be resolved at the hospital level are taken with local leaders. If there are immediate solutions, they will be implemented locally. Larger issues that need system-level, multi-hospital system coordination are taken to the system-level IC team. The issues shared with the system-level IC team are usually related to matters that might affect several sites or the local community to avoid unnecessary overlap. Examples of this would include sharing ventilators or testing kits between hospitals or coordinating neighborhood testing sites.

- **Pathway B:** The larger health system COVID-19 Equity Committee is composed of equity representatives from multiple hospitals. The BWH COVID-19 equity representative reports to this committee and coordinates specific equity-related issues at the community level.



Risks to equity

The pressures of a crisis may highlight patterns and risks for organizations that are counter to the goals of equity. It is critical to note and mitigate such risks, including but not limited to:



- “Colorblind” approaches to policies and procedures.
- Policies and practices that, by ignoring race or other markers of identity, perpetuate (and exacerbate) structural inequities.
- Rigid and hierarchical decision-making.
- Implicit and explicit biases.
- Lack of transparency and information-sharing.
- Lack of diversity when designing teams.
- Perfectionism leading to inaction.
- Rushing to action with excessive focus on short-term solutions.
- Overburdening employees of color and other disadvantaged groups with additional but uncompensated requests related to diversity, equity, and inclusion efforts.
- Overworking employees leading to burnout.

Lessons learned

Mitigating risks to equity requires a thoughtful and systematic approach that integrates equity at every stage of decision-making and process development. Consider the following strategies:



- Embed equity experts in the incident command structure.
- Identify priority equity areas and assign equity leaders to oversee these areas.
- Empower equity leaders to take action by providing the support and resources needed to make meaningful changes.
- Systematically stratify COVID-19 dashboard data by demographics and use this data to guide responses.
- Ensure clear pathways for identifying and escalating COVID-19 equity-related concerns.
- Enhance existing pathways (e.g., quality and safety) with an explicit equity lens.
- Coordinate efforts across the system to avoid duplication and redundancy.
- Review, address, and communicate equity-related issues regularly at every level of the incident command structure.
- Constantly monitor for and quickly address breakdowns in communication in the incident command structure.

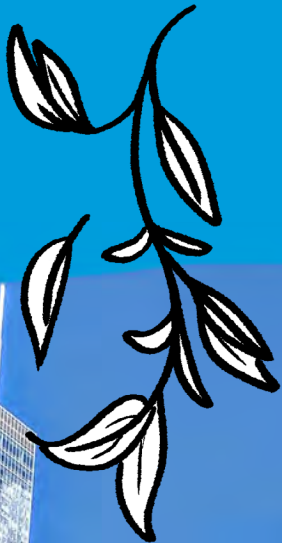
Health care is learning many hard lessons during the COVID-19 pandemic about emergency preparedness and response. What the data demonstrates about who is

being hurt most compels us to act now to integrate equity into health care decision-making processes throughout our systems.

Case study

#3

Engaging with partners to leverage data and co-create a community-wide response



**Chicago Racial Equity
Rapid Response Team**

 **Chicago, IL**

The first reports of COVID-19 deaths in Chicago echoed the city's historical fault lines: of the first 100 deaths, 70% were Black (despite only one-third of the city's population being Black).

One of the most powerful analyses of these data was published in ProPublica Illinois: "70 of the city's 100 first recorded victims of COVID-19 were Black. Their lives were rich, and their deaths cannot be dismissed as inevitable. Immediate factors could—and should—have been addressed".¹⁶

ProPublica reached out to families and friends of these first victims, painting an ethnographic sketch of their lives—in the process, reminding all of us that data on health inequities always represent the lives and struggles of individuals, families, and communities.

These data are never abstract numbers or math. Underneath the models, underneath the regressions and coefficients, are people like Larry Arnold, one of the first people in

Chicago to succumb to COVID-19 at age 70, who took an Uber from his south side apartment with a 103-degree fever to a hospital 30 minutes away because he did not trust the hospital that was less than a mile from his home. As told by ProPublica, Larry Arnold's story is both a tragic tale of an individual's personal troubles, but also a warning of the harmful consequences of systems that unfairly concentrate access and privilege in some communities while disadvantaging others.

Chicago's COVID-19 response efforts, like those of all cities and states, remains a work in progress. However, from the outset, the city's public health community made a concerted effort to ensure that as the city responded to immediate needs, consideration was given to deep-rooted contextual factors that drive COVID-19 inequities. As resources to support the COVID-19 response were allocated via Federal, State, and local governments, and supplemented by philanthropy, the City of Chicago has been intentional about facilitating collaboration across health systems, academic institutions, public health professionals, community-based organizations, and others to ensure that

data is accurately interpreted, that it is disseminated at various levels to those making decisions, and that response is driven by diverse perspectives and wisdom. A key tenet to Chicago's comparative success versus some other urban areas has been its active pursuit of community insights to guide decision-making and the inclusion of community leaders and organizations as co-developers of response efforts.

Tenets of success:

- ✓ Active pursuit of community insights to guide decision-making.
- ✓ Inclusion of community leaders and organizations as co-developers of response efforts.
- ✓ The City of Chicago responded to the first wave of data by establishing the Racial Equity Rapid Response Team (RERRT).

The City of Chicago responded to the first wave of data by establishing the Racial Equity Rapid Response Team (RERRT).

Discussing the initial data at a press conference, Mayor Lightfoot stated: "these numbers take your breath away... this is a call-to-action moment for all of us... It is unacceptable, no one should think that this is OK."¹⁷ Moreover, she noted: "When we talk about equity and inclusion, they're not just nice notions... they are an imperative that we must embrace as a city."¹⁷

The RERRT was established in April 2020, with a framework of data-driven, collaborative, and community-driven mitigation of COVID-19 morbidity and mortality.

It sought to:

- bring together communities and form coalitions by convening community leaders from the south, west, and southwest sides.
- identify needs and advocate for resources (distributing educational materials, tests, and PPE).
- champion reliable information and promote wellbeing (running town halls to gather insights from communities and sharing information with residents).

The RERRT's immediate focus was to flatten the COVID-19 mortality curve in Black and Latinx communities. Its work was organized around four core strategies: education, prevention, testing and treatment, and support services. A data and metrics working group, comprising experts from West Side United, the University of Illinois at Chicago, Rush University Medical Center, Sinai Urban Health Institute (SUHI), DePaul University, Loyola University, the American Medical Association (AMA), the Chicago Department of Public Health, the Illinois Department of Public Health, Enlace, NowPow, South Shore Works, and more provided support.

1. Education

2. Prevention

3. Testing & treatment

4. Support services

One of the first tasks the data and metrics workgroup took on was to address missing race/ethnicity data for COVID-19 tests. Mayor Lightfoot also underscored that race/ethnicity data was missing in almost half of the city's COVID-19 test records early on in the pandemic: "While we have sufficient

data to say that these trends are alarming... Healthcare providers are still not providing total demographic information that is needed for us to have a complete picture... this is not negotiable. We must understand the magnitude of the impact of this virus on all of our communities."¹⁷ A citywide effort is needed to address the issue, which reflected a historical lack of investment in public health infrastructure, fractured data collection and sharing systems, and underneath it all, our collective failure to convey why it is so vital to collect race/ethnicity data.

Lessons Learned

Several important lessons were learned through Chicago's COVID-19 response that will inform future efforts to address public health emergencies and more endemic public health challenges. First, the importance of getting accessible data to community stakeholders, from residents to organizations to health providers, in real time cannot be overstated. It is also vital that data is shared in digestible ways that mobilize people and organizations to informed action. The pandemic demonstrated a longer term need to

build capacity and data literacy across sectors, empowering all Chicagoans to access and interpret public health data and use it to guide decision-making and action. While Chicago was fortunate to have a data-sharing portal (<https://chicagohealthatlas.org/>) prior to the pandemic, partners engaged through the COVID-19 response aim to implement innovative models that translated typically underused epidemiologic data to formats for community members, organizers, and organizations that will help them make strategic decisions going forward.



Key lessons learned:

- Ensuring data is accessible to community stakeholders in real-time is important.
- Data needs to be shared in digestible ways that mobilize people and organizations to informed action.
- Longer-term need to build capacity and data literacy across sectors.
- Equity must be centered at all stages of data collection and analysis.
- Data must be contextualized with community insights.

As we build broader public and community capacity to access and interpret data, we as data analysts, public health professionals, and scientists need to think critically about how data can be used to tell stories that meaningfully capture underlying health inequities. Data can be used to paint the most complete picture only if we center equity from the moment we conceive of our data collection and analysis methodology. Data further needs to be contextualized with community insights to better distinguish race from racism, and to lay bare how data analysis decisions can inadvertently hide inequities (e.g., not disaggregating between subgroups within Latinx or Asian racial/ethnic groups). We need to improve the ways data can be used to uncover and explain injustices. Of particular note, as Chicago's COVID-19 experience underscores, we can begin by stressing the importance of collecting accurate and complete racial/ethnic data.

Source: Helen Margellos-Anast (Sinai Urban Health Institute), Fernando De Maio (American Medical Association; DePaul University), C. Scott Smith (DePaul University), Pamela Roesch (Sinai Urban Health Institute), Emily Laflamme (American Medical Association), Eve Shapiro (West Side United). Excerpt from "State Case Study: Illinois" published in *Healthcare Analytics: Emergency Preparedness for COVID-19* (Rafalski, E. and Mullner, R., eds). Reprinted with permission.

Case study

#4

Ensuring equity and access to health care



Massachusetts
Department
of Corrections

📍 Framingham, MA

Ensuring equity and access to health care



When the COVID-19 pandemic began, Shannon Bell, MD, was an OB/GYN consultant for the Massachusetts Department of Corrections, running a weekly on-site clinic in the MCI-Framingham Women's Prison. The medium-security prison was locked down in March, closing the clinic indefinitely. Pre-COVID-19, patients could drop in for answers to their health care needs. Under lockdown, they had to rely solely on telemedicine and a (preexisting) ticket submission system. Any off-site care came with a mandatory 14-day stay in the isolation unit upon return.

"Prison is already an incredibly isolating event. A lot of patients were understandably reluctant to voluntarily go [off-site and undergo the isolation upon return]," Dr. Bell shared. "We didn't know when I'd be able to come back to the clinic or when these rules would change."

To help them maintain access to care, Dr. Bell scheduled regular virtual check-ins with patients in case they decided to receive care. She and the nurse working there triaged the ticket submissions more closely on a daily basis, carefully balancing equity against the risk of a COVID-19 outbreak within the prison.

Meanwhile, in the hospital system where she worked, Dr. Bell was treating patients who were pregnant while incarcerated. Massachusetts is one of only 21 states with "no-shackle laws," prohibiting the restraint of pregnant prisoners during active labor and postpartum care; there are active efforts by the American Medical Association to develop model state legislation prohibiting the use of shackles on pregnant women unless flight or safety concerns exist with the aim of expanding the number of states with "no-shackle laws."¹⁶ As noted by Dr. Bell, at the height of the pandemic, many health care professionals invoked these laws for incarcerated people on ventilators due to COVID-19. Still, Dr. Bell says that neither corrections officers nor health care professionals are fully familiar with these policies, and conflict often results. During a crisis, "the protections that are

Ensuring equity and access to health care

#4

built-in for incarcerated folks are at-risk, [and] for anyone who is traditionally marginalized. Just remembering that, when the world is on fire and we're running around, is the crux."



"The internal reaction of someone with a security mindset is to tighten things up as much as possible to keep everybody safe. But that doesn't necessarily work in a health setting," she shared. "I've done a lot of talking around coming to a relationship and understanding between the security arm and the health arm... [so] the patient feels safe and cared for, and their care isn't confined by the security team."



Case study

#5

Creating infrastructure for equity



**Long Beach Department
of Health**

 **Long Beach, CA**

Creating infrastructure for equity



#

5

Long Beach, is a coastal city in Southern California with a racially and socioeconomically diverse population. Because the community needs are vast and various, especially in crisis situations, the City of Long Beach Emergency Operations Center (EOC) recognized a need for equity-specific programming and teams. In 2017, the Long Beach Department of Health established its Office of Equity, creating infrastructure that would help them to embed equity into operations across the department. Initial work included releasing equity toolkits for city leaders and staff and enhancing education around the need for centering equity in their work with Long Beach community members.

Office of Equity established in 2017 to:

- Embed equity into operations across the department.
- Release equity toolkits for city leaders and staff.
- Enhance education for centering equity.

This equity infrastructure proved to be critical at the onset of COVID-19 as Department of Health employees were searching for ways to center equity in their crisis response to the pandemic. The Office of Equity, which was officially embedded in the Emergency Operations Structure, worked to ensure that all residents of Long Beach were receiving adequate resources and education as the pandemic unfolded, with a specific focus on health and racial equity. The Office of Equity's work and impact grew, and it was transitioned from the Department of Health and Human Services into the City Manager's Department, where it now oversees all departments city-wide. From this level in the city government, the Office of Equity deploys Equity Champions who function as liaisons between the various departments in the city government and the Office of Equity. Their role is to ensure that the needs of populations most impacted by inequities are included in the EOC's department projects and policies, and equitable considerations and accommodations are made at the field level.



Creating infrastructure for equity

#5

Equity Champions are liaisons between various departments in city government at the Office of Equity who ensure:

- The needs of populations most impacted by inequities are included.
- Equitable considerations and accommodations are made.

“It’s a multifaceted problem,” says Rebecca Lopez, a Disaster Preparedness Analyst in the Department of Disaster Preparedness and Emergency Communications. “We’re really trying to look at it from all angles. The city right now is really focused on racial equity, [which includes] health equity, residential equity, [and providing] resources for people experiencing homelessness,” and more. The Office of Equity liaison model is designed to ensure that each department, with its varying needs, has an embedded staff member represented to ensure that the department is meeting and accounting for all Long Beach community members’ needs.

Their work was successful in engaging community members to shape their testing and vaccination rollout strategies, as well as developing culturally focused education and communication strategies for staff. Moving forward, the Office of Equity plans to train and prepare more equity officers, including those who will step into crisis roles, and share their experience and success of their equity work with other jurisdictions as well.



Source: Rebecca Lopez, MPA. Disaster Preparedness Analyst, Department of Disaster Preparedness & Emergency Communications, City of Long Beach.

Case study

#6

Leading with trauma-informed practices for staff well-being



Minnesota Department
of Health

 Minnesota

Leading with trauma-informed practices for staff well-being

#

6

In early spring of 2020, the Minnesota Department of Health (MDH) rapidly activated its emergency preparedness and response infrastructure, like many local governments across the country, in response to the onset of the COVID-19 pandemic. MDH, a state agency that partners with and is a part of a larger ecosystem consisting of local public health agencies, community health boards, and tribal nations, was already understaffed before the pandemic, but became stretched beyond capacity as staff were quickly reassigned to new incident command structure positions. “We don’t have enough staff [...] people that have higher levels of risk for trauma—we really don’t have the specialists that are able to provide that support,” says Nancy Carlson, the Coordinator for the Department’s Disaster Behavioral Health Program. A few months into the pandemic, racial trauma and tension within Minnesota communities and in particular Minneapolis with the police murder of George Floyd, came to the forefront of Department staff’s minds and response efforts. BIPOC residents of Minnesota, specifically AAPI and Black communities, were experiencing and processing ongoing racial discrimination that, compounded with the COVID-19

pandemic, required the MDH to reassess their approach and priorities.

Concerned for staff of color at MDH internally and within their communities, the agency stood up a robust well-being component of their response effort that aimed to amplify the work of the Department’s Disaster and Behavioral Health team “to reach not just internal staff, but to local health partners and communities across the state as well,” says Kris Igo, Director for the Office for Statewide Health Improvement Initiatives. Some ongoing interventions to support staff specifically included, but were not limited to, staffing recommendations to increase capacity, bringing in contractors to support staff taking time off, listening sessions for staff, opening a staff wellness unit, and sharing mental health resources via one-pagers and webinars on a recurring basis. In an effort to tackle racial inequity and promote understanding within the department, the team held a series of trauma-informed listening sessions and trainings for managers. The trainings focused heavily on racial equity and sensitivity in the state’s vaccine rollout by describing the historical and current

Leading with trauma-informed practices for staff well-being



trauma that's been experienced by many BIPOC residents in health care settings. The trainings were designed for anyone in a vaccine response role in the state to equip them with anti-racist vaccine response strategies.

Interventions implemented:

- Staffing recommendations to increase capacity.
- Bringing in contractors to support staff taking time off.
- Facilitating listening sessions for staff.
- Opening a staff wellness unit.
- Staring mental health resources (one-pagers and webinars).
- Hosting trauma-informed listening sessions and racial equity trainings for managers.

The team's work continues to evolve to meet the needs of those they serve and employ. "It's not like this incident just occurred—it continues to go on. [...] It continues to weigh on staff and community members," says Carlson. By prioritizing space for staff and community members to reflect back to the department how they can best support them in times of crisis, the Minnesota Department of Health's Emergency Preparedness and Response team demonstrates a community-centered approach that is not fixed, but instead adapts to an ever-changing environment.



Case study

#7

Understanding the people, history, and communities that your organization serves



**Dade County
Street Response**

 **Dade County, Florida**

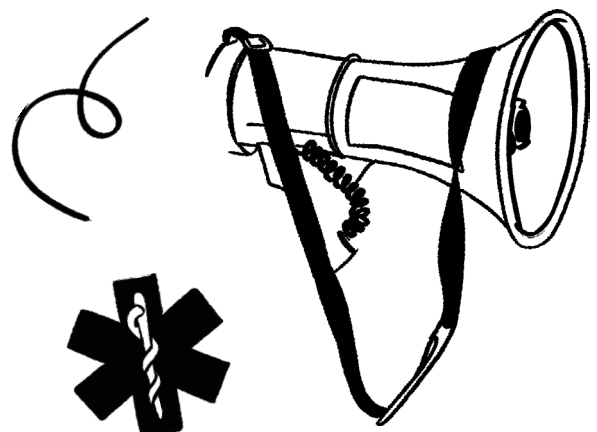
When Hurricane Irma swept through Southern Florida in 2017, Armen Henderson, MD, MBA, was a medical resident in Dade County. He witnessed firsthand the government's inability to respond to communities in need after the hurricane, as low-income, predominantly Black communities didn't get their electricity turned back on for weeks compared to wealthier and predominantly white communities not far away. The government also distributed food and other emergency supplies and resources to communities that simply didn't need it, turning their backs on already vulnerable low-income communities of color struggling to recover from the storm. In an effort to meet the needs of vulnerable populations in Dade County, he founded, with a cohort of fellow medical students, the Dade County Street Response, a grassroots medical organization that serves those most affected by poverty and oppression in the county. The team leads community-centered programming and advocacy efforts designed to ensure residents have access to safe shelter, food, water, and medical care, while they also work to hold local governments accountable to meeting all community members' needs in the wake of natural and public health

crises. Dr. Henderson describes his work as being "tasked with organizing physicians, medical professionals and local hospitals that serve health care entities to prepare and respond [to crises and emergencies]."

Dade County Street Response:

a grassroots medical organization that serves those most affected by poverty and oppression in the county.

- Focus on community-centered programming and advocacy efforts.
- Ensure access to safe shelter, food, water, and medical care.
- Hold local government accountable to meeting community needs.



At the onset of the COVID-19 pandemic, Dr. Henderson reflects that the Disaster Relief team “looked at COVID as a similar crisis in terms of hurricanes. We knew that vulnerable populations would be left to the wayside, and we knew that the people we serve would get the last of the resources and the worst of the information.”

So as early as February 2020, they activated their Emergency Operations Center by first sharing information with everyone on their listserv regarding what the virus was, how it spreads, the importance of masks, etc. Additionally, they worked to train volunteers to talk directly to community members about the virus, and how to screen people for symptoms of the virus. The team worked with members of their organization’s larger coalition that spans outside of Dade County to create a spatial map of all testing sites throughout Florida, and then around the

country. To incentivize testing, the team offered compensation for their constituents to get tested. While the government’s focus was solely on individuals with shelter, the team worked directly with their unsheltered community members to understand their needs. They set up shower sites and handwashing stations, and distributed toiletries to hundreds of unsheltered residents of Dade County.

Steps taken by the Emergency Operations Center:

- Shared COVID-19 information with their listserv.
- Trained volunteers to talk directly to community members about the virus and to screen people for symptoms.
- Worked with larger coalition members to create a spatial map of all testing sites across Florida and the country.
- Offered compensation to their constituents to incentivize testing.
- Worked with unsheltered community members to understand their needs. Set up shower sites and handwashing stations. Distributed toiletries to hundreds of unsheltered residents.

The Dade County Street Response team's work continues in coalition with partners to call out local governments for their inadequate response to the pandemic, and advocate against the criminalization of homelessness. Additionally, the hygiene sites set up during the pandemic evolved to be a Street Team branch of the organization that serves unsheltered communities on a weekly basis, demonstrating a critical component of radicalized medical care to meet health care needs not covered by Medicare and Medicaid.

The team's future focus is programming that shows addressing social determinants of health in action. Knowing full well the research on health inequities, it is time to support the next cohort of practicing physicians and share their organizing tactics with other local communities around the country to ensure that health professionals understand and can mobilize around their role in this fight, which begins when they step outside of hospital doors and into their communities.

“

“The real work doesn't begin until you step outside of the institution and into your community,” says Dr. Henderson. “You have to get with a reputable social justice organization, sit at their feet, and learn exactly what they're doing and why they're doing it. It's hard for physicians or medical professionals to do because they have letters behind their names, but it doesn't mean we can't learn something new, and organizing is one of those tactics.”

”



Case study

#8

Facilitating access and connections to care



**East Boston
Neighborhood
Health Center**

 **Boston, Massachusetts**

Facilitating access and connections to care



East Boston Neighborhood Health Center (EBNHC), established in 1970, is the largest community health center in Massachusetts. Annually, about 120,000 patients are seen—the majority of whom have incomes below the federal poverty level. The OB/GYN department is composed of six nurse practitioners, four midwives, and six physicians. The department sees about 19,000 patients a year.

“Many of our patients are recent immigrants from Latin America and Morocco. Our patients live in multi-family homes, making it almost impossible to social distance; as a result, our COVID positivity rate was among the highest in the state.

In response, the EBNHC organized COVID testing in the community to make it easier for patients to get tested. We quickly needed to adapt our practice to keep our patients safe while still providing appropriate care, especially for pregnant patients. Our patients had both in-person visits and telemedicine. To reduce the chance of exposure, in-person visits were scheduled whenever an ultrasound or other on-site testing needed to be done. Our COVID-positive patients were called every 48 hours until they were cleared from quarantine.

This helped us make a clinical assessment, and also provided us with time to offer support.

We collaborated with food pantries and community organizations to help with food insecurity. Members of the community, medical students, and midwives volunteered to deliver the food to COVID-positive patients. Patients were referred to case navigators for housing and financial help.

Now we are vaccinating our pregnant patients at high rates by offering vaccines at our health center vaccine site, and also in our own clinic.

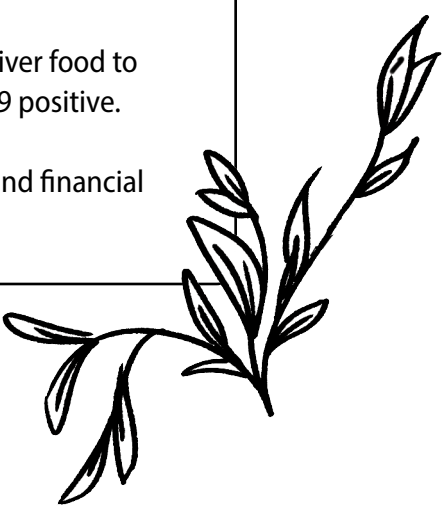
“**The health center was built by the community. The goal is to provide access to high quality health care to an underserved community in an equitable way.**”

Facilitating access and connections to care

#8



Action steps taken:

- Established community-based COVID-19 testing.
 - Aligned and consolidated medical visits to reduce chance of exposure.
 - Made follow-up calls to patients who were COVID-19 positive.
 - Collaborated with food pantries and community organizations.
 - Organized volunteers to deliver food to patients who were COVID-19 positive.
 - Made referrals for housing and financial support.
- 

Case study

#9


Supporting patients with intellectual and developmental disabilities and their families during a crisis



University of California
Leadership Education
in Neurodevelopmental
Disabilities Clinic

📍 Los Angeles County, CA

In the U.S., between 3.3 and 6.6 million people live with intellectual and developmental disabilities (I/DD). Even before the COVID-19 pandemic, individuals with I/DD experienced pronounced health disparities such as increased cardiovascular disease, diabetes, epilepsy, and psychiatric conditions, and decreased life expectancy relative to the general population.



The University of California Leadership Education in Neurodevelopmental Disabilities (UC-LEND) is one of 60 LEND clinics in the U.S. which seek to promote high-quality primary and psychological care and coordinate services across the life course for people with intellectual and developmental disabilities, including ADHD, autism, cerebral palsy, learning disabilities, seizures, developmental delays and/or intellectual impairments.

During the COVID-19 pandemic, this population demonstrated more severe illness, greater risk of hospitalization,

almost twice the case fatality rates, and disproportionate collateral consequences related to the social and financial strain brought on by the pandemic—particularly those with multiple marginalized intersectional identities, such as autistic and BIPOC. UC-LEND saw firsthand that people with disabilities are disproportionately affected by crises including experiencing greater injuries, morbidity, mortality, and more difficulties accessing emergency services (e.g., food, water, shelter, health-care services, and services for emergency-induced mental health and psychological problems due to the breakdown in essential support structures). Furthermore, crises on their own increase the number of people who experience disability (i.e., long COVID, physical disabilities).

As a result, there is now an urgent need for services, supports, and resources to support this population before, during, and after crises. While there is no one-size-fits-all approach for persons with disabilities given the diversity of this population, there are important considerations and resources needed to ensure that crisis response planning accounts for different types and degrees of impairment.

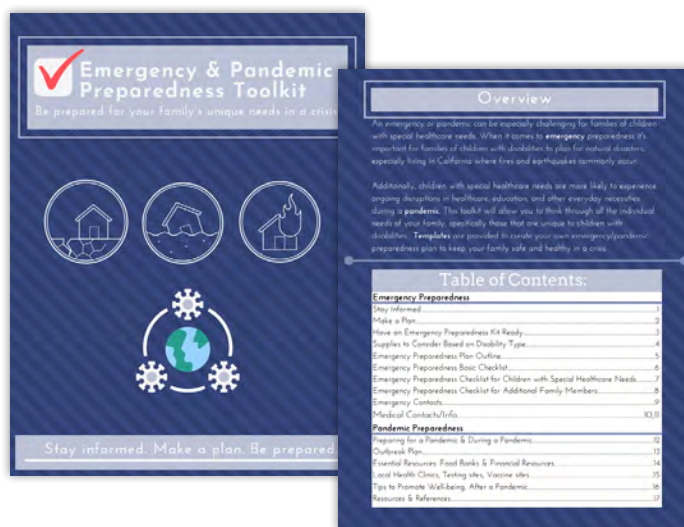
Our interdisciplinary team aimed to address both:

- the direct consequences of the pandemic that created an immediate need for resources and information
- social determinants of health (SDOH) that impede this population in accessing such resources and information

In response to the immediate need for resources and information, we created an I/DD-specific virtual patient emergency preparedness guide by first conducting a series of interviews with families of individuals with I/DD about their needs, experiences, and challenges during the pandemic. We then revised the guide with their continued input and feedback to ensure that the resources and information provided in the guide directly aligned with the priorities of the I/DD population.

The resulting patient emergency preparedness guide—available in both English and Spanish—provides disability-specific resources, information, support and linkages to community-based services related to the COVID-19 pandemic and other emergencies.

Figure 2.2: Snapshot of the Patient Emergency Preparedness Guide



We directly e-mailed the guide to all UC-LEND patients and families and linked it on the UC-LEND website. Current efforts are underway to glean preliminary feedback on the utility and acceptability of the guide via an online survey.

In addition to the guide, our SDOH pilot is underway and preliminary data are being collected. UC-LEND has already enhanced its capacity to connect patients and their families to a multi-faceted array of resources at an earlier stage within clinic workflow to preemptively mitigate the negative effects of disability-specific and financial challenges.

Source: Emily Hotez, Ph.D., Assistant Professor and Developmental Psychologist-Researcher, David Geffen School of Medicine at UCLA & Alice Kuo, MD, Ph.D., MBA, Medical Director, David Geffen School of Medicine at UCLA & UC-LEND

Case study

#10



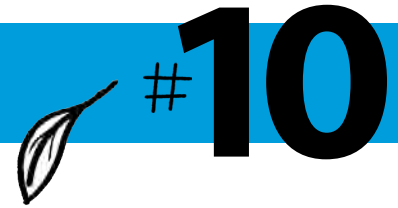
Leveraging existing data systems during times of crises



**Veterans Affairs
Pittsburgh
Healthcare System**

 **Pittsburgh, PA**

Leveraging existing data systems during times of crises



While it is important to ensure that data systems that identify inequities are in place during crises, much of the foundation of this work must be put into place before crises hit. The VA Pittsburgh Healthcare System is a large, urban academic health care facility that provides medical care for veterans in western Pennsylvania and the surrounding region. With cardiovascular disease being a leading cause of death in the U.S., a number of VA Pittsburgh patients are at risk and qualify to receive statin therapy, a treatment for the disease. However, adherence to statin therapy is problematic in the U.S. A team of primary care pharmacists sought to assess adherence to statin therapy among their total patient population and better understand any existing inequities among demographic sub-groups. This information can then be directly applied during times of crisis.

The VA Pittsburgh Healthcare System is a large, urban academic health care facility that provides medical care for veterans in western Pennsylvania and the surrounding region.

Utilizing quality improvement infrastructure, a pharmacist in the Inter-professional Patient Safety Fellowship was designated as a Quality Improvement (QI) project champion. The QI team became early adopters of the VA Primary Care Equity Dashboard, a data tool newly developed by a team at the Center for Health Equity Research and Promotion. The tool calculates inequities within VA medical centers based on race and ethnicity, gender, and rural/urban residence for measures of chronic disease management, including statin adherence. Equity data revealed that VA Pittsburgh was below the national level of adherence to statin therapy, and that there was a racial disparity in adherence among Black and white veterans.

With this information, the QI team designed an intervention to both improve adherence rates among Black veterans at VA Pittsburgh and reduce the disparity between Black and white veteran populations. Following a literature review, the QI team decided on targeted education that capitalizes on the critical role of pharmacists in counseling patients about medication use. The team designed 30-minute educational phone consults and created a consulting template in their

Leveraging existing data systems during times of crises



electronic medical record for primary care pharmacists to use. The goal of the sessions was to improve patients' awareness and understanding around cardiovascular disease risks and the importance of statin therapy treatment. During the calls the team also asked patients about barriers to taking medications every day and what VA Pittsburgh can do as a health care system to help patients successfully take their medications.

Intervention implemented:

- Designed 30-minute educational phone consults and created a consulting template in their electronic medical record for primary care pharmacists to use.
- During the calls, asked patients about barriers to taking medications every day and what VA Pittsburgh can do as a health care system to help patients successfully take their medications.

The intervention proved to be successful in both improving veteran patient understanding of statin therapy and identifying barriers to treatment adherence. The QI team also learned that direct, focused contact with their patient population

regarding the issue at hand was beneficial to veterans. Veterans shared that, because of the calls from the pharmacist, they learned information about their statin that had not been previously provided by a health care professional. Several veterans also identified health system improvements that may be beneficial in improving adherence, including medication refill reminders.

Primary care pharmacists at VA Pittsburgh continue to use the Primary Care Equity Dashboard to monitor statin adherence among Black veterans in their care and consider ways to apply the education intervention to address other racial inequities in their patient population. The Primary Care Equity Dashboard has since been made available to all VA clinicians and is helping QI teams easily identify inequities and design interventions aimed at closing gaps in quality for demographic groups of veterans across the health system. Building out these robust data systems prior to crises is important as they can be leveraged during times of crises to identify populations at greater risk and ensure that proper information is quickly distributed.

Source: Beth DeSanzo, PharmD, BCPS, VA Pittsburgh Healthcare System

Case study

#11

Building equity capacity via fiscal and administrative readiness



**Milwaukee Health
Care Partnership**

 **Milwaukee, WI**

Building equity capacity via fiscal and administrative readiness

#11

For health care leaders, money became one of the biggest conundrums of an already-complex crisis. The need was great, the data was clear, and the response plans were grand, but who would fund it all? In Milwaukee, solutions emerged. Private foundations, elected officials, local businesses, universities, community organizations, and of course, a battalion of health care professionals from the Milwaukee Health Care Partnership, a consortium of the city's health care professionals of all sizes, came together. The money came first, beginning with a phone call between Mayor Tom Barrett and Ellen Gilligan, president and CEO of the Greater Milwaukee Foundation. The latter then tapped the executives at United Way of Greater Milwaukee and Waukesha County, and together, they raised \$1.2 million in a week, and \$6 million by June 30, 2020. It was the precursor to what would become the Milwaukee (MKE) Civic Response Team.



“Having a single entity that could coordinate all those entities made [everyone’s] jobs a lot easier. The other thing [the MKE Civic Response Team] could do, is say, ‘Here’s where we need the most help financially,’” says Paul Schmitz, senior advisor at the Collective Impact Forum and CEO of Leading Inside Out, who authored two comprehensive case studies of the Response Team. **“In a period when people didn’t have resources, they could utilize this body to get the resources to do the things they couldn’t do or couldn’t do quickly.”**

Harnessing the powers of philanthropy, grassroots organizing, and communal care to support the buckling health care system and fill the gaps/delays in government response, the MKE Civic Response Team raised and deployed funds where they were most needed. To accomplish this, they sought and assessed community data on the pandemic’s effects, and identified seven areas of need: physical health, mental health, food, shelter, early childhood education, K-12 education, and economic recovery.

Building equity capacity via fiscal and administrative readiness

#11

Then, they recruited members across sectors around each of these needs. Elected officials joined weekly calls between the sub-teams' leads, and routinely sought their advisement during the pandemic.

1. Physical health

2. Mental health

3. Food

4. Shelter

5. Early childhood education

6. K-12 education

7. Economic recovery

“It was very clear from the beginning. The biggest impact of the disease and the economic fallout was on African American and Latinx communities, so that’s where the focus had to be. A lot of the key players involved had that commitment at the center of their work...so everything went through a racial equity filter in every [sub]team,”

—Paul Schmitz,

senior advisory at the Collective Impact Forum and CEO of Leading Inside Out

“And then, our new county executive was elected on a campaign of racial equity; his mission was to make Milwaukee the healthiest county by means of improving racial equity. And our city health department was the first in this country to declare racism as a health crisis,” Schmitz says.

For health care professionals seeking funding solutions, Schmitz recommends the following:

- Convene and collaborate with other health care professionals before and during a crisis.
- Remain in conversation and coordinate with public health entities and funders that work on social determinants of health.
- Adopt a policy of supporting and working alongside groups in your community that do complementary work on social determinants of health.

Source: Paul Schmitz, Senior Advisor, Collective Impact Forum, CEO, Leading Inside Out

Case study

12

Embedding health equity in a public health emergency response



**New York City
Department of Health
and Mental Hygiene**

 **New York City, NY**

The Challenge

Structural and institutional racism shapes health inequities. The COVID-19 pandemic amplified existing inequities with tragic consequences.¹⁸ New York City (NYC) residents in poorer neighborhoods were more than twice as likely to be burdened by and die from COVID-19. The strongest neighborhood factors linked to high COVID-19 rates were having a large share of Black and Hispanic residents, overcrowded apartments, and residents without college degrees.¹⁹ In addition to being less likely to work from home, residents without degrees were more likely to rely on public transportation during the pandemic, creating an added exposure risk. Black New Yorkers were nearly twice as likely as white residents to require hospitalization for COVID-19. Hispanic residents were nearly twice as likely as white residents to die in the hospital.²⁰

By February 2021, despite increased availability of the COVID-19 vaccine for the general public, NYC neighborhoods with the highest COVID-19 infection and fatality rates still had some of the lowest vaccination rates and continued to have

some of the highest infection rates. Several factors contributed to this disparity. It was difficult to obtain appointments for vaccines in marginalized communities, particularly for those with limited internet access. Communities of color do not trust the medical system because of both historical and current discrimination against them. Vaccine messaging did not resonate with marginalized communities or did not match their preferred languages. They were confused by misinformation, some of it coming from health care providers.²¹

Communities were looking to trusted providers and community leaders for support, answers, and resources. In response, the New York City Department of Health and Mental Hygiene (health department) developed the Provider and Community Engagement (PACE) unit based on our observations learned from working with and within communities that (1) effective COVID-19 response must prioritize the most impacted communities; and (2) the people who know best how to guide efforts to tackle health equity are the ones who live, work, play, and pray in those communities. We built upon the framework of the citywide Taskforce on Racial Inclusion & Equity

(TRIE),²² which had been launched in April 2020 in response to the disproportionate impact of COVID-19 on communities of color to monitor the COVID-19 response, identify key disparities through analysis and dialogue with affected communities, and make recommendations to bring increased attention and resources to the most impacted communities. Utilizing pandemic, health and socioeconomic indicators, **TRIE identified 33 priority neighborhoods of focus.**

The goal



The disparities in vaccination rates between **TRIE neighborhoods** and the city as a whole were driven by historical disinvestment and structural racism that limited access to health resources and services. **In July 2021, the COVID-19 vaccines had been widely available for nearly 6 months and 19% of TRIE zip codes had reached the goal of 70% of adults fully vaccinated compared to 64% of non-TRIE zip codes.** To reduce these disparities, we took three approaches to close the gap as swiftly as possible and in a manner that would build rather than erode public trust:

1. Investment in marginalized neighborhoods

We **provided contracts to over 90 community-based organizations (CBOs) and 12 federally qualified health centers (FQHCs)** so that these **organizations that were local to and trusted by the community would have the funds they needed to immediately provide culturally and linguistically appropriate education on the COVID-19 vaccines and greater access to vaccinations in locations that were easily accessible and offered by health care providers that were already known to the community.**

2. Tailored community and provider engagement

We **engaged with community and provider groups to build trust, advance equitable access to information, and bridge public health and health care,**²³ updating partners on COVID-19 prevention and treatment information and resources in neighborhoods disproportionately burdened by COVID-19. **We also collected feedback on community members' vaccine-related concerns and developed tailored approaches in response to these concerns.** Given the need for a timely and tailored

response, we leveraged data on vaccine personas, a psychobehavioral segmentation approach to prioritize groups and tailor solutions. Based on belief and motivational systems and the barriers and opportunities that drive the decision to get vaccinated, we focused on the three most persuadable behavioral segments—the **Watchful** (people who need to see that peers/community members are getting vaccinated and having safe, positive experiences), **Cost-Anxious** (time and cost are primary barriers), and **System Distrusters** (barriers are related to trust in and access to a health system that has an inequitable history).²⁴ The vaccine persona helped us identify the barriers specific to racial and ethnic groups. For **Latinx New Yorkers**, the major concerns were time and cost, not having health insurance, fears related to the public charge rule (immigrants classified as likely to become dependent on the public for subsistence may be denied visas or permission to enter the country due to their disabilities or lack of economic resources), and easy access to vaccination. **Black New Yorkers'** concerns were mostly about trust. Our interventions were tailored accordingly. For example, for Latinx communities, vaccinations were held at consulates, and

for Black communities we focused more on trusted messengers (e.g., faith-based organizations and CBOs) to deliver vaccine messaging.



Three most persuadable behavioral segments:

- **The watchful:** people who need to see that peers/community members are getting vaccinated and having safe, positive experiences.
- **The cost-anxious:** time and cost are primary barriers.
- **The system distrusters:** barriers are related to trust in and access to a health system that has an inequitable history).



3. Collective impact to track and respond to inequities by age, race, and place

We tracked vaccination rates by age, race, and place so that we could take a data-driven approach to targeting the neighborhoods with the lowest vaccination rates. We endeavored with our team and partners to close vaccination gaps through

collective impact, acknowledging that successes were the results of combined rather than individual efforts. The collective impact approach is based on the idea that to make lasting system changes, groups must coordinate their efforts around a common goal.²⁵ While the evidence for collective impact is still limited and, in many cases, challenging to evaluate, examples exist to show that a cross-sector collaboration produces change on a larger scale than that produced by an individual organization.



The execution

Our work built off a larger context of citywide and institutional investments in antiracism and health equity, particularly over the last decade. To get started, we assessed ways to leverage and build upon efforts and lessons learned from working with and within communities. For example, in 2003, the health department established District Public Health Offices in marginalized neighborhoods—later revitalized and renamed Neighborhood Health Action Centers (Action Centers)—in the South Bronx, East and Central Harlem, and North and Central Brooklyn

as an innovative program to work with community members, CBOs, and health care organizations to address health inequity and the history of systemic racism

The Action Centers opened city buildings to community health and social services, colocating services such as primary care, mental health care, social services, and health and wellness classes. The Action Centers also offered shared meeting spaces for individuals and groups to work and coordinate strategies that advance neighborhood health. During the pandemic, these Action Centers were a neighborhood resource for referrals to a network of social services, free personal protective equipment (PPE), COVID-19 test kits, and information on vaccines. We also developed processes for coordinating and collaborating within the health department and other city agencies. For instance, we leveraged a new program, Public Health Corps,²⁶ a citywide initiative to expand the public health workforce by partnering with community groups and community health workers to eliminate COVID-19 inequities through outreach and education, to fund a large portion of the CBO contracts. With these factors in mind, we based

PACE within the Center for Health Equity and Community Wellness (CHECW), a health department division with existing ties to providers and community-based organizations (CBOs). We adapted routine CHECW operations to meet the needs of the pandemic, establishing a framework to operationalize an equity-focused, place-based approach within already established citywide functions.



The key functions of PACE included:

Public health detailing

Modeled after the pharmaceutical sales approach, health department representatives made in-person visits to health care practices,^{25,27} presenting education and resources to help practices build confidence, combat misinformation, and offer vaccinations. Representatives also referred practices for technical assistance (see below). Despite the extensive public messaging surrounding vaccination opportunities, the representatives frequently discovered gaps in providers' knowledge, which underscores the value of the in-person visit. Public health detailing created opportunities for bidirectional

communication, providing rapid feedback to the health department on provider and patient barriers and needs, including neighborhood specific themes, which led to new resources. For instance, when the vaccine was first approved for children 12 and older, health department representatives noted that pediatricians struggled with how best to address parent's and adolescent patients' questions and concerns. We developed new guidance for them about how to speak with parents about COVID-19 vaccination in children to help address potential hesitancy.



Technical assistance

Since 2010, the health department has supported provider care transformation (e.g., adoption of electronic health records [EHR] to improve patient safety and health outcomes, shifting from fee-for-service to a value-based care system) through the NYC Regional Electronic Adoption Center for Health.²² Under PACE, these efforts were adapted to help providers offer the COVID-19 vaccine and be reimbursed through local and state-sponsored programs for patient counseling connected with vaccination.^{26,28} Technical assistance

included helping health care practices order COVID-19 vaccines, report vaccinations provided, redesign day-to-day operations to account for social distancing and vaccine requirements (e.g., many smaller independently owned practices had minimal space to store the vaccine, which required specific refrigerators/freezers and patient seating areas for the post-vaccine observation period), provide up-to-date information on the vaccine, and use the EHR to identify and contact patients who were not vaccinated, particularly those at highest risk for negative outcomes.

Additionally, in partnership with the Mayor's Office and other health department emergency response units, we contracted and provided assistance to 12 FQHCs to operate 19 large-scale vaccination sites using mostly Federal Emergency Management Agency funds. Data had consistently shown that community members living in TRIE neighborhoods were going to local FQHC sites to get the COVID-19 vaccine, however, the number of individuals who could get vaccinated at a FQHC was limited because FQHCs were not equipped to offer vaccinations on a large scale. The goal was to increase

access to the COVID-19 vaccine through health care organizations that were already established and trusted within high-need areas. The FQHCs selected were ones that already had a footprint within TRIE neighborhoods that did not already have a health department operated point-of-dispensing (POD) site. PODs are community locations that dispensed the vaccines on a mass scale. FQHCs set up their COVID-19 vaccine operations within their own clinics if space allowed or rented neighborhood spaces that could easily be accessed by community members (e.g., church, senior centers). Contracts totaling nearly \$20 million allowed FQHCs to equip and staff the sites, message, and advertise. We found that both independently owned health care practices and FQHCs required support to operationalize vaccination efforts.



Tailored Black, Indigenous, and People of Color (BIPOC) provider engagement

The health department already had robust initiatives to engage providers (e.g., emails on public health priorities, routine convenings, and small meetings with individual providers and provider

groups). The goal of PACE was to further our engagement specifically with BIPOC providers. We convened the NYC Black and Latinx Provider Collective—38 Black and Latinx medical providers and academics who volunteered their time to discuss issues facing their communities and find solutions. The members shared accounts of what they were observing in their communities and provided opinions about what community engagement strategy was resonating or not resonating with community members.

We also surveyed NYC providers to assess their communication preferences, public health priorities, and interest in hearing more on issues concerning health equity. Nearly half of the respondents identified as BIPOC. Survey respondents stated a preference for short emails with to-the-point email subject lines versus other communication formats such as websites and social media. More than 80% said “alerts and advisories about threats to public health” best address their public health and clinical information needs. BIPOC respondents were more interested in racism and health, antiracist health policy, immigrant health, and critical race theory compared with white respondents.

Community engagement

The health department had existing relationships with some of the most impacted communities through its Action Centers,²² health and social service resource centers in TRIE neighborhoods with colocated community partners. We fostered these connections for PACE. Community engagement was based on shared decision-making where the community and the health department defined and solved problems together. The community then initiates and directs actions and shares information with the health department.



Excerpt from Ige O, Watkins J, Pham-Singer H, Dresser M, Maru D, Morse M. Embedding Health Equity in a Public Health Emergency Response: New York City's Covid-19 Vaccination Experience. *NEJM Catalyst* 2023;4(2). Used with permission.

The Gardener's Tale



**Lessons for
embedding equity
in crisis preparedness
and response in
health systems**

Many people in health care know of Camara Phyllis Jones' influential allegory, "The Gardener's Tale."¹³ The story is one of a gardener who divides resources to favor one type of flower over another, segregated in different plant boxes. Dr. Jones explains how that preference becomes entrenched (and even internalized), ultimately allowing one type of plant to thrive in high-quality soil and another type of plant to grow in less fertile soil. The gardener's tale is one of racism, which Dr. Jones defines as a "system of structuring opportunity and assigning value based on phenotype ("race"), that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources."²⁹

“

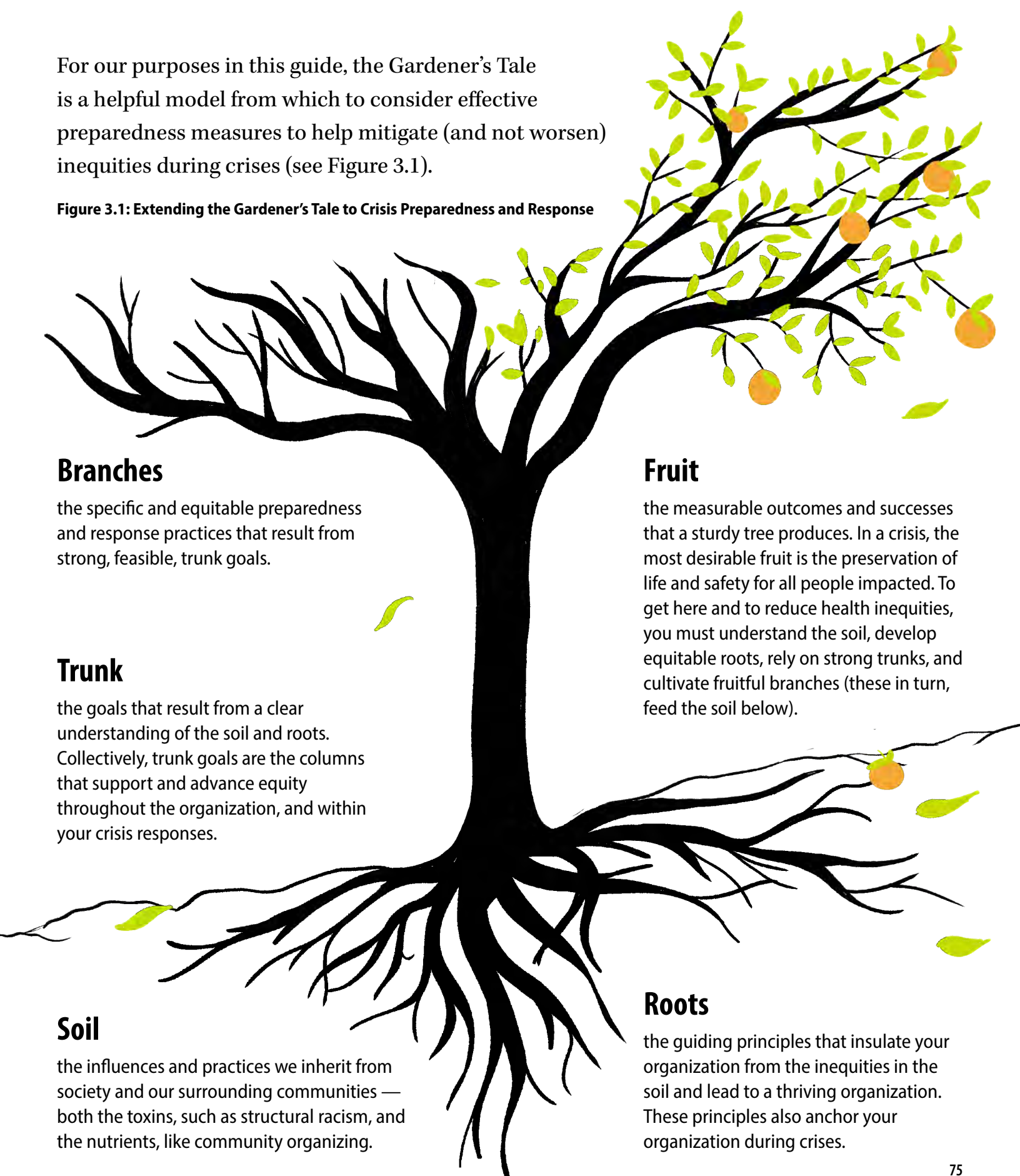
Racism is a system of structuring opportunity and assigning value based on phenotype ("race"), that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources.

— Camara Phyllis Jones

”

For our purposes in this guide, the Gardener's Tale is a helpful model from which to consider effective preparedness measures to help mitigate (and not worsen) inequities during crises (see Figure 3.1).

Figure 3.1: Extending the Gardener's Tale to Crisis Preparedness and Response



Soil

Soil rich in nutrients and minerals produces healthy trees. However, depleted or contaminated soil results in unhealthy trees and a chain reaction of consequences for the living things that rely on them. Health care organizations that commit to equity understand they exist in an environment contaminated by structural racism, and that this is the soil in which they have had to grow. This environment has assets (nutrients) for racial and social justice work that can be mobilized for equity as well. Understanding the context in which your organization operates is key to equitable decision-making.

Organizations often look to forge new partnerships during times of crisis. Given the uncertainty that shrouds a crisis, we emphasize the importance of maintaining an up-to-date inventory of the existing networks and services in your area. This requires intentional partnership development and coordination. This also requires an infrastructure for a shared picture of all the resources in the community (e.g., an electronic directory with current status of operations, as well as infrastructure for bi- / multi-directional communication for coordination of response). Existing networks (especially in neighborhoods most vulnerable to crises) promote coordination of essential information, services, and resources. Getting patients, staff and community members connected to these essential services, communication networks and public goods that often become disrupted during crisis is essential for both planning and response efforts. Meeting these immediate needs requires existing trust and collaboration.



Understanding the people and communities your organization serves and is part of is another critical aspect of soil assessment. Taking the time to know and honor the history and the diversity of communities you serve and the knowledge they hold—each with their own distinct histories, strengths, assets, and challenges—is essential to mitigating the impact of a crisis. Asset mapping activities allow you to know where equity promoting resources are located and to understand the potential for community partnerships

with organizations such as social-support organizations, libraries, community centers, government representatives' offices and agencies, cultural centers, houses of worship, and more. Asset mapping also helps identify additional resources and supports that are needed to meet community needs during a crisis. In sum, health systems should learn about and partner with mutual aid and/or community organizations active in disaster (COADs) between emergencies to sustain them and support more robust and equitable response during the crisis.³⁰



Roots

Roots allow a tree to insulate itself from the inequities in the soil and grow a thriving organization for everyone involved. Below are suggested guiding principles your health care organization can use as protection from the effects of systemic inequities to grow more equitable preparedness and response practices.



1. Trust

Trust is an integral element of building equity at every level within your organization. Trust requires consistency, time, and a leap of faith in both directions. Leaders must honor their staff, patients with lived experience, and community partners. Institutions must understand their histories in and with communities, commit to listening and learning, and value community expertise and knowledge. Trustworthiness is a journey and not a quick process that can be expedited. Each conversation, collaborative planning meeting, and crisis is an opportunity to strengthen mutual trust step by step.³¹

Guiding principles

2. Transparency

Embedding equity requires transparency, especially in communication and decision-making processes. During a crisis, the timely flow of information is key. Effective and equitable crisis preparedness and response require frequent updates, especially when plans change. It is also important for a leader to admit uncertainty, inviting the input and collaboration needed to proceed thoughtfully. Ethical and thoughtful transparency is the most direct route to developing trust.

3. Accountability

Trust is only sustained when accountability and transparency are practiced and witnessed across all levels of the organization. This means not just talking about organizational values but also living them with individual and collective responsibility. In fact, stating values without practicing them can do more harm than good. Ways to ensure accountability that are referenced throughout this Guide include: securing adequate resources for the work to be successful; communicating clear roles and responsibilities for everyone supporting the work and processes and information with partners; re-engaging staff and community partners when trust has been fractured in the past; and providing consistent, fair, and effective feedback that includes suggested corrective behaviors as well as praise and recognition.

Guiding principles

4. Collaboration and mutuality

This root principle also allows for accountability to be multi-directional. In other words, accountability is not limited to a “top-down” approach; instead, all team members work collaboratively to encourage each other to take responsibility for their collective actions. Recognizing that health systems are in a position of great power in relation to the communities they serve, collaboration works best with intentional efforts to prioritize seeking input from people or groups who have traditionally been excluded or silenced and who have experienced the worst health outcomes.

5. Patient- and family-centered care

Patients are partners with physicians and other health professionals who not only treat patients' clinical needs, but also foster a shared humanity. Physicians and other health professionals should consider the needs of entire groups and communities most disproportionately impacted by inequities. Centering the needs and concerns of these patients, families, and communities ultimately improves outcomes for all.

Guiding principles

6. Rooted in community with cultural humility

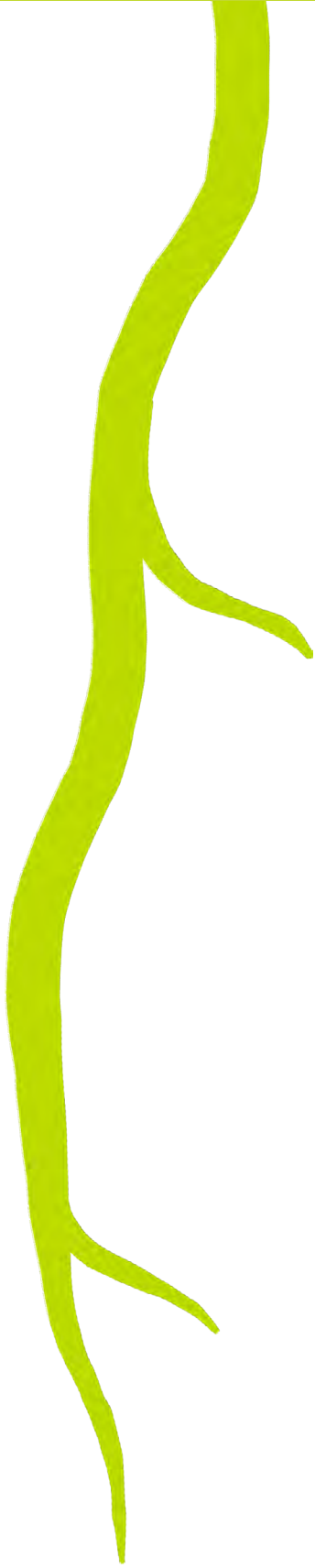
Cultural humility means a “lifelong commitment to self-evaluation and self-critique, to redressing the power imbalances in the patient-physician dynamic, and to developing mutually beneficial and non-paternalistic clinical and advocacy partnerships with communities.”³² Cultural humility encourages health care professionals to examine their organization’s culture and its influences, understanding that “the way things are” is reflective of a dominant culture that may not be shared by patients.

7. Attention to cultural, historical, racial and gender issues

Crisis situations can create new trauma and elicit memories of past trauma. When it comes to accessing health care, the legacies of anti-Native colonialism, racism, ethnonationalism, gender bias and sexism, eugenics and other forms of ableism, and homo-, bi- and trans-phobia have fueled intergenerational trauma, especially for people of color. Consideration and acknowledgment of historical and current experiences promote a more inclusive environment. Making a commitment to trauma-informed practice before a crisis can ensure staff and health care professionals have appropriate training, awareness and focus during a crisis, as well as adequate support for themselves.³³

Guiding principles

8. Data for equity



A commitment to equitable data use principles is a fundamental component of embedding equity. This involves recognizing that data are not “neutral,” but rather, reflect underlying systems of power that shape how data are collected, analyzed, interpreted and shared. Along these lines, Nancy Krieger has described a two-edged sword of data, where one edge (“no data, no problem”) describes situations where the absence of data is used by those in power to hide injustice and shirk responsibility, and the second edge (“problematic data, big problem”) describes cases where poorly conceptualized data gets entrenched in systems, perpetuating harm and legitimizing unjust policies and practices.³⁴ Both issues have been well documented with COVID-19, with repeated calls for improving data collection on race and ethnicity, in particular.^{35,36} As a result, imputation methods have been widely used to fill gaps in missing data, yet such methods carry considerable risks, particularly for smaller populations.³⁷ Engagement of historically marginalized communities and voices can help to minimize risk of unintended harms.

Sociodemographic data (including race and ethnicity, gender identity and sexual orientation, disability status, language proficiency and more) need to be interpreted with care, as they are both individual-level attributes but also proxies for underlying systems. For example, race and ethnicity should not be used as a proxy for genetic or biological ancestry, but rather as a proxy for racism.

Trunk & branches

Below we discuss 5 trunk goals, each with their own branch practices.

#1

Integrate equity into emergency operations and decision-making

#2

Cultivate a protected, supported, and engaged staff

#3

Engage with partners and leverage data to co-create a community/neighborhood-wide response

#4

Ensure equity via whole-person and whole-community care

#5

Build equity capacity through fiscal and administrative readiness

Trunk goal

#1



Integrate equity
into crisis
operations and
decision-making



Integrate equity into crisis operations and decision-making

#1

Promising practice

#1

Create an Equity Team within your incident command system (ICS) or emergency operations center (EOC) structure.

How to operationalize:

Step 1:

- Name an Equity Officer to report to the Incident Commander. Qualifications/responsibilities include:
- Prior training around implicit bias, racism, ableism, heterosexism and general health equity.
- Can identify equity concerns before and as they arise, and implement inclusive decision-making and practices.
- Relationship-building experience with community partners, especially those working with people most impacted by inequities.

Step 2:

Recruit, train, and mentor staff who share lived experiences with underrepresented patient communities and staff to serve on the Equity Team. Routinely seek out and implement their perspectives, ideas, and feedback.

How it helps us embed equity:

- Establishing equity leaders helps build accountability during a crisis.
- Incident Commanders and Equity Officers who are connected to the community are more likely to catch important considerations in their decision-making.
- Comprehensive and culturally responsive decisions during a crisis strengthen community trust in your organization and improve access to care.

Integrate equity into crisis operations and decision-making

#1

Promising practice

#2

Name equity as its own response, process, and objective.

How to operationalize:

Step 1:

Meet with each leader to explicitly discuss, center, and require equity as a core part of the crisis response. Amend processes accordingly.

- Stand-alone equity goals may work best in systems that are just starting to embed equity and/or situations where a response got underway without an equity lens. Alternatively, equity objectives may be integrated into an organization's existing objectives; such integration works best in organizations that are more advanced in their equity work.

Step 2:

Establish a workstream focused on equity throughout the response, with objectives including creating guidance on equity considerations for the crisis, and training staff on equity issues.

How it helps us embed equity:

- This demonstrates your organization's commitment to equitable practices.
- This lends credibility and empowers the equity leadership's authority in the decision-making process.

Integrate equity into crisis operations and decision-making

#1

Promising practice

#3

Commit adequate staff and resources to equity objectives.

How to operationalize:

Step 1:

Fund equity work adequately.

Step 2:

Nurture an equity mindset among crisis preparedness and response staff.

Step 3:

Ask key staff to read literature and resource guides from health care groups that have deeply reflected on the importance of embedding equity in emergency and crisis preparedness work.³⁸

Step 4:

Identify Equity Champions, who are ideally on staff at all times, sourcing and nurturing community-based partnerships and collaboration opportunities. Protect staff time to do this.

How it helps us embed equity:

- Understanding implicit biases helps prevent those biases from impacting decision-making, access to or quality of care.
- The Equity Team will be more effective with knowledgeable support, ongoing equity training, and adequate resources.

Integrate equity into crisis operations and decision-making

#1

Promising practice

#4

Build a mechanism to address social drivers of health in your ICS/EOC.

How to operationalize:

Step 1:

Give Equity Teams adequate staffing to properly understand and address inequities.

Step 2:

Lean into corporate and community partnerships to adequately fund, staff and maintain these mechanisms—and to keep informed of the critical data others collect.

Step 3:

Embody the importance of listening to and in partnership with communities impacted most by inequities.

How it helps us embed equity:

Understanding the ways in which crises have differential impacts on the communities we serve is the first step toward creating an equitable response plan.

Integrate equity into crisis operations and decision-making

#1

Promising practice

#5

Use
disaggregated
data to inform
decisions
and education
efforts.

How to operationalize:

Step 1:

Work with data teams to establish a regular pattern of collecting and analyzing data that is disaggregated by area/s of inequities (e.g., race, place, sexual orientation, gender identity, disability).

Step 2:

Proactively monitor the extent of complete demographic data collection and data reporting and conduct quality improvement initiatives aimed at improving data quality.

Step 3:

Work with community partners to identify strengths and gaps in data collection and monitoring.

Step 4

Monitor for unintended harm from any use of data imputation methods by sharing detailed methodology for any imputation strategy used and discussing results with and without imputed data.

How it helps us embed equity:

A commitment to data disaggregation allows for more precise community outreach and engagement as well as a more efficient use of organizational resources.

Integrate equity into crisis operations and decision-making

#1

Promising practice

#6

Use equitable
decision-making
tools and
protocols.

How to operationalize:

Step 1:

Train teams to consistently use equity lens tools before, during, and after a crisis.⁸³⁻⁸⁵

Step 2:

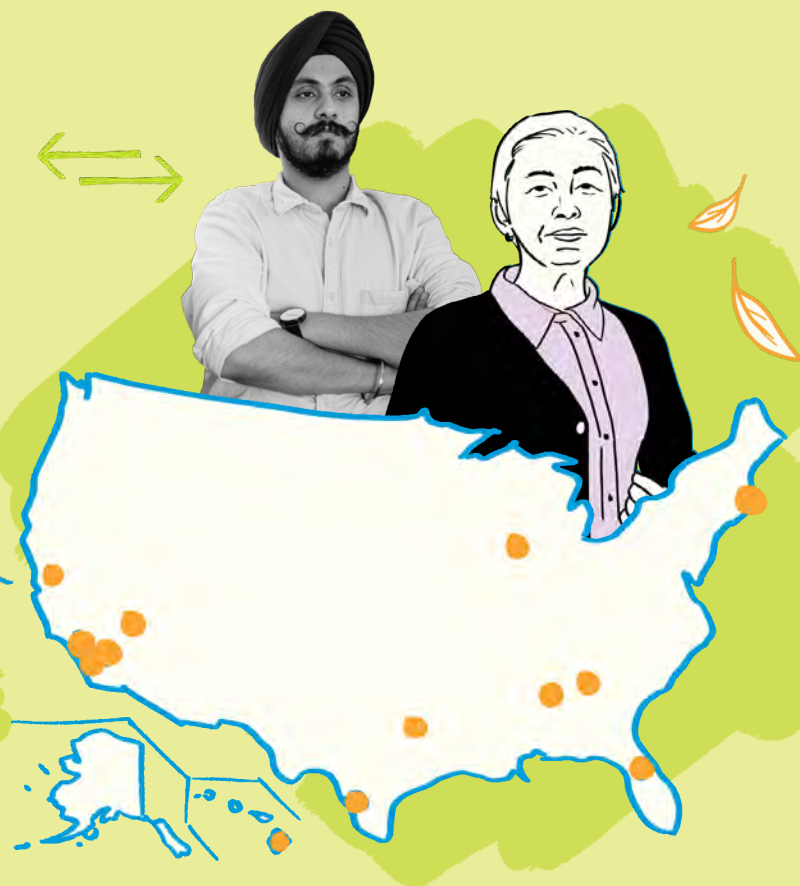
Create regular opportunities to reflect on the successes and shortcomings of different equity lens tools. As needed, seek to adapt or create your own version of tools and protocols.

How it helps us embed equity:

The more we use equity lens tools in advance of a crisis, the more likely we are to use them when a crisis unfolds.

The American College of Preventive Medicine (ACPM) and the American Medical Association (AMA)

For *Improving Minority Physician Capacity to Address COVID-19 Disparities*, a supplemental award funded by the CDC's COVID-19 Response Supplement, the American College of Preventive Medicine (ACPM) and the American Medical Association (AMA) created equity teams via advisory groups to center equity in funding and the award selection processes. This approach allowed ACPM and AMA to further



Location: 15 U.S. based sites

Setting: Physician-led organizations

Populations Served: Black, Indigenous, Latinx, People of Color, LGBTQIA+, Asian Americans and Pacific Islander, people with disabilities, and other minoritized groups.

their strategy of sharing power throughout the funding process, from the requests for proposals to the award selection, based on impact and communities served. Through this participatory process, ACPM and AMA awarded 13 physician-led organizations across the United States, representing 15 sites serving Black, Indigenous, Latinx, People of Color, LGBTQIA+, Asian Americans and Pacific Islander, people with disabilities, and other minoritized groups.

Source: Sarafina Cooper, MPH, CHES, Anita Balan, MPH, MCHES, Kate Shreve, MPH, American College of Preventive Medicine; Crystal Sacaridiz, MPA, Maria Regalado, MPH, Luke Sleiter, MPH, American Medical Association Center for Health Equity; Organization Type: Professional Society, Funder

The Regents of University of California Los Angeles

Transgender and gender diverse (TGD) people represent approximately 1.4 million people in the U.S. The TGD population experiences myriad challenges related to social determinants of health (SDOH). One SDOH indicator that disproportionately affects the TGD population is intimate partner violence (IPV). Emerging research finds that between 42 and 62 percent of TGD individuals experience some type of IPV; this is higher than is reported by the CDC for non-TGD women and men (41 and 26 percent, respectively).

There are calls for efforts to effectively connect TGD individuals to health-promoting services and supports. Med-Peds and Family Medicine clinics may be particularly well-positioned to support these efforts due to their focus on transitional-aged youth and young adults and the high prevalence of TGD in individuals who are 18-24 years old.

UCLA launched a quality improvement (QI) initiative that aimed to pilot-test a generalized and TGD-specific intimate partner violence (IPV-T) screening at TGD-specialty Med-Peds and Family Medicine clinics in a large, diverse health system in Los Angeles, CA. UCLA formed an interdisciplinary team comprised



of Clinical champions, as well as researchers, data analysts, and administrative staff within the clinic and broader health system, to engage in brainstorming and ideation to conceptualize aims and methods. The project highlighted the utility of an iterative approach to screener rollout to allow for continuous refinements that would ensure effective and high-quality implementation.

The decision to roll out an IPV screener required the development of a referral mechanism, which allowed the clinics to make important linkages to community supports and services. There was significant value in providers receiving education from the community organization. UCLA's QI project determined more data is needed to support the addition of the IPV-T over the generalized screener, however there may be utility in tailoring referral resources to include those providing services specifically to LGBTQ+ and/or TGD people.

Location: Los Angeles, California

Setting: Med-peds and family medicine clinics

Populations Served: Transgender and gender diverse (TGD) people

Trunk goal



Cultivate a
protected,
supported, and
engaged staff



Cultivate a protected, supported, and engaged staff

#2

Promising practice

#1

Ensure
an equity
lens is
applied to
workforce
decisions.

How to operationalize:*Step 1:*

Consider the needs of support staff in lower-earning roles when making decisions and implementing policies and practices. As general practice, consider: "who is burdened and who benefits?"

Consider hazard pay for those who continue with in-person duties and accommodate those who are at high risk with remote work schedules. Build such protections into collective bargaining discussions and insurance contracts between emergencies.

How it helps us embed equity:

- When we center the needs of those requiring the most support, there is maximum benefit for all affected staff.
- Lowest paid workers are often those with the most public (and therefore infectious) exposure.

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#2

Communicate
with staff
often.

How to operationalize:

Step 1:

Provide regular updates to your staff as you gather new information and as decisions are made.

Step 2:

- Consider scheduling daily communication that is clear, coherent, and concise. It should include:
- What we know: Define the current situation and mission (because the mission will likely evolve).
- What we don't know and how we will find out: Be explicit about what is unknown and develop a plan to gather additional insights or clarity.
- What we're doing to keep everyone safe, promote equity, and accomplish our mission.

Step 3:

Provide insight on the best practices and the equity-minded initiatives that you have activated.

How it helps us embed equity:

- A culture that promotes and embraces open and frequent communication, diverse thought, and dissent enhances autonomy, psychological safety, and engagement.
- Numerous avenues for communicating sensitive information can result in more contributions of ideas, meaningful feedback, and effective planning.
- We risk losing the trust of staff and community partners if we withhold good, bad, or hopeful news. Additionally, their confidence in our ability to solve problems directly and collaboratively will diminish.

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#3

Help staff
clarify their
work
priorities.

How to operationalize:

Step 1:

Help staff identify their tasks and priorities (what stays the same and what changes in their daily roles during the crisis).

Step 2:

Make sure staff understand how their work ties into the larger equity goals. Highlight the importance of what they're doing and discuss the direct and indirect consequences of staff not feeling accountable to their work.

Step 3:

Make sure staff and management understand what duties might be on hold as they attend to the emergent and prioritized needs facing the organization.

Step 4:

Clarify emergency response reporting relationships early and reassess regularly to best meet response objectives.

Step 5:

Formally recognize staff who take on substantially higher levels of responsibility during the emergency.

How it helps us embed equity:

- With a firm understanding of what they are confronting, staff can better prioritize their limited time and resources.
- People often have emergency response roles that are different from their day-to-day roles, and this often means joining or leading teams that are defined by the temporary incident command structure and different than the usual organizational structure. Formal recognition of effort is particularly important in this context.

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#4

Invite staff
to identify
workforce
priorities.

How to operationalize:

Step 1:

Implement a multi-disciplinary Staff Equity Task Force to represent the varied identities, needs and interests of staff during a crisis.

Step 2:

Advocate for a competency-based orientation rather than a title-based determination of who can fulfill rapidly emerging needs.

How it helps us embed equity:

A Staff Equity Task Force is instrumental for timely reactions and identifying unintended consequences of crisis-time decisions or temporary policies.

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#5

Protect your
staff's health
and safety.

How to operationalize:

Step 1:

Ensure you have policies and practices in place to protect the health and safety of your staff, including hourly workers.

Step 2:

State and acknowledge that crises may affect each employee's safety differently and can exacerbate existing inequities.

How it helps us embed equity:

Acknowledging and working to mitigate staff's safety concerns honors their job roles, contributions and lived experiences.

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#6

Provide flexibility for staff when possible.

How to operationalize:

Step 1:

- Many staff are parents and/or caretakers. It is important to acknowledge this reality and provide flexibility, when possible, for those staff who need it. This may mean you:
- Establish flexible and/or rotational work schedules for staff where possible.
- Offer subsidized childcare, especially for staff who earn lower wages.
- Provide reassurance around job security, income, and personal leave if staff become directly affected by the crisis (e.g., physical damage to home during a climate disaster or they contract a virus during a pandemic).
- Arrange for mutual aid among staff.

Provide information and actively support staff in applying for / enrolling in crisis-era aid (e.g., child tax credit, liberalized insurance policies, food assistance).

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#6

Provide flexibility for staff when possible.

Step 2:

Recognize and provide support around any trauma that staff may experience. Remind staff about wellness and support services available through work and community partners.

How it helps us embed equity:

- Staff feel seen and respected when we honor their non-work responsibilities and provide support for optimal navigation of these responsibilities, especially during a crisis when community and family support are significantly impacted or absent.
- Crises can cue prior experiences of trauma and create new trauma—both of which can interfere with people's daily functioning. Recognizing how trauma is a real possibility during crisis times plus how staff can receive support is sound trauma-informed practice.

Cultivate a protected, supported, and engaged staff

#2

Promising practice

#7

Promote
connection
and a sense
of belonging.

How to operationalize:

Step 1:

Consider hosting or scheduling virtual coffee breaks or other types of unstructured social meetings to give people dedicated time to check in with one another.

Step 2:

Build in time to celebrate personal milestones reached as well as team efforts and successes.

Step 3:

Make sure leadership is visible to staff regularly.

How it helps us embed equity:

- Leaders can model vulnerability and normalize feelings of fear and isolation more by sharing their own experiences. Feeling afraid and alone is a bit easier to cope with when honest thoughts can be shared with colleagues without judgment.

AltaMed Health Services

AltaMed's team launched a COVID-19 Street Vendor Ambassador Program, utilizing the Community Health Worker/Promotora model to partner with 50 street vendors across Los Angeles. In partnership with the Street Vendor Ambassadors, AltaMed co-developed community campaigns, enhancing the capacity of street entrepreneurs as influential messengers in COVID-19 outreach and community action campaigns, and built bi-directional community-outreach infrastructure that delivered critical information and supported the identification of community priorities and gaps (77% of patients are Hispanic/Latino, 57% live at or below the poverty level, 76% are enrolled in Medi-Cal).



Street vendors were the ideal partners for this initiative due to their positionality as members of marginalized communities. To ensure the wellbeing of staff members and Street Vendor Ambassadors during the COVID-19 pandemic, AltaMed hired a consultant to provide monthly wellness and trauma-informed training for the community outreach and engagement team staff members. These sessions also served as capacity building for the program team to enhance their outreach skills and approach in response to the community-level trauma witnessed during the pandemic. The consultant also held two sessions for AltaMed's community ambassadors and provided one-on-one support to street vendor ambassadors to support their own processing of the COVID-19 pandemic and how it impacted them and their families.

Location: Los Angeles, California

Setting: Med-peds and family medicine clinics

Populations Served: Hispanic/Latino patients, people at or below poverty levels, and people enrolled in Medi-Cal

Trunk goal

Engage with partners
to leverage data and
co-create a community/
neighborhood-wide
response

Promising practice

#1

Identify and understand the people and communities surrounding your organization.

How to operationalize:

Step 1:

Identify the geographic and political bounds of your local community; how long and how far do patients travel to receive care at your facility? Within these geographic bounds, aim to understand:

- Racial and ethnic identities
- Languages spoken
- Age and household composition
- Religious identities
- Gender identities
- Disability status and accessibility needs
- Immigration status
- Types of housing (including historical racial discrimination in housing)
- Employment status levels
- Household income levels
- Insurance coverage levels
- Education and literacy levels
- Utilization of telehealth services

Step 2:

Identify existing emergency preparedness and response coalitions and structures that you can join.

Step 3:

Identify existing asset maps, support community-led asset mapping or engage in asset mapping to know where resources are and understand potential community partnerships. Asset Maps will define the following:

- Social-support organizations
- Libraries and community centers
- Public transportation and car/bike shares
- Supermarkets/farmers markets/food pantries

Promising practice

#1

Identify and understand the people and communities surrounding your organization.

- Affordable or subsidized housing/tenant associations
- Houses of worship
- Cultural institutions and spaces
- Barbershops/salons
- Schools and educational centers
- Community Boards
- Media and Communications organizations
- Mass employment opportunities
- Broadband network capacity
- Government representatives' offices
- Emergency preparedness offices, coalition meetings, materials, disaster literacy tools

Step 4:

Collect and share stories with community partners to deepen understanding of community context, histories, truths, and realities of community members.

How it helps us embed equity:

- Understanding the “soil” of your service area helps highlight the diversity of communities you serve—each with their own distinct assets and challenges.
- You will be unable to mitigate the impact of a crisis for people and communities without this information. Such information allows you to develop inclusive, responsive, and tailored strategies and approaches for communities.

Promising practice

#2

Leverage data and learnings about the people and communities around your organization.

How to operationalize:

Step 1:

Inquire about, and base your planning on the successes, failures, and opportunities learned from prior crises in your community.

Step 2:

Ask community partners how your organization's position and resources can support their preparedness efforts.

Step 3:

Ask community partners how you might best shape your equity efforts to support local patient populations.

Step 4:

Learn about existing organizations that share a common goal or already provide services to and engaging with patient populations.

How it helps us embed equity:

- Acknowledging power dynamics and being transparent at all times with community partners about how information will be used and decisions that are made based on information is important to earning and maintaining trust.

Promising practice

#3

Use established priorities around addressing health inequities to guide community partnerships and engagement.³⁹

How to operationalize:

Step 1:

Engage partners who are representative of the communities you serve, and who have established relationships with key populations—as well as the ability to channel feedback and needs from those populations.

Step 2:

Consider better avenues to disseminate critical communication to all the populations you serve. Work to engage and compensate partners who are trusted, credible, and able to access those communities via pathways (e.g., media, engagement, programming, events) they already understand and trust.

How it helps us embed equity:

The way you align (or not) with certain partners may affect the way the community perceives your organization. Be cognizant of the community history and the perceptions of new and existing partners, vendors, etc.

Promising practice

#4

Leverage each other's strengths and resources to plan for, and implement, a comprehensive and equitable crisis response.

How to operationalize:

Step 1:

Use trusted partners / community groups to design, implement, and evaluate crisis risk communication strategies, ensuring they are culturally humble, safe and linguistically appropriate. Adequately support and pay them for this work.

Step 2:

Develop and test drills and exercises that incorporate the cultural norms and languages of historically marginalized communities.

Step 3:

Ensure crisis response drills, exercises and communications are fully accessible for community members with mobility and sensory disabilities.

How it helps us embed equity:

- Sustainable partnerships will help to assess, build, and sustain trust.

Promising practice

#5

Develop mechanisms for community partnerships to inform your organization's priorities and decision-making.

How to operationalize:

Step 1:

Staff who manage community partnerships should also be members of your Equity Team.

Step 2:

Integrate community members in decision-making:

- Bring preparedness and real-time decisions to community partners for their input.
- Be transparent about power in decision-making processes.

Step 3:

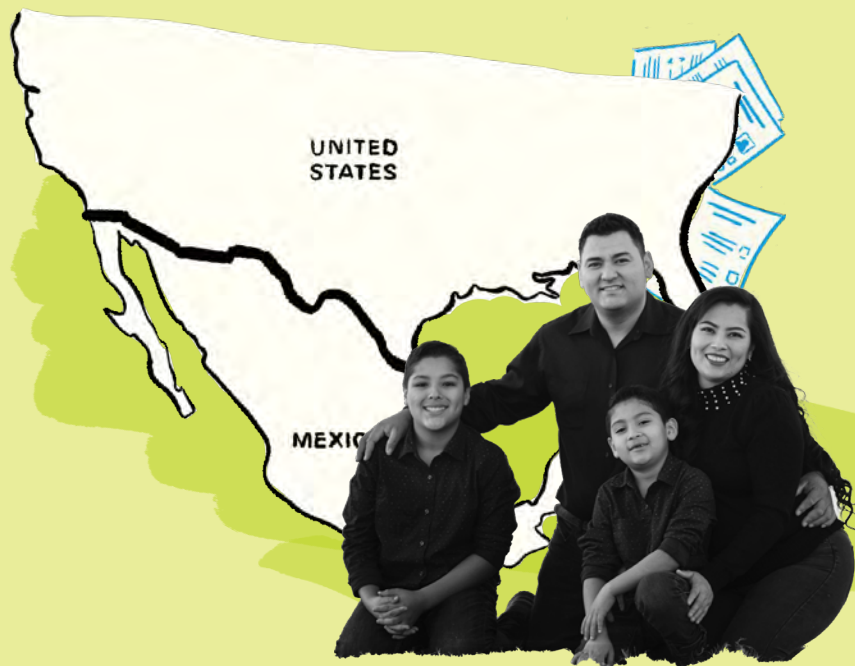
Consider how often you engage with partners. Do you have a practice of listening on a regular basis? Ensure there is an ongoing relationship that you can then lean on during crises.

How it helps us embed equity:

- When we integrate collaborations and partnerships into service delivery, it amplifies the reach of a single organization and helps to build trust among partners.

Wellness Equity Alliance

In South Laredo, Texas, along the U.S.-Mexico border, disparities exist in immigration status, socioeconomic status, access to healthcare and housing, and as a result, polarize health outcomes. The Wellness Equity Alliance (WEA) provided COVID-19 vaccination services to people released from Laredo Immigration and Customs Enforcement detention centers and to those living in Colonias substandard housing developments.



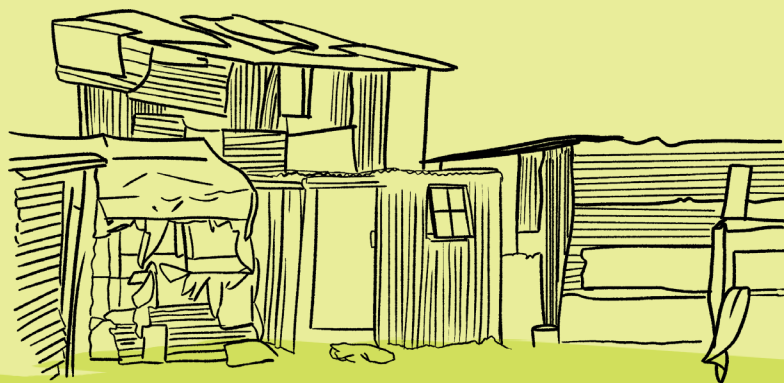
WEA implemented a capacity-building program focused on Las Colonias residents and asylum seekers to improve health equity and COVID-19 vaccination access by involving local groups. This effort encompassed mapping of social determinants of health data to identify the greatest COVID-19 needs and barriers, conducting stakeholder analysis with local leaders, hiring Spanish-speaking and bilingual clinical staff, and providing referrals to established medical clinics locally and across the nation.



Location: South Laredo, Texas

Setting: U.S. - Mexico border

Populations Served: People released from Laredo Immigration and Customs Enforcement detention centers and those living in Colonias



MedsPlus Consulting

Recognizing that many community members—particularly Black, Latinx, uninsured, underinsured, and low-income residents—are not connected to primary care providers, struggle to manage chronic conditions, or require referrals to healthcare providers, MedsPlus Consulting, through a Pharm-D/Family Medicine Alliance, adopted a community centered approach to reach individuals where they reside.



Through their partnership with ConnectionHealth and the Housing Authority of Birmingham (HABD) across 13 sites, MedsPlus Consulting addressed these challenges by inquiring about primary care physician status during registration for COVID-19 vaccine or testing. They also provided guidance and resources for individuals who tested positive for COVID-19, offering a handout on symptoms and instructions on what to do if symptoms worsen, conducting a follow-up call, referring individuals to telehealth services local healthcare providers, or federally qualified health centers, and advising a visit to the emergency room if symptoms worsen.

Location: Birmingham, Alabama

Setting: Covid-19 vaccine and testing sites

Populations Served: Black, Latinx, uninsured, underinsured, and low income residents

Cook County Health (CCH)

Little is known about the burden of long COVID among Black and Hispanic patients in the United States. Cook County is the primary inpatient facility of Cook County Health (CCH), the only public safety-net health system for metropolitan Chicago. The majority of patients are predominantly Black and Hispanic, uninsured, or insured through Medicaid.



Through its CCH care coordinators, and its partnership with its Preventive Medicine Residency Program, Cook County surveyed patients for persistent symptoms after hospitalization to assess prevalence of Long COVID and identify risk factors. Once screened, CCH care coordinators referred patients to the Dr. Jorge Prieto Family Health Center and the Ruth M. Rothstein CORE Center to conduct a more thorough survey of their symptoms and a social needs assessment, and to refer them to the appropriate specialty services, rehabilitative services, such as acupuncture, and social services.



Location: Chicago, Illinois

Setting: Inpatient facilities

Populations Served: Black and Hispanic patients

Trunk goal



Ensure equity
via whole-person
and whole-
community care



Ensure equity via whole-person and whole-community care

#4

Promising practice

#1

Build on your work in Trunk #3; use community data to improve care.

How to operationalize:

Step 1:

Use community context with clinical data in the Electronic Health Record (EHR). Supplement the clinical data in your EHR with information about the patients' community. Enlist knowledgeable staff to search for context about the geographical clustering of social determinants of health in your area.

Step 2:

Add the ability to identify as having a disability or needing accommodations in the EHR; this will facilitate access for patients with disabilities.⁴⁰

Step 3:

Strive for a standardized approach, clear benchmarks, and best practices in collecting equity data.

Step 4:

Review data for completeness prior to, or at the beginning of, an emergency or crisis. Adjust and expand data collection and interpretation as needed to account for identified needs and gaps.

Ensure equity via whole-person and whole-community care

#4

Promising practice

#1

Build on your work in Trunk #3; use community data to improve care.

Step 5:

Seek out and implement tools for standardized screening for health-related social needs, sharing updated directories of community resources, and facilitating referrals between entities.

Step 6:

Provide concrete and clear messaging around data to ensure that socio-political and systems-based context is applied.

How it helps us embed equity:

- Uncovering information about the differential effects of care on different populations helps reduce health inequities.

Ensure equity via whole-person and whole-community care

#4

Promising practice

#2

Create a welcoming environment that promotes belonging.

How to operationalize:

Step 1:

Convey safety and belonging in your physical space:

- Add artwork and decor that is from or represents local communities.
- Post signs and create educational materials that welcome and celebrate diversity, including people of all ethnicities, documentation statuses, religions, body sizes, disabilities, sexual orientation and gender identities, age, and more.

Step 2:

Value, attract and retain staff that represent the local communities to greet patients, deliver health care and provide education.

How it helps us embed equity:

- Patients, especially those who have been overlooked and unwelcome historically, will immediately observe things in a physical environment that signal safety and belonging—and will also note their absence.

Ensure equity via whole-person and whole-community care

#4

Promising practice

#3

Ask patients for their feedback and incorporate improvements whenever possible.

How to operationalize:

Step 1:

Seek feedback from patients about their care experience via patient surveys. Ensure accessibility of surveys to capture the opinions and feedback of patients with disabilities; offer surveys in different preferred languages.

Step 2:

Use feedback to generate or complement service improvement efforts. When changes are made based on patient feedback, make the information readily available—demonstrating your commitment to accepting and acting on patient feedback.

How it helps us embed equity:

- When organizations can demonstrate to patients that they consider their feedback when making decisions and improvements, patients are more likely to keep sharing their input and experiences.

Ensure equity via whole-person and whole-community care

#4

Promising practice

#4

Provide
multiple
means of
access for
patients.

How to operationalize:

Step 1:

Ensure language access by considering the following questions:

- Is care accessible for deaf and hard of hearing or communication-based disabilities?
- Are there non-English and sign language interpreters or language-access resources, especially during telehealth care?

Step 2:

Consider accessibility for those with intellectual disabilities. Use plain language and pictures as needed.

Step 3:

Consider how individuals with physical disabilities are able to access your treatment areas.

Step 4:

Consider how patients with low vision or those who are blind will access pre- and post-appointment instructions and other items during their visit.

Ensure equity via whole-person and whole-community care

#4

Promising practice

#4

Provide multiple means of access for patients.

Step 5:

Offer telehealth without losing or degrading in-person access.

Step 6:

Recruit crisis navigators and plan for surge staffing to support patient navigation needs during a crisis.

Step 7:

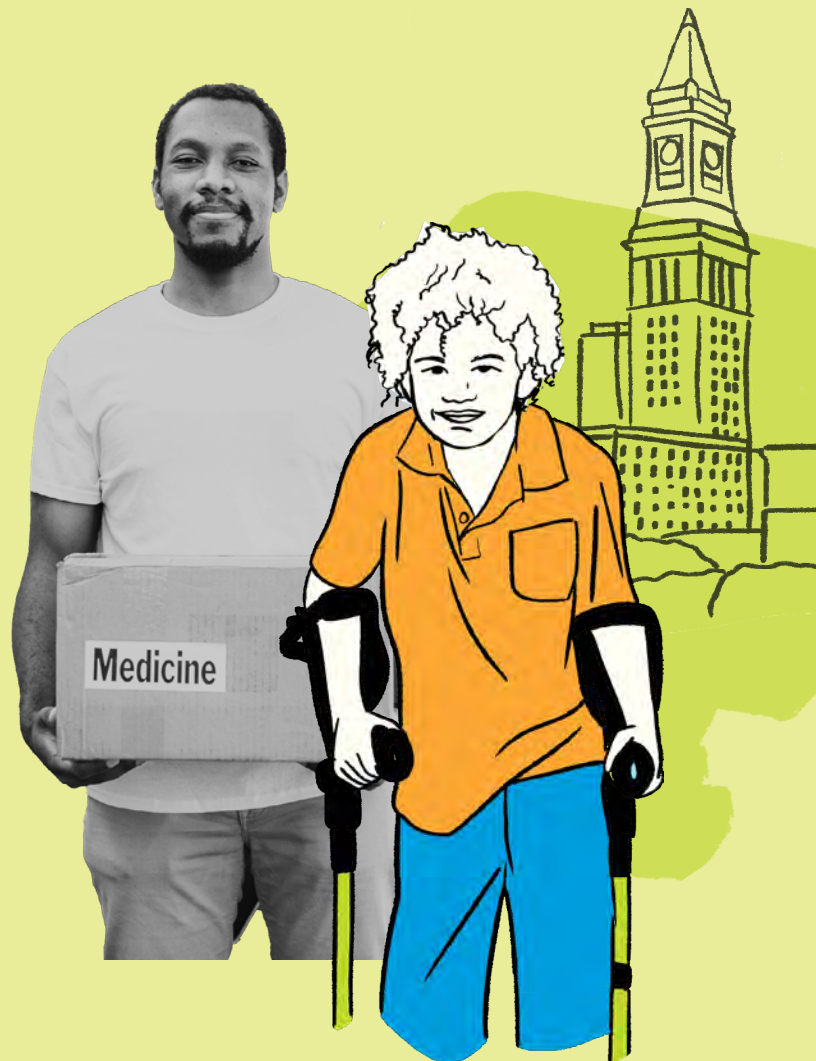
Leverage, expand, or implement directly provided, contracted, or referral-based home-based services and medication and equipment delivery.

How it helps us embed equity:

- Individuals and families are stretched more than usual during a crisis. Adding more appointment options can avoid a disruption of care.
- Support from a crisis navigator helps to ensure patients continue to receive whole-person care, including the full use of language access resources.

Boston Community Pediatrics

The use of community partnerships and social determinants of health (SDOH) screening tools can facilitate integrated care and lead to better outcomes for patients. Boston Community Pediatrics (BCP), largely serving Black and Latinx children whose families are low-income, administers SDOH screenings at all well-child visits. This practice, along with building trusted relationships with families, enables the care navigation team to quickly identify financial and utility hardships.



Location: Boston, Massachusetts

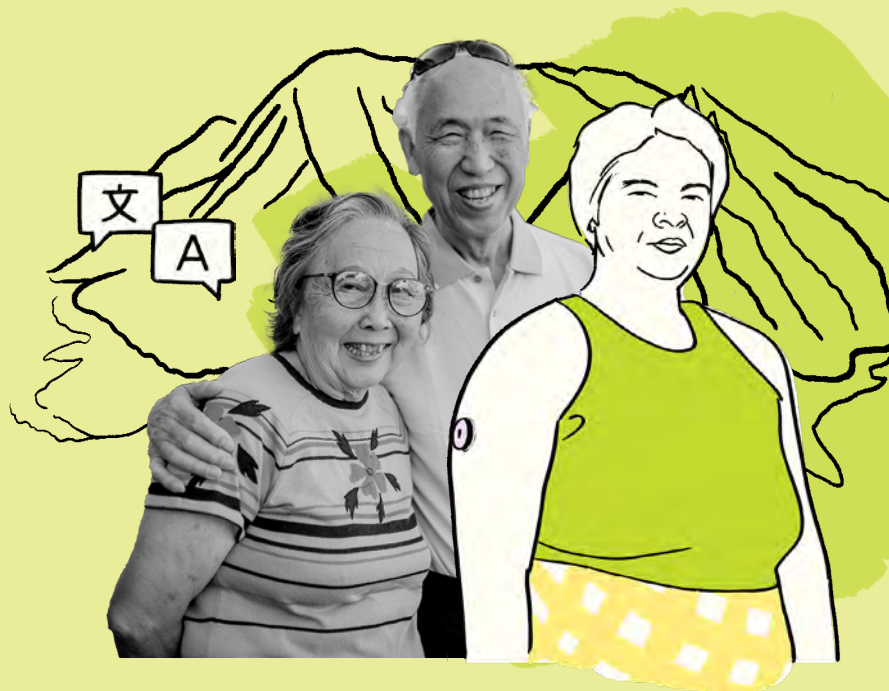
Setting: Community pediatric facilities

Populations Served: Black and Latinx children and their families

By partnering with community organizations that share the same mission and commitment to equity, BCP can access additional resources and services that support families in addressing social determinants of health. In addition to the screenings and partnerships, BCP has focused its fundraising efforts on addressing social determinants of health by providing diapers, groceries, hygiene products, and summer camp to families.

East Hawaii Independent Physician Association

Small, independent, privately owned, solo or group practices deliver most of the primary care in isolated rural communities on Hawaii's Islands. Unlike the larger state-owned or federally funded clinics, the smaller clinics needed to fend for themselves during the COVID-19 pandemic. East Hawaii Independent Physician Association (IPA) implements a comprehensive care management program through



their clinic, providing access and quality care to their patients. Patient trust is gained by speaking in the patient's language (most often local pidgin) to allow for comfortable communications and to show compassion and understanding related to the patient's upbringing, education, and family situation (52% of the patients are Pacific Islander/Native Hawaiian ethnicity; 23% are living below poverty level).

During the pandemic, IPA staff performed social needs screenings for patients using a social determinants of health (SDOH) assessment. IPA care managers carried out patient health education and referrals to numerous community resources including food banks, the Aging and Disability Resources Center, home health agencies, hospice/palliative care, durable medical equipment suppliers, and long-term care facilities. East Hawaii IPA also developed an SDOH resource website that was launched and shared with their 62-provider network.

Location: Rural Hawaii

Setting: Small, independent, and privately owned practices

Populations Served: Pacific Islander/Native Hawaiian patients and their families.

Trunk goal



Build equity
capacity through
fiscal and
administrative
readiness

Build equity capacity through fiscal and administrative readiness

#5

Promising practice

#1

Prioritize
investments
before a crisis.

How to operationalize:

Step 1:

Make the case that crisis preparedness is a daily investment, regardless of the presence of an active crisis.

How it helps us embed equity:

This will have the greatest effect on your organization's ability to prepare, respond to, and recover from crises.

Build equity capacity through fiscal and administrative readiness

#5

Promising practice

#2

Review and
tend to
administrative
and legal
protocols and
requirements.

How to operationalize:

Step 1:

Use existing tools that can help foster legal and administrative readiness.⁴¹

- Utilize master service agreements that can quickly be amended, or emergency protocols with flexibility in procurement processes (while maintaining rigor and the possibility of later audit) during crises. In particular need to be able to infuse cash into smaller organizations or businesses early and regularly as they have limited cash flow flexibility.

How it helps us embed equity:

Administrative preparedness allows your organization to respond to a crisis quickly and lawfully, freeing you to prioritize equity needs.

Build equity capacity through fiscal and administrative readiness

#5

Promising practice

#3

Foster an equitable supply chain.

How to operationalize:

Step 1:

Consider mutual aid agreements for supplies and equipment.

- Partner in creating equitable local or regional protocols (shared across health systems) and securing agreement from local, state, or federal authorities in advance to: access pools of surge staffing from other regions when local shortages exist, access local expansion spaces (e.g., establishing a pop-up health care site in an unused publicly-owned building), make emergency adaptations to existing spaces (e.g., converting operating room to ICU) and equipment (e.g., 3D printing ventilator modifications), procure equipment from local manufacturers who convert temporarily to emergency supplies (e.g., local production of face shields), and access equipment from publicly-administered stockpiles.

Step 2:

Government emergency supplies tend to be inequitable because they are often “one size fits all” and often don’t support local businesses. To help build capacity more equitably, restore regular post-crisis supply chains as soon as possible.

- Understand local supply chain dynamics, such as which suppliers are Minority/Women-Owned Business Enterprises (MWBE).
- Tap into collaborators and partners to understand pain points along supply chains.

How it helps us embed equity:

- Equitable supply chains serve as significant sources of economic vitality for local communities.

Build equity capacity through fiscal and administrative readiness

#5

Promising practice

#4

Measure and evaluate all stages of crisis plans and actions, from preparedness to recovery.

How to operationalize:

Step 1:

Ensure a fiscal and legal representative co-creates or reviews all steps of the work, including how you engage, support, and collaborate with partners to implement a community-wide response.

Step 2:

Ensure active involvement of collaborators and partners by maintaining a continual review process.

How it helps us embed equity:

Centering equity in our crisis planning and response efforts requires caring for our business as well as tending our ethical and legal obligations.

Los Angeles LGBT Center

Ahead of potential monkeypox and COVID-19 outbreaks, the Los Angeles LGBT Center convened a vaccine workgroup to review and revise vaccination processes. Additionally, the Center implemented an electronic health information exchange, coding identity across 21 different categories (i.e., sex at birth, gender identity, sexual orientation, gender pronouns, etc.) and assessing individual and community barriers of vaccine confidence and compliance in the LGBTQIA+ community. Ultimately, these efforts increased the number of patients who are up to date on their preventative vaccines (based on age, health and risk status).



Location: Los Angeles, California

Setting: Vaccination sites

Populations Served: LGBTQIA+ community

Source: Kaiyti Duffy, MD, MPH, Claudia Alvarez, RN, Gabriel Garcia-Lopez, MSHI, CPHIMS, Los Angeles LGBT Center, Los Angeles, California; Organization Type: Federally Qualified Health Center

North East Medical Services

After evaluating their crisis plans and actions, North East Medical Services (NEMS), worked to improve their data collection efforts to center cultural humility and safety in care. They expanded the race and ethnicity options on their forms to gather more detailed race and ethnicity information for people who identify as Hispanic. Furthermore, they included Middle Eastern and/or North African as an option for race as they transition to a new electronic health records system.



Location: San Francisco, California

Setting: Community health centers

Populations Served: Asian American and Pacific Islanders, non-U.S.-born, low-income, and uninsured populations

Additionally, to prepare for COVID-19 surges, NEMS translated COVID-19 testing flyers into Chinese, Vietnamese, and Spanish to ensure patients understand how to use the test kits effectively and safely. NEMS expanded COVID-19 testing and vaccination in the San Francisco area through their Community Health Worker delivery model, specifically in single room occupancy housing serving Asian American and Pacific Islander (AAPI) populations, reviewed data collection for race/ethnicity completeness, and deepened partnerships with local public health partners.

Action Planning Workbook



This Action Planning Workbook is a tool designed to help health care organizations and teams focused on emergency and crisis preparedness and response efforts to assess their current state of equity and create plans for change. This workbook contains two sections:



Organizational assessment tool

to assess the current state of equity at an organization and better understand which trunk goals and branch practices to prioritize.



Action planning worksheets

to guide planning teams in their prioritization of equity work as it relates to emergency and crisis preparedness and response.

Organizational assessment tool

Adapted from the Institute for Healthcare Improvement's *Achieving Health Equity: A Guide for Health Care Organizations*, this Organizational Assessment tool is designed to help organizations evaluate their current equity efforts related to the five trunk goals and subsequent branch practices discussed in this Guide.

This assessment is best completed as a group with the key individuals engaged in organizational strategy and operations, especially in the areas of emergency and crisis preparedness and response. It's particularly important to ensure that those involved in these areas of work are involved in this process.

On a scale of **1-5**, rate your organization's current level of readiness to each trunk goal and branch strategy. Trunk goals with low scores can be used to identify priorities.



Integrate equity into crisis operations and decision-making



On a scale of **1–5**, rate your organization's current level of readiness to each trunk goal and branch strategy. Trunk goals with low scores can be used to identify priorities.

LEVEL 1 No work in this area	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5 Equity is continually at the forefront of preparedness, infrastructure, and operations.
---------------------------------	---------	---------	---------	--

Assessment question	Current level				
Does the organization have an Equity Team within its incident command system (ICS) or emergency operations center (EOC) structure?	1	2	3	4	5
Have you named equity as its own response, process, and objective during crises?	1	2	3	4	5
Has the organization committed adequate staff and resources to equity objectives?	1	2	3	4	5
Have you built a mechanism to address social determinants of health into your ICS/EOC?	1	2	3	4	5
Does the organization use disaggregated/inequities data to inform decisions and education efforts?	1	2	3	4	5
Does the organization use equitable decision-making tools and protocols?	1	2	3	4	5
TOTAL:					

Cultivate a protected, supported, and engaged staff



On a scale of **1–5**, rate your organization's current level of readiness to each trunk goal and branch strategy. Trunk goals with low scores can be used to identify priorities.

LEVEL 1 No work in this area	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5 Intention is applied to address staff concerns simultaneous to response needs. Marginalized staff are engaged as critical decision makers and added attention applied to minimize trauma.
---------------------------------	---------	---------	---------	--

Assessment question	Current level				
Does the organization ensure an equity lens is applied to workforce decisions?	1	2	3	4	5
Is there frequent staff communication across staffing teams and structure?	1	2	3	4	5
Is information shared (no matter how negative) as transparently and accessibly as possible?	1	2	3	4	5
Are staff across the response structure asked to help identify priorities?	1	2	3	4	5
Does the organization protect staff's health, safety, and well-being?	1	2	3	4	5
Does the organization acknowledge the personal realities of and provide flexibility for staff when possible?	1	2	3	4	5
Does the organization promote connection and a sense of belonging?	1	2	3	4	5
TOTAL:					

Engage with partners to leverage data and co-create a community/neighborhood-wide response

#3



On a scale of **1–5**, rate your organization’s current level of readiness to each trunk goal and branch strategy. Trunk goals with low scores can be used to identify priorities.

LEVEL 1 No work in this area	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5 Organization engages and collaborates with local community networks to advance health equity, centering community needs and desires.
---------------------------------	---------	---------	---------	---

Assessment question	Current level				
Does the organization work to identify and understand the surrounding communities?	1	2	3	4	5
Does the organization leverage data and findings about the communities around your organization?	1	2	3	4	5
Does the organization acknowledge gaps in your expertise and collaborate with your community partners to address them?	1	2	3	4	5
Does the organization use established priorities around addressing health inequities to guide community partnerships and engagement?	1	2	3	4	5
When working with community partners, does the organization leverage each other’s strengths and resources to plan for, and implement, a comprehensive and equitable emergency and crisis response?	1	2	3	4	5
Does the organization develop mechanisms for community partnerships to inform your organization’s priorities and decision making?	1	2	3	4	5
TOTAL:					

Ensure equity via whole-person and whole-community care



On a scale of **1–5**, rate your organization’s current level of readiness to each trunk goal and branch strategy. Trunk goals with low scores can be used to identify priorities.

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
No work in this area				Patients are receiving equitable care that considers their wellbeing beyond a single visit, especially during a crisis.

Assessment question	Current level				
Does the organization use community data to improve care and services?	1	2	3	4	5
Does the organization create a welcoming environment that promotes belonging for people?	1	2	3	4	5
Does the organization ask people for their feedback, and incorporate improvements whenever possible?	1	2	3	4	5
Does the organization provide multiple ways for people to access care and services?	1	2	3	4	5
Does the organization acknowledge how crises cause disruptions to health and safety, and offer support?	1	2	3	4	5
Does the organization work to understand how crises increase risk across all aspects of care, and fight to keep all health care accessible?	1	2	3	4	5
TOTAL:					

Build equity capacity through fiscal and administrative readiness



On a scale of **1–5**, rate your organization's current level of readiness to each trunk goal and branch strategy. Trunk goals with low scores can be used to identify priorities.

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
No work in this area				Providing equitable care is considered a continuing priority, especially when the organization is under strain.

Assessment question	Current level				
Does the organization prioritize investments before a crisis—particularly staff capacity building, organizational infrastructure, and supplies?	1	2	3	4	5
Does the organization utilize master service agreements that can quickly be amended, or emergency protocols with flexibility in procurement processes?	1	2	3	4	5
Does the organization foster an equitable supply chain?	1	2	3	4	5
Does the organization measure and evaluate emergency and crisis plans and actions, from preparedness to recovery?	1	2	3	4	5
TOTAL:					

Soil

Consider:

How does your organization experience the soil that produced and/or supports it?

Respond to the following questions as an Equity Team:

How can our emergency and crisis preparedness and response efforts acknowledge and consider the health care atrocities that have occurred disproportionately to Black, Indigenous and Latinx people in the U.S.?

What are the inequities in our service area? How has systemic racism and oppression produced these inequities? How can we center the communities that have been most marginalized, so they are not disproportionately impacted by a crisis?

Who are the local organizational leaders and elected officials—and are they representative of and trusted by all the communities you're serving? How can we eliminate that imbalance?

What resources are available within our organization and what partnerships exist that we can use more creatively to center equity?

How does the infrastructure in your area affect patients? Do you see higher prevalence of chronic conditions in certain neighborhoods? Conversely, where are there strong social organizations that help keep communities together and connected to health resources?

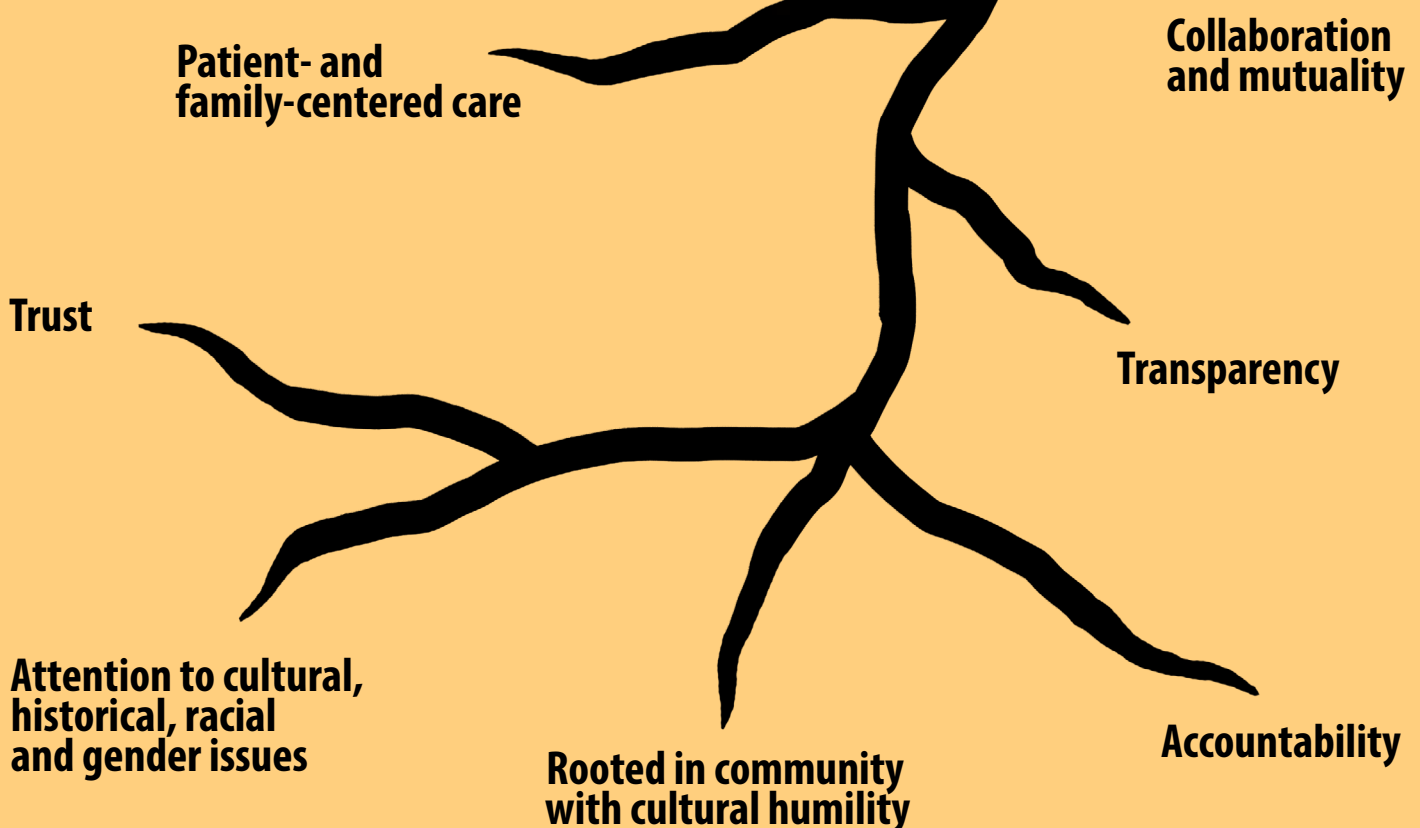
Roots

Consider:

What are the ways in which these roots have manifested within the organization?

What are strengths at the organization related to each root?

What are potential gaps at the organization related to each root?



Integrate equity into crisis operations and decision-making



How do we ensure equity is continually at the forefront of preparedness, infrastructure, and operations?

Strategy

What branch strategy can be made into an action step?

1.

2.

3.

Action Step(s)

What needs to be done?

1.

2.

3.

Responsible Person/Team

Who should lead the action to complete this step?

1.

2.

3.

Timeline

When do all action steps need to be completed?

1.

2.

3.

Necessary Resources

What do we need in order to complete this step?

1.

2.

3.

Potential Challenges

Are there potential challenges to completing this step?
How will we overcome them?

1.

2.

3.

Cultivate a protected, supported, and engaged staff



How do we make sure that all staff feel safe, heard, and supported during a crisis?

Strategy

What branch strategy can be made into an action step?

1.

2.

3.

Action Step(s)

What needs to be done?

1.

2.

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Responsible Person/Team

Who should lead the action to complete this step?

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Timeline

When do all action steps need to be completed?

1.

2.

3.

Necessary Resources

What do we need in order to complete this step?

1.

2.

3.

Potential Challenges

Are there potential challenges to completing this step?
How will we overcome them?

1.

2.

3.

Engage with partners to leverage data and co-create a community/neighborhood-wide response

#3



How do we best engage, collaborate with and support local community partners to advance health equity?

Strategy

What branch strategy can be made into an action step?

1.

2.

3.

Action Step(s)

What needs to be done?

1.

2.

3.

Responsible Person/Team

Who should lead the action to complete this step?

1.

2.

3.

Timeline

When do all action steps need to be completed?

1.

2.

3.

Necessary Resources

What do we need in order to complete this step?

1.

2.

3.

Potential Challenges

Are there potential challenges to completing this step?
How will we overcome them?

1.

2.

3.

Ensure equity via whole-person and whole-community care

#4



How do we ensure that we are providing equitable care to our patients during a crisis?

Strategy

What branch strategy can be made into an action step?

1.

2.

3.

Action Step(s)

What needs to be done?

1.

2.

3.

Responsible Person/Team

Who should lead the action to complete this step?

1.

2.

3.

Timeline

When do all action steps need to be completed?

1.

2.

3.

Necessary Resources

What do we need in order to complete this step?

1.

2.

3.

Potential Challenges

Are there potential challenges to completing this step?
How will we overcome them?

1.

2.

3.

Build equity capacity through fiscal and administrative readiness



How do we financially ensure that we can continue providing equitable care and services while under strain?

Strategy

What branch strategy can be made into an action step?

1.

2.

3.

Action Step(s)

What needs to be done?

1.

2.

3.

Responsible Person/Team

Who should lead the action to complete this step?

1.

2.

3.

Timeline

When do all action steps need to be completed?

1.

2.

3.

Necessary Resources

What do we need in order to complete this step?

1.

2.

3.

Potential Challenges

Are there potential challenges to completing this step?
How will we overcome them?

1.

2.

3.

Contributors

This guide was written as a collective effort by the following contributors:



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The Collaborative for Equity and Justice

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References

1. Goralnick E, Serino R, Clark CR. Equity and Disasters: Reframing Incident Command Systems. *Am J Public Health*. 2021;111(5):844-848. doi:10.2105/AJPH.2021.306171
2. Pearce E, Kamenov K, Barrett D, Cieza A. Promoting equity in health emergencies through health systems strengthening: lessons learned from disability inclusion in the COVID-19 pandemic. *Int J Equity Health*. 2022;21(Suppl 3):149. doi:10.1186/s12939-022-01766-6
3. Leider JP, DeBruin D, Reynolds N, Koch A, Seaberg J. Ethical Guidance for Disaster Response, Specifically Around Crisis Standards of Care: A Systematic Review. *Am J Public Health*. 2017;107(9):e1-e9. doi:10.2105/AJPH.2017.303882
4. Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. Achieving Health Equity: A Guide for Health Care Organizations. IHI White Paper. Institute for Healthcare Improvement; 2016.
5. The AMA's strategic plan to embed racial justice and advance health equity. American Medical Association. Accessed February 27, 2023. <https://www.ama-assn.org/about/leadership/ama-s-strategic-plan-embed-racial-justice-and-advance-health-equity>
6. Choo EK. COVID-19 fault lines. *Lancet*. 2020;395(10233):1333. doi:10.1016/S0140-6736(20)30812-6
7. Liao TF, De Maio F. Association of Social and Economic Inequality With Coronavirus Disease 2019 Incidence and Mortality Across US Counties. *JAMA Netw Open*. 2021;4(1):e2034578. doi:10.1001/jamanetworkopen.2020.34578
8. Metzl JM, Maybank A, De Maio F. Responding to the COVID-19 Pandemic: The Need for a Structurally Competent Health Care System. *JAMA*. 2020;324(3):231. doi:10.1001/jama.2020.9289
9. Gamble VN. "There Wasn't a Lot of Comforts in Those Days:" African Americans, Public Health, and the 1918 Influenza Epidemic. *Public Health Rep*. 2010;125(Suppl 3):114-122.
10. Økland H, Mamelund SE. Race and 1918 Influenza Pandemic in the United States: A Review of the Literature. *Int J Environ Res Public Health*. 2019;16(14):2487. doi:10.3390/ijerph16142487
11. Klinenberg E. Heat Wave: A Social Autopsy of Disaster in Chicago. (Preface W a N, ed.). University of Chicago Press; 2015. Accessed April 13, 2023. <https://press.uchicago.edu/ucp/books/book/chicago/H/bo20809880.html>

- 12.** McGhee H. *The Sum of Us: What Racism Costs Everyone and How We Can Prosper Together*. Random House
- 13.** Jones CP. Levels of racism: a theoretic framework and a gardener's tale. *Am J Public Health*. 2000;90(8):1212-1215.
- 14.** Annamma SA, Jackson DD, Morrison D. Conceptualizing color-evasiveness: using dis/ability critical race theory to expand a color-blind racial ideology in education and society. *Race Ethn Educ*. 2017;20(2):147-162. doi:10.1080/13613324.2016.1248837
- 15.** De Maio F, Ansell D. "As Natural as the Air Around Us": On the Origin and Development of the Concept of Structural Violence in Health Research. *Int J Health Serv Plan Adm Eval*. 2018;48(4):749-759. doi:10.1177/0020731418792825
- 16.** COVID-19 Took Black Lives First. It Didn't Have To. Accessed April 14, 2023. <https://features.propublica.org/chicago-first-deaths/covid-coronavirus-took-black-lives-first/>
- 17.** Opinion | For Chicago, the coronavirus is 'the perfect storm,' Mayor Lori Lightfoot says - The Washington Post. Accessed April 14, 2023. <https://www.washingtonpost.com/opinions/2020/04/29/chicago-coronavirus-is-the-perfect-storm-mayor-lori-lightfoot-says/>
- 18.** Lundon DJ, Mohamed N, Lantz A, Goltz HH, Kelly BD, Tewari AK. Social Determinants Predict Outcomes in Data From a Multi-Ethnic Cohort of 20,899 Patients Investigated for COVID-19. *Front Public Health*. 2020;8:571364. doi:10.3389/fpubh.2020.571364
- 19.** COVID-19 Cases in New York City, a Neighborhood-Level Analysis. Accessed April 29, 2023. <https://furmancenter.org/thestoop/entry/covid-19-cases-in-new-york-city-a-neighborhood-level-analysis>
- 20.** Renelus BD, Khoury NC, Chandrasekaran K, et al. Racial Disparities in COVID-19 Hospitalization and In-hospital Mortality at the Height of the New York City Pandemic. *J Racial Ethn Health Disparities*. 2021;8(5):1161-1167. doi:10.1007/s40615-020-00872-x
- 21.** Warren RC, Forrow L, Hodge DA, Truog RD. Trustworthiness before Trust - Covid-19 Vaccine Trials and the Black Community. *N Engl J Med*. 2020;383(22):e121. doi:10.1056/NEJMp2030033
- 22.** About - TRIE. Accessed April 29, 2023. <https://www.nyc.gov/site/trie/about/about.page>
- 23.** Health NYC. Inaugural Chief Medical Officer (CMO) Strategic Plan 2022-23. Accessed April 4, 2023. <https://www1.nyc.gov/assets/doh/downloads/pdf/public/chief-medical-officer-strategic-plan.pdf>

- 24.** Engl E, Smittenaar P, Sgaier SK. Identifying population segments for effective intervention design and targeting using unsupervised machine learning: an end-to-end guide. *Gates Open Res.* 2019;3:1503. doi:10.12688/gatesopenres.13029.2
- 25.** Collective Impact (SSIR). Accessed April 29, 2023. https://ssir.org/articles/entry/collective_impact
- 26.** Public Health Corps - NYC Health. Accessed April 29, 2023. <https://www.nyc.gov/site/doh/health/neighborhood-health/public-health-corps.page>
- 27.** Larson K, Levy J, Rome MG, Matte TD, Silver LD, Frieden TR. Public health detailing: a strategy to improve the delivery of clinical preventive services in New York City. *Public Health Rep Wash DC* 1974. 2006;121(3):228-234. doi:10.1177/003335490612100302
- 28.** Gallego AI, Pham-Singer H, Withers Z, Jarrah S, Morse ME, Chokshi DA. Payers and Public Health: A Novel Collaboration to Support Covid-19 Vaccination Uptake. *NEJM Catal.* 2022;3(8):CAT.22.0058. doi:10.1056/CAT.22.0058
- 29.** Jones CP. Confronting Institutionalized Racism. *Phylon.* 2002;50(1/2):7. doi:10.2307/4149999
- 30.** Spence SF. Four Key Takeaways from Mutual Aid Organizing During the COVID-19 Pandemic. Beeck Center. Published October 4, 2022. Accessed April 30, 2023. <https://beeckcenter.georgetown.edu/four-key-takeaways-from-mutual-aid-organizing-during-the-covid-19-pandemic/>
- 31.** The Principles of Trustworthiness. Center For Health Justice. Accessed April 13, 2023. <https://www.aamchealthjustice.org/our-work/trustworthiness/trustworthiness-toolkit>
- 32.** Tervalon M, Murray-García J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *J Health Care Poor Underserved.* 1998;9(2):117-125. doi:10.1353/hpu.2010.0233
- 33.** Using Trauma-Informed Care to Guide Emergency Preparedness and Response | Blogs | CDC. Published July 9, 2018. Accessed April 17, 2023. <https://blogs.cdc.gov/publichealthmatters/2018/07/trauma-care/>
- 34.** Krieger N. Structural Racism, Health Inequities, and the Two-Edged Sword of Data: Structural Problems Require Structural Solutions. *Front Public Health.* 2021;9:655447. doi:10.3389/fpubh.2021.655447

- 35.** Tsai J, Khazanchi R, Laflamme E. Death by missing data: Uncollected racial and ethnic pandemic data will drive inequities for decades to come. STAT. Published January 30, 2023. Accessed February 4, 2023. <https://www.statnews.com/2023/01/30/covid-19-missing-data-race-ethnicity-drive-inequities-decades-to-come/>
- 36.** Urban Indian Health Institute. Data Genocide of American Indians and Alaska Natives in COVID-19 Data. Accessed April 20, 2023. <https://www.uihi.org/projects/data-genocide-of-american-indians-and-alaska-natives-in-covid-19-data/>
- 37.** Brown KS. Ethics and Empathy in Using Imputation to Disaggregate Data for Racial Equity: Recommendations and Standards Guide.
- 38.** Embedding_Equity_Into_Emergency_Ops_Brief.pdf. Accessed April 17, 2023. https://phasocal.org/wp-content/uploads/2020/07/Embedding_Equity_Into_Emergency_Ops_Brief.pdf
- 39.** Ensuring Equity in COVID-19 Planning, Response, and Recovery Decision Making. Human Impact Partners. Accessed April 18, 2023. <https://humanimpact.org/hipprojects/ensuring-equity-in-covid-19-planning-response-and-recovery-decision-making/>
- 40.** Halkides H, James TG, McKee MM, Meade MA, Moran C, Park S. Spotlighting Disability in a Major Electronic Health Record: Michigan Medicine's Disability and Accommodations Tab. JMIR Form Res. 2022;6(12):e38003. doi:10.2196/38003
- 41.** NACCHO Toolbox. Accessed April 18, 2023. <https://toolbox.naccho.org/pages/tool-view.html?id=5501&userToken=40a1232e-b895-4d85-ae61-a8dce959c-bec&Site=NACCHO>