The U.S. Equity-First Vaccination Initiative

Impacts and Lessons Learned

About This Report

The U.S. Equity-First Vaccination Initiative (EVI) aimed to reduce racial disparities in vaccination rates for coronavirus disease 2019 (COVID-19) in the United States and, over the longer term, strengthen the public health system to achieve more-equitable outcomes. To accomplish these goals, The Rockefeller Foundation funded demonstration sites in Baltimore, Maryland; Chicago, Illinois; Houston, Texas; Newark, New Jersey; and Oakland, California. These sites in turn subgranted to nearly 100 community-based organizations that implemented hyper-local, place-based strategies to increase vaccine confidence and access for communities that identify as Black, Indigenous, and People of Color. This report is the second of two on this initiative. The first report described the origins and structure of the EVI, introduced the anchor partners in each of the five demonstration sites and what they planned to accomplish, and synthesized early lessons learned across the EVI in its first three months. In this second report, we describe the work of the community-based organizations that were the real engine of the EVI, including who they are, what they did to promote equitable vaccination, and how they tracked their progress over time. Then, drawing on data collected throughout the year-long initiative, we discuss the EVI’s impacts, identify promising practices for such equity-first public health initiatives as the EVI, and suggest policy options for decisionmakers to consider as they seek to support hyper-local, community-driven efforts to reduce inequities in COVID-19 vaccination.

Funding

This research was supported by a contract from The Rockefeller Foundation and carried out within the Access and Delivery Program in RAND Health Care.

RAND Health Care

RAND Health Care, a division of the RAND Corporation, promotes healthier societies by improving health care systems in the United States and other countries. We do this by providing health care decisionmakers, practitioners, and consumers with actionable, rigorous, objective evidence to support their most complex decisions.

For more information, see www.rand.org/health-care, or contact:

RAND Health Care Communications
1776 Main Street
P.O. Box 2138
Santa Monica, CA 90407-2138
Acknowledgments

The authors would like to thank, first and foremost, the EVI partners for their contributions to this report and tireless work on behalf of their communities around the country. They also would like to acknowledge the Center to Advance Racial Equity Policy (CAREP) at RAND for providing guidance and resources for designing and conducting equity-centered research. Finally, they thank Angela Shen and RAND colleagues Rhianna Rogers, Paul Koegel, and Carrie Farmer for their reviews of this work, and Teague Ruder, Lisa Turner, Mary Vaiana, Liisa Hiatt, Ninna Gudgell, Nora Spiering, Rachel Ostrow, and Steve Oshiro from RAND for their assistance with this report.
Summary

Overview

The one-year U.S. Equity-First Vaccination Initiative (EVI), officially launched in April 2021, aimed to reduce racial inequities in coronavirus disease 2019 (COVID-19) vaccination across five demonstration cities (Baltimore, Maryland; Chicago, Illinois; Houston, Texas; Newark, New Jersey; and Oakland, California), and over the longer term, strengthen the U.S.’s public health system to achieve more-equitable outcomes. Nearly 100 community-based organizations (CBOs) and other local partners led hyper-local, place-based, holistic work to increase vaccination access and confidence in communities of people who identify as Black, Indigenous, and People of Color (BIPOC). In each demonstration city, an anchor partner (and in two cities, an additional key partner), selected and subgranted funding from The Rockefeller Foundation to a diverse coalition of CBOs in their city. Anchor partners and key partners provided leadership, tracked progress, and ensured that the CBOs had what they needed to be successful. Various EVI learning, communication, and advocacy partners supported and amplified the work of the CBOs. Building on an interim report that was released in January 2022, these two reports together answer the following research questions:

- What has been learned within and across the five demonstration sites about the most-effective hyper-local and equity-first delivery models to increase access to COVID-19 vaccination for marginalized populations?
- What are implementation practices that make such models more feasible, acceptable, effective, scalable, and sustainable?
- To what extent do available data indicate that the equitable COVID-19 vaccination efforts have been successful?

To address these questions, this report describes:

- Activities of the CBOs that comprise the EVI, including the local COVID-19–related context in which they were working, how that context changed over time, and what these organizations did to promote equitable COVID-19 vaccination in their respective cities
- How those activities affected individuals, organizations, and the broader community
- Implementation challenges and lessons for implementers and policymakers in advancing an equity-first approach
- Specific policy recommendations for how to support, and sustain, this hyper-local, community-led approach, as well as overarching recommendations for beginning to tackle the longer-term goal of strengthening the public health system in the United States.
Approach

We used a combination of **quantitative and qualitative data and approaches** for this analysis. Over the course of the EVI, we conducted virtual semistructured interviews with organizational leaders and staff from the anchor and key partners, collected monthly reflections about their work through an online survey or brief discussion, and interviewed a subsample of CBOs. We also reviewed informal notes taken by the RAND Corporation team during the community of practice meetings. To supplement these interviews and notes, we collected screen captures of flyers, photos, and other public posts from the social media pages of the EVI CBOs.

We conducted descriptive analyses of four metrics that anchor partners reported monthly to RAND to track the activities of the EVI in their demonstration sites and modify their hyper-local strategies as needed. We compiled and conducted descriptive analyses and mapping of community-level COVID-19 cases, hospitalizations, deaths, and vaccinations by type and by race and ethnicity in each city. We accessed these community-level data through a combination of public sources (e.g., COVID-19 dashboards) and data requests from state and local departments of health. Although the results of our analysis provide important insights that are relevant beyond these five communities, it is important to not overgeneralize the findings to all BIPOC populations in all settings. Rather, the lessons learned need to be tailored to the specific contexts and populations to which they will be applied.

Key Findings

**Impacts**

We found that the EVI had the following impacts:

- There is evidence that the EVI reached its target population and played a role in improving vaccination equity.
- The CBOs that participated in the EVI were working in cities with longstanding inequities. Over the course of the EVI, rates of those who were fully vaccinated rose substantially among Latinx residents across the five demonstration sites, but there was less progress for Black residents. Those receiving booster doses were disproportionately White.
- Despite these entrenched inequities, CBOs that previously did not work in the fields of public health and health care (as traditionally defined) proved that they could quickly and effectively pivot to address barriers to COVID-19 vaccination, thereby playing a critical role in the country’s pandemic response.
- At the national level, the number of first and second doses of COVID-19 vaccines given per month steadily declined; over the same period, vaccinations through the EVI continued to trend upward.
- Collectively, the CBOs that participated in the EVI held over 4,500 events where vaccination occurred, provided assistance to get vaccinated almost 155,000 times, gave
nearly 65,000 vaccinations, and made almost 15 million connections with people to provide accurate vaccination information.

- The EVI’s primary impact on anchor partners and CBOs was the capacity these organizations built and continued to strengthen over time, including building health communication infrastructure and skills; establishing relationships, networks, and communities of practice in their cities; and advocating for equitable policies in their communities.

Implementation Challenges and Lessons Learned

These were the challenges and lessons learned:

- The initiative encountered challenges related to (1) the need to move quickly to address this urgent public health crisis, and (2) the use of an equity-first approach.
  - For instance, it was a challenge to define and communicate partner roles within the complex initiative and efficiently distribute funding to anchor partners and CBOs. In addition, The Rockefeller Foundation and the EVI supporting partners navigated challenges with addressing the trauma, loss, and burnout that the CBOs were experiencing themselves; minimizing the burden on anchor partners and CBOs; and tailoring resources and tools offered by the supporting partners to what the anchor partners and CBOs actually needed.

- These challenges and insights from EVI participants pointed to a set of promising practices for implementing hyper-local, community-led, equity-first vaccination and other public health interventions.

- Approaches for building relationships include:
  - Form authentic, ongoing partnerships built on trust.
  - Build bridges across sectors.
  - Partner with various types of trusted messengers. Think creatively with communities about who their trusted messengers are.
  - Harness the power of communities of practice for emotional support, technical assistance, and shared problem-solving.

- Approaches for working with CBOs include:
  - Amplify, support, but do not direct, the CBOs that are doing the grassroots work.
- Build lasting capacity within CBOs through resources, trainings, and technical assistance.
- Co-create messaging and information campaigns and co-design strategies to expand vaccination access in partnership with affected communities.
- Constantly assess and reassess the burden that participating in such initiatives as the EVI places on CBO partners.
- Acknowledge and address the grief, burnout, trauma, and stress—direct results of the pandemic and of doing this work—among partners. Demonstrate flexibility and adaptability to meet the needs of the partners.

Recommendations

The EVI CBOs played an essential role in addressing inequitable access to public health services that were laid bare by the pandemic. However, the COVID-19 pandemic and the intensity of community-based work have taken an extraordinary toll on these organizations, and they worried that the EVI was a unique opportunity that provided an exceptional level of support that they might not receive again.

To sustain this work, not just for COVID-19 but for other emerging or longstanding issues affecting communities, CBOs should not be seen as stopgaps used to plug holes in an emergency. CBOs need to be incorporated into the public health system on a day-to-day basis and consistently and adequately supported with both funding and technical assistance. Policymakers and public health officials at all levels of government, health care organizations, philanthropy, and the private sector play an important role in providing the resources, leadership, and implementation supports for community-based organizations to successfully implement hyper-local public health interventions.

To build an equitable and community-centered public health system of the future, we must **expand our definition of the public health workforce** to include those that are outside the fields of health care and public health as traditionally defined, and we must provide those nontraditional partners with:

- **adequate, consistent, and flexible funding** to meet the needs of communities as the pandemic evolves and other crises emerge
- resources that are **allocated equitably**, (e.g., according to disease burden)
- access to high-quality, race-disaggregated, hyper-local, and timely data to inform their work
- resources, technical assistance, workforce capacity-building, and infrastructure to focus on **public health communication** and be able to disseminate coordinated, evidence-based messaging to the public and policymakers.
## Contents

About This Report ........................................................................................................................................ iii
Summary .................................................................................................................................................. v
Figures and Tables ................................................................................................................................. x
Chapter 1. Introduction .......................................................................................................................... 1
  Background ........................................................................................................................................ 1
  The U.S. Equity-First Vaccination Initiative ..................................................................................... 2
Chapter 2. The Local Context in the Five Demonstration Cities ....................................................... 9
  Baltimore ............................................................................................................................................. 11
  Chicago ............................................................................................................................................. 12
  Houston .......................................................................................................................................... 13
  Essex County (Newark) ...................................................................................................................... 14
  City of Oakland and Alameda County ............................................................................................... 15
Chapter 3. The Work of the U.S. Equity-First Vaccination Initiative’s Community-Based Organizations ........................................................................................................................... 17
  Overview of the EVI’s Community-Based Organizations ............................................................... 17
  Tracking the Progress of the EVI’s Community-Based Organizations ........................................... 19
  Summary ......................................................................................................................................... 35
Chapter 4. Impacts of the U.S. Equity-First Vaccination Initiative ..................................................... 36
  Conceptual Framework ..................................................................................................................... 36
  Impacts on Individuals and Their Communities ............................................................................. 36
  Impacts on EVI Partners .................................................................................................................... 41
  Impacts on Society ............................................................................................................................. 47
  Summary ....................................................................................................................................... 47
Chapter 5. Lessons Learned and Recommendations ......................................................................... 48
  Challenges Encountered in the Implementation of the EVI ......................................................... 48
  Lessons Learned: Promising Practices for Implementing Hyper-Local and Community-Led Approaches to COVID-19 Vaccination......................................................... 53
  Options for Policymakers to Support Equity-First Approaches to Vaccination ............................... 55
  What’s Needed to Strengthen the Public Health System in the United States .................................. 58
  Summary ....................................................................................................................................... 59
Chapter 6. Conclusions ....................................................................................................................... 60
  Sustainability of These Efforts ........................................................................................................... 60
Appendix A. U.S. Equity-First Vaccination Initiative Anchor Partners ............................................. 62
Appendix B. A Logic Model for the U.S. Equity-First Vaccination Initiative ..................................... 65
Appendix C. Methods .......................................................................................................................... 66
Abbreviations ...................................................................................................................................... 71
References ........................................................................................................................................... 72
Figures and Tables

Figures

Figure 1.1. Age-Adjusted Risk of COVID-19 Infection, Hospitalization, and Death in the United States

Figure 1.2. U.S. Equity-First Vaccination Initiative Demonstration Sites and Anchor Partners

Figure 1.3. U.S. Equity-First Vaccination Initiative Partners

Figure 2.1. Baltimore Fully Vaccinated Rate and Equity Index by Race/Ethnicity

Figure 2.2. Chicago Fully Vaccinated Rate and Equity Index by Race/Ethnicity

Figure 2.3. Houston Fully Vaccinated Rate and Equity Index by Race/Ethnicity

Figure 2.4. Essex County Vaccine Doses per Vaccine-Eligible Resident and Equity Index by Race/Ethnicity

Figure 2.5. Oakland Vaccination Rate and Alameda County Equity Index by Race/Ethnicity

Figure 3.1. Key Words from CBO Mission Statements in Houston and Newark

Figure 3.2. Key Progress Indicators Across the Five Equity-First Vaccination Initiative Demonstration Sites, as of April 2022

Figure 3.3. Key Progress Indicator 1: EVI Events Across All Sites, by Month and Overall, by Type

Figure 3.4. Events, Behind the Numbers

Figure 3.5. Key Progress Indicator 2: EVI Assistance Across All Sites, by Month and Overall, by Type

Figure 3.6. Assistance, Behind the Numbers

Figure 3.7. Key Progress Indicator 3: EVI Vaccinations Across All Sites, by Month and Overall, by Type

Figure 3.8. Distribution of EVI Vaccinations of Known Race or Ethnicity, by Site

Figure 3.9. Vaccinations Given, Behind the Numbers

Figure 3.10. Key Progress Indicator 4: Monthly Counts and Proportion of Reported Reach, by Type

Figure 3.11. Reach, Behind the Numbers

Figure 4.1. The Socio-Ecological Model, Adapted to Describe Impacts of the U.S. Equity-First Vaccination Initiative

Figure 4.2 Vaccination Doses Given Nationally and in U.S. Equity-First Vaccination Initiative Cities, by Month from June 2021 to February 2022

Figure 4.3 Change in Vaccination Rates by ZIP Code Tabulation Area and Proportion of Black, Indigenous, and People of Color Population
Figure 4.4. Example of a Flyer from a Houston CBO Specifying That No Identification Was Required to Get Vaccinated .................................................................43
Figure B.1. Logic Model for the U.S. Equity-First Vaccination Initiative .........................................65

Tables

Table 1.1. The U.S. Equity-First Vaccination Initiative’s Community-Based Organizations ........4
Table 3.1. Types of Reach Reported by the Five U.S. Equity-First Vaccination Initiative Cities .................................................................30
Table 5.1. Summary of Challenges Encountered in the Implementation of the U.S. Equity-First Vaccination Initiative .................................................................48
Table 5.2. Promising Practices for Hyper-Local and Community-Led Approaches to COVID-19 Vaccination and Other Public Health Interventions ........................................54
Table 5.3. External Supports and Groups That Are Best Positioned to Provide Them ...............56
Chapter 1. Introduction

Background

Since the beginning of the coronavirus disease 2019 (COVID-19) pandemic, Black and Latinx communities in the United States have been disproportionately affected by COVID-19. Data from the Centers for Disease Control and Prevention (CDC) on COVID-19 infections, hospitalizations, and deaths reveal persistent disparities (CDC, undated). In November 2021, Black, Hispanic, and American Indian or Alaska Native (AI/AN) people were four times as likely to be hospitalized with COVID-19 and three times as likely to die from it as White people after adjusting for age (Hill and Artiga, 2022). These disparities have narrowed slightly over time; however, as of February 2022, these groups are still about 2.5–3 times more likely to be hospitalized and twice as likely to die from COVID-19 as the White population (Figure 1.1).

Figure 1.1. Age-Adjusted Risk of COVID-19 Infection, Hospitalization, and Death in the United States

SOURCE: Hill and Artiga, 2022 (CC-BY-NC-ND 4.0).

1 The remainder of this chapter, with the exception of the roadmap for this report, the description of the CBOs, and Table 1.1, has been excerpted and adapted slightly from our interim report: Laura J. Faherty, Jeanne S. Ringel, Malcolm V. Williams, Ashley M. Kranz, Lilian Perez, Lucy Schulson, Allyson D. Gittens, Brian Phillips, Lawrence Baker, Priya Gandhi, Khadesia Howell, Rebecca L. Wolfe, and Tiwaladeoluwa Adekunle, *The U.S. Equity-First Vaccination Initiative: Early Insights*, Santa Monica, Calif.: RAND Corporation, RR-A1627-1, 2022.
The Rockefeller Foundation formulated an initiative to directly address these stark inequities. Building on its 100 Resilient Cities Initiative, the Rockefeller Opportunity Collective work, and its place-based work on COVID-19 testing in kindergarten through grade 12 schools, the foundation implemented the **U.S. Equity-First Vaccination Initiative (EVI)**, a hyper-local, place-based, demonstrate-and-scale model focused on community-led efforts, shared learning in real time, and data-driven decisions (The Rockefeller Foundation, undated-a, undated-b, 2020, 2021). This $21-million, one-year investment (April 2021 to April 2022, with some partners receiving grant extensions for additional months) had the following two complementary goals, with an emphasis on the first goal because of the time-bound nature of the initiative:

- to reduce racial disparities in COVID-19 vaccination rates in the United States
- over the longer term, to strengthen the country’s public health system to achieve more-equitable outcomes.

This final report builds on our interim report, released early in 2022, which described the origins and the structure of the EVI in more detail, introduced the five anchor partners, and detailed progress and lessons learned during the early months of the initiative (Faherty, Ringel, et al., 2022). In this report, we focus on:

- the activities of the nearly 100 community-based organizations (CBOs) that comprised the EVI, including the local COVID-19–related context in which they worked, how that context changed over time, and what these organizations did to promote equitable COVID-19 vaccination in their respective cities (Chapters 2 and 3);
- how those activities affected individuals, organizations, and the broader community (Chapter 4)
- the implementation challenges and lessons learned, including specific policy recommendations for how to support and sustain a hyper-local, community-led approach during this ongoing public health emergency, and overarching recommendations for the longer-term goal of strengthening the public health system in the United States (Chapter 5).

In the remainder of this chapter, we describe the EVI, who was involved, and how it was structured.

**The U.S. Equity-First Vaccination Initiative**

*The EVI Partners*

To achieve its dual goals, The Rockefeller Foundation, led by its Equity and Economic Opportunity team, funded organizations in five demonstration sites, shown in Figure 1.2—*Baltimore, Maryland; Chicago, Illinois; Houston, Texas; Newark, New Jersey; and*

---

2 For the purposes of this report, *hyper-local* describes small geographic areas, such as neighborhoods, while *local* refers to the city or county level.
Oakland, California—to plan and implement hyper-local, place-based models to increase vaccine confidence and access for communities that identified as Black, Indigenous, and People of Color (BIPOC). These sites were selected because they were disproportionately affected by COVID-19; in addition, in most of the sites, the foundation had long-standing existing networks that had been developed through previous initiatives.

The EVI comprised a variety of partners with individually defined but mutually reinforcing roles (The Rockefeller Foundation, undated-b). These partners included:

- **CBOs** in the demonstration sites, which were the central focus of the EVI. They were the organizations on the ground that worked to implement hyper-local strategies to increase equitable access to information and vaccinations, including identifying trusted messengers (and, in many cases, serving as the trusted messengers themselves). The initiative was designed and the other partners were chosen to amplify and support the CBOs’ efforts. Ninety CBOs participated in the EVI (Table 1.1); most joined in July 2021, but some joined at other points during the initiative. Unlike the other partners in the EVI, which were funded directly by The Rockefeller Foundation, the CBOs received subgrants from the anchor partners in their respective cities.
<table>
<thead>
<tr>
<th>Location</th>
<th>Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore, Maryland</td>
<td>Act Now, B-360, Baltimore City Public Schools, Baltimore Healthy Start,</td>
</tr>
<tr>
<td></td>
<td>Behavioral Health Leadership Institute, Black Girls Vote, B Mom, CASA,</td>
</tr>
<tr>
<td></td>
<td>Center for Urban Families, Charm City Care Connection, Civic Works, Clergy</td>
</tr>
<tr>
<td></td>
<td>United for the Transformation of Sandtown, The Franciscan Center, Free State</td>
</tr>
<tr>
<td></td>
<td>Justice, The Movement Team, Next Generation Scholars, No Boundaries Coalition,</td>
</tr>
<tr>
<td></td>
<td>Older Women Embracing Life, Sisters Together and Reaching, SPARC Women’s</td>
</tr>
<tr>
<td></td>
<td>Center, Wide Angle Youth Media, The Y in Central Maryland</td>
</tr>
<tr>
<td>Houston, Texas</td>
<td>Avenue, BakerRipley, Bonding Against Adversity, CRECEN, Culture of Health-</td>
</tr>
<tr>
<td></td>
<td>Advancing Together, Department of Transformation, East Harris Empowerment</td>
</tr>
<tr>
<td></td>
<td>Council, EMGAGE, Greenhouse International Church, Gulf Coast Leadership</td>
</tr>
<tr>
<td></td>
<td>Council, Houston Justice, HTX Art, Intercultural Center for Health, Research,</td>
</tr>
<tr>
<td></td>
<td>&amp; Wellness, The Links-Houston Chapter, MECA, Mi Familia Vota Educational Fund,</td>
</tr>
<tr>
<td></td>
<td>Pure Justice, Urban Community Network, Vietnamese Culture and Science</td>
</tr>
<tr>
<td></td>
<td>Association, Wesley Community Center, Young Invincibles</td>
</tr>
<tr>
<td>Newark, New Jersey</td>
<td>Bridges Outreach, La Casa de Don Pedro, Clinton Hill Community Action, FOCUS,</td>
</tr>
<tr>
<td></td>
<td>Greater Newark Health Care Coalition, Ironbound Community Corporation, Newark</td>
</tr>
<tr>
<td></td>
<td>Emergency Services, North Jersey AIDS Alliance / NJCRI, Project Ready, Sarah</td>
</tr>
<tr>
<td></td>
<td>Ward Nursery, South Ward Children’s Alliance, Tree House Cares, Unified</td>
</tr>
<tr>
<td></td>
<td>Vailsburg Service Organization, United Community Corporation</td>
</tr>
<tr>
<td>Oakland, California</td>
<td>Allen Temple Baptist Church, Building Opportunities for Self-Sufficiency,</td>
</tr>
<tr>
<td></td>
<td>Centro Legal de la Raza, East Oakland Youth Development Center, Hard Knock</td>
</tr>
<tr>
<td></td>
<td>Radio, Legal Services for Prisoners w/ Children, True Vine Ministries, Young</td>
</tr>
<tr>
<td></td>
<td>Women’s Freedom Center</td>
</tr>
<tr>
<td>Chicago, Illinois</td>
<td>Access Living of Metropolitan Chicago, After School Matters, Arab American</td>
</tr>
<tr>
<td></td>
<td>Family Services, Austin Coming Together, BUILD Incorporated, CommunityHealth,</td>
</tr>
<tr>
<td></td>
<td>Corazon Community Services, Equal Hope, Free Spirit Media, Greater Auburn</td>
</tr>
<tr>
<td></td>
<td>Gresham Development Corporation, Illinois Coalition for Immigrants &amp; Refugee</td>
</tr>
<tr>
<td></td>
<td>Rights, Increase the Peace, Inner City Muslim Action Network, Howard Brown</td>
</tr>
<tr>
<td></td>
<td>Health Center, Mujeres Latinas en Accion, Northwest Side Housing Center,</td>
</tr>
<tr>
<td></td>
<td>Phalanx Family Services, Respond Now Inc., Southwest Organizing Project, True</td>
</tr>
<tr>
<td></td>
<td>Star Foundation Inc., Young Invincibles, Youth Crossroads</td>
</tr>
</tbody>
</table>
• **Anchor partners and other key partners**, which played key roles in planning and coordinating efforts among CBOs within their communities. The partners were funded by The Rockefeller Foundation and selected CBOs in their community who were awarded subgrants. The partners provided leadership, tracked progress, fostered a community of practice, and worked with CBOs to ensure that they had what they needed to be successful. The anchor partners were as follows (Appendix A contains more detail about each of these organizations):
  - the Chicago Community Trust in Chicago, Illinois
  - Houston in Action in Houston, Texas
  - Open Society Institute—Baltimore (OSI-Baltimore) in Baltimore, Maryland
  - Roots Community Health Center in Oakland, California
  - United Way of Greater Newark (UWGN) in Newark, New Jersey.

• **The equity learning community manager**, which provided an equity lens for this work, built connections across all partners, served as a liaison between each anchor partner and The Rockefeller Foundation and between each anchor partner and the learning partners, and facilitated information-sharing and knowledge-sharing across demonstration sites. An important role of the equity learning community manager was to “ensure the needs of the CBO community are heard, elevated, and addressed” (The Rockefeller Foundation, undated-b).
  - Pink Cornrows, a public policy, communications, and social impact firm, served as the equity learning community manager for the EVI.

• **Communication partners, collectively known as MegaComms**, which worked closely with CBOs and local influencers to build their capacity to provide evidence-based, misinformation-resilient messaging about vaccination with their community members. They provided trainings and weekly tips to the EVI community and worked with each site one-on-one to co-develop creative assets, such as videos, flyers, and social media content, so that campaigns and messaging were tailored to their local contexts. The communication partners were as follows:\(^3\)
  - The Brown University School of Public Health
  - First Draft News
  - The Public Good Projects.

• **Learning partners**, which worked closely with each of the anchor partners and CBOs to gather, synthesize, and share cross-site information about the barriers to vaccination that communities faced and the promising community-led strategies that were used to overcome those barriers. Additionally, these partners provided technical assistance to the CBOs in the form of support for data collection and analysis to inform an equitable vaccination approach and improve the CBOs’ ability to understand and track the impact of their efforts over time. The learning partners and their primary area of focus were the following:

---

\(^3\) A forthcoming report from the Brown University School of Public Health will focus on the lessons learned from the EVI around messaging and communications (Friedhoff et al., forthcoming).
The Brown University School of Public Health designed, evaluated, and disseminated a responsive communication intervention to build vaccine acceptance. It worked with communities to (1) understand the drivers of vaccine hesitancy and confidence and (2) determine how social determinants of health affected vaccine acceptance. It synthesized these learnings to identify and disseminate effective strategies for reaching BIPOC communities.

Mathematica supported the anchor partners and CBOs in each site to field the COVID-19 Vaccination Pulse Survey, which gathered information about vaccination status, intentions, barriers, and more. Mathematica worked with each site to develop a plan for fielding the survey, helped to analyze the data, and co-interpreted the results with the communities to inform and tailor their communications and access strategies. These Pulse Surveys built on earlier community surveys conducted by HIT Strategies to inform the design of the EVI.

The RAND Corporation focused on capturing, synthesizing, and disseminating (1) promising strategies for improving access to and delivery of COVID-19 vaccines across the five demonstration sites and (2) implementation practices that made such models more feasible, acceptable, effective, scalable, and sustainable.

- **Advocacy partners**, which elevated and amplified the voices of the CBOs by advocating with state and federal policymakers and others in positions of power to make near-term changes that addressed barriers to equitable COVID-19 vaccination and could promote systemic changes needed to create long-term access to health and wellness for communities of color. The advocacy partners were as follows:
  - Disinfo Defense League
  - Families USA
  - Global Citizen
  - Health Equity Solutions
  - Health Leads
  - Manatt Health
  - UnidosUS.

- **Service providers**, including Uber and Lyft, which collaborated with The Rockefeller Foundation to offer free or reduced-price rides to vaccination sites.

The Rockefeller Foundation also convened the **Equitable Vaccination Advisory Council**, a group of thought leaders in the field of health equity who reflect diverse lived experience and expertise. The group provided strategic advice and recommendations to the foundation about the direction of the initiative, emerging issues, and how to generate sustainable change.

The structure of the initiative was complex, reflecting its collective impact approach (Figure 1.3).
The U.S. Equity-First Vaccine Initiative’s Place-Based Collective Impact Model

The foundation designed the EVI as a **collective impact model** in which all partners collaborated in pursuit of shared goals and objectives. The anchor partners were the hubs in each demonstration site and the CBOs were the spokes. The anchor partner in each city identified CBOs in their community and made subgrants to them to support equitable vaccination efforts. This place-based, hub-and-spoke anchor partner–CBO structure was chosen for several interrelated reasons.

- First, the structure allowed anchor partners to select CBO subgrantees of varying sizes in their respective cities rather than funding organizations that typically receive financial support from the government, the private sector, and foundations. The Rockefeller Foundation acknowledged that in so doing, it intentionally ceded control over where the funding went and exactly how it was used. According to a Rockefeller Foundation staff member, they “trust the anchor to know their CBOs and know their community and know which players understand communications best, which ones will be perfect for vaccine delivery, which ones are strongest for information and advocacy and education.”
- Second, bringing together CBOs under the umbrella of a site-specific anchor partner was designed to create a learning community within each demonstration site and across the EVI. This structure was intended to generate communities of practice so that organizations shared information and lessons learned rather than working in silos.
• Third, according to Foundation staff, the intent was to “get dollars into communities as quickly as possible” and break the mold of federal funding going to states, which then distributed it to local entities over time. The need for speed was paramount when it came to vaccination equity for BIPOC populations, and, as Rockefeller staff noted, “there really weren’t mechanisms in the early days, and [we] still really aren’t [able] to get money down to tiny grassroots organizations.” Foundation staff noted that it was a challenge to disburse funding as quickly as they would have liked, and it took longer than expected to onboard and integrate the large number of CBOs. As a case in point, the EVI officially began in April 2021, but it did not fully launch until July 2021, when most of the CBOs were on board.

Another unique aspect of this initiative was its explicit, and as one Advisory Council member stated, “unapologetic” focus on BIPOC populations. In the fall of 2020, the council member noted, the “narrative around equity, around COVID . . . it was one of those emerging things where [The Rockefeller Foundation] saw that there was a big unmet need.” In discussions around the design of the EVI, this Advisory Council member observed that

the fact that they were so explicit about leaning in on . . . racial and ethnic equity without reservation, without a whole lot of preamble, sad to say, but that in and of itself is incredibly innovative. That’s not something that I think we’ve been really comfortable with doing in a lot of health care efforts and especially in crisis response.

Other populations, such as rural populations, some religious groups, and those with certain political affiliations, also were not being optimally reached by COVID-19 vaccination efforts. However, the foundation made the deliberate decision to concentrate on closing the gap in vaccination between BIPOC populations and their White counterparts.

A final distinguishing characteristic of the EVI was its focus on integrating communication efforts about COVID-19 vaccination into the initiative from the outset. Rockefeller Foundation staff firmly believed that The Rockefeller Foundation should be funding CBOs to conduct evidence-based public health communications rather than expecting them to “do the work for free” or as an afterthought to their vaccine-delivery efforts. To support the communications work and make it central to the EVI rather than a separate stream of work, the CBOs and anchor partners worked closely with MegaComms, who brought expertise in identifying and countering misinformation and disinformation about vaccines; co-developed creative assets, such as informational videos and flyers, with EVI partners so that campaigns and messaging were tailored to local contexts; and built capacity among the CBOs to promote effective, evidence-based communication around COVID-19 vaccination. The communications work by the MegaComms partners was designed to be fully integrated into the EVI’s programmatic priorities rather than running parallel to efforts to expand vaccination access.

Appendix B contains a logic model that illustrates the inputs, activities, outputs, and outcomes of this complex initiative.

In the next chapter, we turn to the local context in which the CBOs were working in the five demonstration sites.
Chapter 2. The Local Context in the Five Demonstration Cities

To better understand the EVI’s impact and the factors that might have influenced its implementation, it is important to consider the context in which the CBOs were working and contributing to as they aimed to promote COVID-19 vaccination equity in their respective cities. In this chapter, we present a pair of figures for each city (or county, in the case of Essex County, which contains Newark; and Alameda County, where Oakland is located). The figures vary slightly based on available data. Sometimes data were available at the county level and not the city level, e.g., in Essex and Alameda counties. Furthermore, in some cities, we had access to more-recent data or more-detailed time series data—typically obtained through a data use agreement with a state or local health department. The figures also vary because of differences in the way that race and ethnicity data are collected and categorized across communities. Moreover, a key limitation of these community-level data is that the categorization of race and ethnicity are social constructs and do not capture the full complexity of how people identify and the important differences within groups.

The chapter is organized as follows:

- The first figure in each pair summarizes the change over time in the fully vaccinated rate by race/ethnicity. This provides an intuitive measure of whether vaccinations were being delivered equally across groups—that is, whether the percentage of individuals fully vaccinated in each racial or ethnic group was the same. This approach allows straightforward comparisons of vaccination rates across racial or ethnic groups and geographies, but it does not account for the higher burden of disease experienced by Black and Latinx communities.

- The second figure assesses equity. We display changes in an equity index for different racial or ethnic groups, which is the ratio between share of total fully vaccinated individuals by race or ethnicity and share of deaths by race or ethnicity. This index is based on the concept that variation in the equitable distribution of vaccinations accounts for the differences in the burden of COVID-19 on different racial and ethnic groups. For the equity index, a value of 1.0 would reflect equity: the share of vaccinations received and the share of COVID-19 deaths for a particular racial or ethnic group are the same (Phillips et al., 2022). Index values that are less than or greater than one indicate inequities. For example, a value less than one means that a racial or ethnic group is underrepresented in vaccinations given its share of COVID-19 deaths.

Overall, these figures show notable gains in rates of those fully vaccinated among Latinx residents across the five cities but less progress for Black residents. For example, in Baltimore, there was a 40 percentage point increase in the vaccination rate in the Latinx population compared with an 18-percentage point increase among the Black population over the same period (Figure 2.1). These gains across all cities translated into improvements in the equity index for Latinx people over the course of the initiative.
However, improvement for Black people was slight, demonstrating the extent of racial inequities in the five EVI sites and the difficulty in addressing systemic issues that lead the Black population to bear a heavier burden from COVID-19. For example, in Chicago, the equity index value for Latinx individuals increased from 0.75 in May 2021 to 0.94 in April 2022, compared with the equity index value for Black individuals, which only increased from 0.48 to 0.54 (Figure 2.2).

In the following pages, we present data, disaggregated by race and ethnicity, describing the city-level context for Baltimore, Chicago, Houston, Newark (Essex County), and Oakland (Alameda County). These data are critical for setting the stage for Chapters 3 and 4, which describe what the CBOs did in their communities and the impact of their work.
Figure 2.1. Baltimore Fully Vaccinated Rate (left) and Equity Index by Race/Ethnicity (right)

**Key Takeaways:**
- The largest increase in the fully vaccinated rate was among Latinx residents (40 percentage-point increase).
- The fully vaccinated rate among Black residents increased by 23 percentage points.

**Key Takeaways:**
- Black individuals account for a smaller share of the fully vaccinated population than would be equitable based on the proportion of deaths experienced due to COVID-19 (index value < 1).
- White and Latinx individuals account for a smaller share of deaths than the fully vaccinated (index values > 1).
- Across all groups, these findings have been consistent since May 2021.

**Sources:** American Community Survey one-year estimates (U.S. Census Bureau, 2019), Baltimore City COVID-19 Vaccination Dashboard (Baltimore City Health Department, 2021).

**Notes:** Baltimore data are reported separately by race/ethnicity. Latinx individuals may be of any race, while racial categories include those of any ethnicity. Data are not shown for individuals with race reported as “other” (as of November 2021, 12 percent with at least one dose, 12 percent fully vaccinated) or “unknown” (as of November 2021, 3 percent with at least one dose, 3 percent fully vaccinated). Data are current as of November 30, 2021. Percentages are calculated using the vaccine-eligible population for each city or county. Vaccine-eligible population refers to the population age five and older and is estimated using data from the American Community Survey.
Key Takeaways:

- The fully vaccinated rate increased for all racial/ethnic groups in Chicago between July 2021 (when most of the EVI CBOs joined) and April 2022. Black individuals had the lowest rate of full vaccination at 59 percent. However, this represents an increase of 22 percentage points since the end of June 2021.
- The fully vaccinated rate for Latinx individuals grew by 24 percentage points since the end of June 2021; as of April 2022, 72 percent of Latinx individuals in Chicago were fully vaccinated.

Key Takeaways:

- Black individuals accounted for a smaller share of the fully vaccinated population than would be equitable based on the proportion of deaths experienced due to COVID-19 (index value < 1).
- Although Latinx individuals also accounted for a smaller share of the fully vaccinated population than would be equitable, their index value moved closer to equity (index value = 1) over time.

SOURCES: American Community Survey one-year estimates (U.S. Census Bureau, 2019), City of Chicago Data Portal (City of Chicago Department of Public Health, 2022a; City of Chicago Department of Public Health, 2022b).

NOTES: Data are not shown for individuals whose race or ethnicity were reported as “other” (5 percent with at least one dose, 4 percent fully vaccinated, 3 percent with booster doses) or “unknown” (4 percent with at least one dose, 3 percent fully vaccinated, 2 percent with booster doses). Data are current as of April 30, 2022. Percentages are calculated using the vaccine-eligible population in each city or county. Vaccine-eligible population refers to the population age 5 and older and is estimated using data from the American Community Survey.
Key Takeaways:
- The fully vaccinated rate increased for all racial and ethnic groups in Houston between July 2021 and April 2022. Black individuals had the lowest rate of full vaccination (38 percent), but that represents an increase of 14 percentage points since June 2021 at the beginning of the EVI.
- The share of fully vaccinated Latinx individuals grew by 21 percentage points since the end of June 2021; as of April 2022, 58 percent of Latinx individuals in Houston were fully vaccinated. This matches the vaccination rate for the White non-Latinx population, whose vaccination rate increased by 12 percentage points since June 2021.

Key Takeaways:
- Black, Latinx, and White individuals all accounted for smaller shares of the fully vaccinated population than would be equitable based on the proportion of deaths experienced due to COVID-19 (index value < 1) as of April 2022.
- The equity index for the Latinx population moved modestly closer to 1 from May 2021 to April 2022; the index for the White population fell slightly. The index for the Black population was consistently the lowest, with little improvement over time.

SOURCES: American Community Survey one-year estimates (U.S. Census Bureau, 2019); and data from Houston Health Department: Cases and deaths data from the Houston Electronic Disease Surveillance System (HEDSS), provided to RAND in response to a data request, 2022. Vaccination data from ImmTrac2 (Texas Vaccine Registry), provided to RAND in response to a data request, 2022.

NOTES: Data are not shown for individuals with race or ethnicity reported as "other" or "unknown." As of the end of April 2022, 19 percent of fully vaccinated individuals in Houston were reported as "other" race or ethnicity and 4 percent are reported as "unknown" race or ethnicity. Percentages are calculated using the vaccine-eligible population in each city or county. Vaccine-eligible population refers to the population age 5 and older and is estimated using data from the American Community Survey. Cumulative by week values are calculated from weekly data. Last week shown on chart is 4/30/22. April 2022 data displayed in the chart on the right include the first week of May because of the timing of data receipt. Inconsistencies in race or ethnicity reporting across data sources likely contribute to the notably low vaccination rates displayed on the chart compared with rates in other demonstration cities as well as equity index values below one for the three largest race or ethnicity groups in Houston (Black, White, and Latinx).
Essex County (Newark)

Figure 2.4. Essex County Vaccine Doses per Vaccine-Eligible Resident (left) and Equity Index by Race/Ethnicity (right)

Key Takeaways:
• At all three time points, the Black population of Essex County received the fewest primary series doses per vaccine-eligible resident among all race or ethnicity groups, but the doses per Black resident did grow from 0.51 in May 2021 to 1.09 in April 2022.
• The Latinx population had the largest increase in primary series doses per vaccine-eligible resident over this period—doubling to 1.54 doses per person—and has exceeded the doses per person for the White population.

Key Takeaways:
• Black individuals accounted for a smaller share of the primary series doses administered than would be equitable based on the proportion of deaths experienced due to COVID-19 (index value < 1).
• Latinx individuals account for a higher share of primary series doses administered than this group’s proportion of deaths experienced due to COVID-19 (index value > 1), and the index value increased over time.

NOTES: Available vaccination data reflect primary series doses administered (first, second, or single dose) in the state of New Jersey, excluding doses administered by federal programs and booster doses administered. Data are not shown for individuals with race or ethnicity reported as “other” (9 percent of primary series doses, 7 percent of booster doses) or “unknown” (13 percent of primary series doses, 14 percent of booster doses). Data are current as of September 30, 2021. Vaccine-eligible resident refers to the population age 5 and older and is estimated using data from the American Community Survey.
Key Takeaways:
• The vaccine-eligible Black and Latinx populations of the City of Oakland had similar rates of full vaccination as of April 2022 (about 65 percent), lower than the rates for the White (82 percent) and Asian (95 percent) populations.
• However, the fully vaccinated rates for the Black and Latinx populations increased more sharply between July 2021 and April 2022. Those rates rose 20–22 percentage points versus 9 and 14 percentage points for the White and Asian populations, respectively.

Key Takeaways:
• Black individuals accounted for a smaller share of the fully vaccinated population in Alameda County than would be equitable based on the proportion of deaths experienced due to COVID-19 (index value < 1).
• Latinx individuals also accounted for a smaller share of the fully vaccinated population than would be equitable based on the proportion of deaths experienced due to COVID-19, but this population’s index value moved closer to equity over time.

SOURCES: American Community Survey one-year estimates (U.S. Census Bureau, 2019). For the figure on the left, data were received on request from the California Department of Public Health. For the figure on the right: Alameda County Health Services Agency. California Department of Public Health, vaccination data by ZIP code and race/ethnicity, for 15 ZIP codes with more than half their population in the City of Oakland: 94601, 94602, 94603, 94605, 94606, 94607, 94608, 94609, 94610, 94612, 94613, 94618, 94619, 94621, provided to RAND in response to a data request, 2022.

NOTES: Data are not shown for individuals with race or ethnicity reported as “other” or “unknown.” As of the end of April 2022, 9 percent of fully vaccinated individuals in Oakland are reported as “other” race or ethnicity and 2 percent are reported as “unknown” race or ethnicity. Percentages are calculated using the vaccine-eligible population in each city or county. Vaccine-eligible population refers to the population age 5 and older and is estimated using data from the American Community Survey. Cumulative by week values are calculated from weekly data. City of Oakland reflects an aggregation of data from 15 ZIP codes with at least half their populations in the City of Oakland based on a city-to-ZIP code tabulation area (ZCTA) crosswalk from the U.S. Census Bureau (U.S. Census Bureau, 2010). Individuals may reside inside or outside of the City of Oakland. May 2021 and September 2021 data reflect data through the end of those months. April 2022 data are through April 30, 2022.
The figures in this chapter display the pervasive inequities that were present in each of the EVI demonstration sites. The city-level data also underscore how challenging it proved to be for these five demonstration sites to move toward city-level vaccination equity.

The figures also emphasize the critical importance of the EVI’s focus on BIPOC populations, particularly Black and Latinx communities, who have been most affected by disparities in COVID-19 vaccination rates since vaccines became available to the public.

It is within this context that we turn our attention in the next chapter to the CBOs that comprised the EVI: Who they are, what they did to promote vaccination equity, and how they tracked their progress.
Chapter 3. The Work of the U.S. Equity-First Vaccination Initiative’s Community-Based Organizations

This chapter introduces the CBOs that were the true engine of this initiative and describes their work, with a focus on how the CBOs tracked their progress throughout the EVI using four metrics, or Key Progress Indicators (KPIs).

Overview of the EVI’s Community-Based Organizations

Nearly 100 CBOs and other partner organizations comprised the EVI. The anchor partners made subgrants to a total of 90 CBOs across the five demonstration sites (Table 1.1) and collaborated with several other key partners (e.g., Black Girls Vote, Bread of Life in Houston, and Faith in Action in Oakland), who received direct funding from The Rockefeller Foundation.

The EVI CBOs were a diverse group. All of them served BIPOC populations, which is why they were selected to join the EVI. However, many also focused on special populations, including people who identified as lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, or two-spirit (LGBTQIA++); people experiencing food insecurity, housing insecurity, or both; people with disabilities; migrant populations; and populations that were economically disadvantaged, socially disadvantaged, or both.

Some EVI CBOs had been around for a long time, including at least one in each demonstration site that was founded in the mid-1800s or early 1900s (e.g., Sarah Ward Nursery in Newark, Allen Temple Baptist Church in Oakland). Other organizations were founded as recently as 2018 (e.g., Northeast Houston Community Development Council). It is important to note that when they joined the EVI, only one in three of the EVI CBOs explicitly mentioned health or well-being in their mission statements. Even fewer—around 15 percent of CBOs—would have been considered part of the traditional health care or public health sector based on a review of their websites, social media platforms, publicly available documents, and, where available, documentation provided to the anchor partner or The Rockefeller Foundation. For example, one CBO in Oakland is a legal services agency, providing “bilingual legal representation, education, and advocacy” (Centro Legal de la Raza, undated). One Newark CBO conducts outreach and case management that focuses on housing, and another provides “high quality early education and care . . . to act as a support for the family unit” (Sarah Ward Nursery, undated).

Word clouds composed of key words from CBO mission statements highlight an impressive diversity of focus areas, including advocacy, youth, self-sufficiency, empowerment, housing, child development, and economic opportunity (Figure 3.1).
The anchor partners and key partners in each city connected their CBO subgrantees through communities of practice that facilitated peer-to-peer support, resource-sharing and ongoing technical assistance, group problem-solving, and networking. The CBOs noted both similarities and differences in how those communities were organized as follows:

- **OSI-Baltimore** created a community of practice specifically for its youth-focused CBOs that met once a month. The purpose of these meetings was to share stories, identify areas of need, and surface and address barriers to equitable vaccination promotion together. OSI-Baltimore staff mentioned that in several cases, a CBO representative came to the meeting with a specific need, and other organizations that were present were able to step up to fill that need or direct the person to the right place.

- The **Chicago Community Trust** and its partners in the broader Chicagoland Vaccine Partnership created a learning community in which the CBOs came together regularly to share information about what they had learned about promoting equitable vaccination. The Chicago Community Trust and its partners also supported the CBOs by amplifying the work of these organizations through social media and other formats, such as podcasts.

- **Houston in Action** regularly met with its subgrantees and met with neighborhood coordinators from its partner CBOs in smaller groups. Houston in Action supported its CBOs by providing capacity-building opportunities, facilitating linkages among organizations for collaboration, and providing a safe space to share challenges and solutions with one another.

- In Newark, **UWGN** created two communities of practice: one focused on vaccination delivery and the other on communications. The CBOs held weekly meetings during which the grantees learned from one another, a local public health official, and marketing experts. These meetings were a chance to ask questions about the vaccine and the changing nature of COVID-19 and get consistent information from a public health expert. The meetings also served as opportunities for both the CBOs and UWGN to evaluate their current strategies and recognize when they needed to adapt their approach.

- **Faith in Action** met with its network of Oakland-based CBOs every two weeks as a group and also had brief check-ins during weeks when no meetings were scheduled. The CBOs often communicated with one another about events and other activities via text. Faith in Action also provided the CBOs with weekly updates about the broader EVI,
offered access to opportunities to engage with decisionmakers and political leaders (e.g., a superintendent, school board, county board of supervisors), helped the CBOs create digital content that they could use to amplify vaccination messages, and facilitated cross-organization collaboration around planned events.

Tracking the Progress of the EVI’s Community-Based Organizations

The Key Progress Indicators

The communities that the EVI CBOs served faced numerous barriers that made getting vaccinated against COVID-19 difficult, and more broadly, hindered equitable vaccination distribution and uptake. As described in more detail elsewhere (Faherty, Schulson, et al., 2022; Faherty, Ringel, et al., 2022), we adapted Levesque’s conceptual model of health care access (Levesque, Harris, and Russell, 2013) to the unique COVID-19 context. We identified five types of access barriers: information, physical accessibility, trustworthiness, technology, and cost. To overcome these barriers, the CBOs shared accurate, trustworthy, and accessible information through town halls, phone banking, and going door-to-door; helped people in their communities with transportation, registering for the vaccine, and navigating the system if they did not speak English; offered incentives that were tailored to their communities and had value; and held a wide variety of events at which vaccinations were offered, from community barbecues to karate demonstrations. Although these activities are specific to overcoming barriers to vaccination, they are highly relevant to the EVI’s second goal of strengthening the public health system. Specifically, similar strategies can be applied to promoting equitable access to a variety of public health interventions, health care, and social services that directly affect health and wellbeing.

Although capturing the breadth and depth of the CBOs’ hyper-local efforts always was going to be a challenging task, The Rockefeller Foundation attempted to standardize how the demonstration sites tracked their progress and modified their hyper-local strategies to allow for aggregation and pattern recognition across sites, an important part of the collective impact model. From July 2021 to April 2022, CBOs reported four monthly metrics, called KPIs, to the anchor partner in their demonstration site (Box 3.1). The anchor partners in turn reported these numbers to RAND, where we compiled and cleaned the data to render them as comparable as possible across sites, making it possible to track cross-EVI activities.
Figure 3.2 shows the totals reported by CBOs in the five EVI cities as of the end of April 2022, when the EVI officially concluded.

**Figure 3.2. Key Progress Indicators Across the Five Equity-First Vaccination Initiative Demonstration Sites, as of April 2022**

<table>
<thead>
<tr>
<th>As of April 2022:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Events held</td>
</tr>
<tr>
<td>Times people got help to get vaccinated</td>
</tr>
<tr>
<td>Vaccinations given</td>
</tr>
<tr>
<td>Connections made to provide vaccination information</td>
</tr>
</tbody>
</table>

We examine each of the KPIs by month to describe patterns over time, including images and quotations from EVI partners that help tell the stories behind the numbers.

**Key Progress Indicator 1: Events at Which Vaccinations Were Offered**

After a ramp-up period in June and July, EVI CBOs held between 400–600 events every month from August 2021 to April 2022. This is equivalent to about **15 EVI events every day across the five cities**. The most-common types of events were vaccination clinics, community outreach (e.g., community barbecues, listening sessions, tenant association meetings), and events involving food distribution (Figure 3.3).
Figure 3.3. Key Progress Indicator 1: EVI Events Across All Sites, by Month and Overall, by Type

![Bar chart showing EVI events held across all sites by month from June 2021 to April 2022.]

Figure 3.4. Events, Behind the Numbers

![Pie chart showing the distribution of EVI events by type, with Vaccination Clinics accounting for the majority of events.]
“What I've really appreciated is beyond the partnerships and not just being part of Oakland Advisory Committee, but also the events I've gone to. All the events that I've gone to aren't Centro [Legal de la Raza] events. They are events put on by this middle school, this elementary school, this other organization that did like a whole block party, a type of event that was super popular and even though I was asking folks to take the [Pulse] Survey, folks were also coming asking about our legal services. So, I actually had like volunteers or staff volunteering their time to go to these events and sharing about ‘know your rights,’ our mission, all this stuff. I think it was just more exposure as an organization to the community…Obviously, the pandemic didn't allow me to go to events, but then when things were going back to in-person, finally I can do these in-person events, and it was just a breath of fresh air. You connecting with community and being there, I think that's always a plus.” (Staff member from El Centro Legal de la Raza, Oakland, California)

SOURCE: Photos from the Newark EVI. Used with permission.
Key Progress Indicator 2: Assistance to Get Vaccinated

EVI assistance reached a peak of over 20,000 instances of assistance in December 2021 during the Omicron variant’s surge and remained high through April 2022, when the EVI officially ended for most of the partners (Figure 3.5). Each month, several thousand individuals were assisted with services that directly influenced access to vaccination (through referrals to vaccination sites and registration, transportation assistance, or interpreters).

Sites also offered indirect forms of assistance, including food, mental health support, and general health information through hotlines, flyers, and health fairs. For example, in Houston, key partner Bread of Life took a holistic approach, seeking to address people’s basic needs (e.g., housing, food) before broaching the topic of COVID-19 vaccination. They felt that meeting someone’s basic needs and reducing the day-to-day stressors in their life was necessary to give them the time and space to consider vaccination. In late 2021, coinciding with the emergence of the Omicron variant, sites began offering a new type of assistance: distribution of personal protective equipment (classified as “Other” in Figure 3.5).

Figure 3.5. Key Progress Indicator 2: EVI Assistance Across All Sites, by Month and Overall, by Type
“Access Living, which is our disability rights organization, they are working more across all of the intersections. Certainly, in communities that are predominantly Black and Latinx and also communities that have extra barriers, because they’re serving people with disabilities and/or households where there is a person with disabilities. They have been instrumental in providing outreach, and their lens is always that balance of services and also a lot of policy and advocacy work too. So, I just think about when the city of Chicago was setting up all of their mass vaccination sites, including our biggest one at United Center, Access Living was really, really concerned because there were too many barriers, so that people with disabilities were having a hard time being able to use their wheelchairs. Thinking about the logistics and really helping kind of inform that process to make sure that it was, in fact, low barrier.... Every time websites get updated, it doesn’t mean they’re updated in accessible ways that they’re readable by readers. When you go and you get your COVID vaccine and then they give you the handout, that’s great, but it’s not in Braille. There are so many barriers to really good information that they’re trying to address.” (Staff member at Chicago Community Trust, Chicago, Illinois)
“What I’m most proud of is that we were able to respond the way we did, because our response wasn’t necessarily just providing access to testing and vaccinations, although that was huge, because otherwise, with our transit system, there would just be people who would not have been able to get it. But the ripple effect for our community [of COVID-19] was a high level of unemployment as well. There were people who lost their jobs. They had to choose between, if I have to stay at home with my child, I’m not going to be able to go into work. So, we were able to provide food weekly…The idea that you legitimately could have saved lives is the thing that I’m most proud [of].” (Staff member at Allen Temple Baptist Church, Oakland, California)
Key Progress Indicator 3: Vaccinations Given

Unlike national trends, in which monthly vaccination doses trail off (see Chapter 4, Figure 4.2), the number of first doses, second doses, and COVID-19 boosters distributed by EVI partners continued to increase over time until the first few months of 2022. Vaccinations in December 2021 and January 2022 were more than double the September 2021 and October 2021 totals. Most of the increase was driven by boosters. Figure 3.7 does not show cumulative doses: It shows number of doses given that month.

Figure 3.7. Key Progress Indicator 3: EVI Vaccinations Across All Sites, by Month and Overall, by Type

NOTE: This figure shows the distribution of known race or ethnicity for those receiving vaccinations through the EVI. The majority of EVI vaccinations for which race or ethnicity is known have gone to Black or Latinx people or to those identifying as two or more races or ethnicities. Houston's EVI vaccinations were not reported by race or ethnicity, so are not shown in this figure, and vaccinations administered by Oakland's anchor partner, Roots Community Health Center, are shown separately from those given by Faith in Action’s CBOs.
Figure 3.8. Distribution of EVI Vaccinations of Known Race or Ethnicity, by Site

A. Baltimore

B. Chicago

C. Newark

D. Oakland – Roots Community Health Center

E. Oakland – Faith in Action

- Black or African American
- Hispanic or Latino
- Asian
- White
- Other/Two or more

A. Baltimore

B. Chicago

C. Newark

D. Oakland – Roots Community Health Center

E. Oakland – Faith in Action

- Black or African American
- Hispanic or Latino
- Asian
- White
- Other/Two or more
“I try to go to as many of those sites as possible. And there were people who would listen and say, ‘I’m still anti-vax, but [I appreciate] the fact that you respected us, and you didn’t treat us like we were evil or something.’ They still didn’t believe [the vaccine would] work, but they got the shot because they knew they needed to get it for their job. So that constant, patient persistence, that always being ‘on message’ to bring it back to them, even the second or third time around . . . Whether it’s new congregants or they bring somebody to church with them that Sunday, 100 people show up ready to get shots.” (Staff member at La Casa de Don Pedro, Newark, New Jersey)

“In Beaumont, we’ve decided to go into and work and concentrate on four ZIP codes which have the lowest vaccination rates. In mid-May [2021], they were in the teens. The lowest was about 16%, the highest was about 19% fully vaccinated. So, it was pretty low. And we just went today. It’s not earth shattering, but it’s better than it was. It’s around 35%, 36%, and then 33%. So, it increased significantly.” (Staff member of Gulf Coast Leadership Council, Houston, Texas).

SOURCE: Newark Equitable Vaccine Initiative, used with permission.
Key Progress Indicator 4: Reach

With the support of and assets provided by communication partners (First Draft News, the Public Good Projects, and Brown School of Public Health—collectively known as MegaComms), anchor partners and CBOs built their capacity to disseminate evidence-based, misinformation-resilient messaging and communications. All EVI sites confronted misinformation in their efforts to promote COVID-19 vaccine uptake, but their approaches varied and evolved over time. Through their work, the EVI sites developed a more nuanced and hyper-local understanding of misinformation in their communities and tailored their approaches and messaging accordingly. For example, when Faith in Action joined the EVI, they knew misinformation was being spread by a small number of entities, but seeing the data from surveys, listening sessions, focus groups, and discussions with the EVI network on this topic helped them realize that they could pierce that misinformation in their smaller network with the right resources and skillset. In Newark, UWGN increasingly became aware of the pervasiveness of misinformation based on what the CBOs were hearing in their communities. This allowed UWGN to identify and address multiple barriers to accurate information about vaccination.

**EVI reach increased steadily through January 2022.** The most-common channels of communication and messaging used by the CBOs were social media (such as Facebook), email newsletters, YouTube videos, and flyers. CBOs also were going door-to-door to have one-on-one conversations with community residents to discuss COVID-19 vaccination, phone-banking, airing radio programs, and more. For example, in Houston, Bread of Life engaged community health workers (CHWs) to extend their reach into the community. CHWs discussed with community members how to meet their basic needs, including their need for a COVID-19 vaccine. The CHWs’ reach was so extensive that, according to a key partner, “they’re literally running out of places to visit because they visited every single organization they possibly could have at this point” (Faherty, Ringel, et al., 2022).
Table 3.1 shows the impressive diversity of methods of communicating about COVID-19 vaccination that were used by the five EVI cities.

Table 3.1. Types of Reach Reported by the Five U.S. Equity-First Vaccination Initiative Cities

<table>
<thead>
<tr>
<th>Methods</th>
<th>Baltimore</th>
<th>Chicago</th>
<th>Houston</th>
<th>Newark</th>
<th>Oakland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emails and e-Newsletters</strong></td>
<td>Daily emails</td>
<td>Newsletter</td>
<td></td>
<td>Emails</td>
<td>Newsletter</td>
</tr>
<tr>
<td><strong>Social media and websites</strong></td>
<td>Social media engagement</td>
<td>Social media engagement</td>
<td>Social media engagement</td>
<td>Social media engagement</td>
<td>Social media engagement</td>
</tr>
<tr>
<td></td>
<td>Vaccination hesitancy video</td>
<td>New followers</td>
<td>Content creation</td>
<td>Coordinated digital media campaign</td>
<td>Campaign-specific website</td>
</tr>
<tr>
<td></td>
<td>Website visits</td>
<td>Website visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication campaigns</strong></td>
<td>Billboards</td>
<td>Radio ads</td>
<td>Flyers</td>
<td>Flyers</td>
<td>Flyers distributed</td>
</tr>
<tr>
<td></td>
<td>Flyers distributed at health and wellness centers</td>
<td>Flyers distributed</td>
<td>Billboards</td>
<td>Door hangers</td>
<td></td>
</tr>
<tr>
<td><strong>Street outreach</strong></td>
<td>Community surveying</td>
<td>Door to door canvassing</td>
<td>Community surveying</td>
<td>Community surveying</td>
<td>Community surveying</td>
</tr>
<tr>
<td></td>
<td>Street-based outreach</td>
<td></td>
<td>Door to door canvassing</td>
<td>Street-based canvassing</td>
<td>Street-based outreach</td>
</tr>
<tr>
<td><strong>Phone outreach</strong></td>
<td>Number of phone calls</td>
<td>Number of phone calls</td>
<td>Number of phone calls</td>
<td>Text banking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of text messages sent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Events (virtual or In-person)</strong></td>
<td>Public forums (virtual)</td>
<td>Virtual education events</td>
<td>Community listening sessions</td>
<td>Virtual education event</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of people who engaged with COVID-19 vaccine messages at tabling engagements</td>
<td>Tabling engagements</td>
<td>Town halls</td>
<td>Number of people who visited info. desk</td>
<td></td>
</tr>
<tr>
<td><strong>Church attendance</strong></td>
<td></td>
<td></td>
<td>Community outreach and education events</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Food deliveries</strong></td>
<td>COVID-19 vaccination information included in food box deliveries</td>
<td></td>
<td>Vaccination events</td>
<td></td>
<td>Bags of groceries distributed</td>
</tr>
</tbody>
</table>

SOURCE: Adapted with permission from a synthesis provided to the study team by the Brown School of Public Health.

Efforts by EVI CBOs to connect with their community members and provide accurate COVID-19 vaccine–related information can be categorized into the following three types of reach:
• **Universal** (bottom panel in Figure 3.10): Communication and messaging delivered to a large number of people and intended for everyone (e.g., a social media post about a vaccination event).

• **Targeted** (middle panel in Figure 3.10): Communication and messaging meant for a specific audience. Examples include an informational campaign or radio announcement aimed at youth, or a town hall held at a church.

• **Tailored** (top panel in Figure 3.10): Communication and messaging delivered through one-on-one interactions. Examples include discussing COVID-19 vaccination through phone-banking, going door-to-door, or at a health fair.

Although categories might overlap somewhat, this classification underscores that EVI CBOs consistently have used tailored messaging (the time- and labor-intensive one-on-one strategy) throughout the initiative. Targeted and tailored messaging surged in November 2021, perhaps because children five years and older became newly eligible for COVID-19 vaccination, and universal messaging increased substantially in December 2021 and January 2022 during the Omicron variant surge. The increase in universal messaging in December 2021 was driven by a large billboard campaign that was led by Baltimore Corps.

Importantly, EVI partners emphasized that rather than holding one-off events or pushing out a one-time information campaign, they touched their communities continuously.
Figure 3.10. Key Progress Indicator 4: Monthly Counts and Proportion of Reported Reach, by Type

- **Tailored**
  - Ads: 933,737
  - Emails: 1,760,047
  - Events: 506,165
  - Flyers: 273,326
  - Food Deliveries: 125,490
  - Other: 250,126
  - Church Attendance: 60,000
  - Unknown: 4,751,051

- **Targeted**
  - Tailored Targeted
  - Universal

- **Universal**
  - Tailored Universal

- **Reach**
  - June 2021
  - July 2021
  - August 2021
  - September 2021
  - October 2021
  - November 2021
  - December 2021
  - January 2022
  - February 2022
  - March 2022
  - April 2022

- **Pie Chart**
  - Ads, 933,737
  - Emails, 1,760,047
  - Events, 506,165
  - Flyers, 273,326
  - Food Deliveries, 125,490
  - Church Attendance, 60,000
  - Street Outreach, 3,679
  - Tabling, 122,047
  - Social Media, 3,884,247
  - Other, 250,126
  - Phone Outreach, 11,854

- **Chart Notes**
  - June 2021: Tailored, Targeted, Universal
  - July 2021: Tailored, Targeted, Universal
  - August 2021: Tailored, Targeted, Universal
  - September 2021: Tailored, Targeted, Universal
  - October 2021: Tailored, Targeted, Universal
  - November 2021: Tailored, Targeted, Universal
  - December 2021: Tailored, Targeted, Universal
  - January 2022: Tailored, Targeted, Universal
  - February 2022: Tailored, Targeted, Universal
  - March 2022: Tailored, Targeted, Universal
  - April 2022: Tailored, Targeted, Universal

- **Data Summary**
  - Total Reach: 7,377,234
  - Tailored Reach: 2,736,868
  - Targeted Reach: 2,285,979
  - Universal Reach: 2,354,387
“Well, we have a unique opportunity in addressing the project that we’re working on through our parent navigators who actually meet one-on-one with the adults and the families that we’re working with. We have an opportunity to just share and talk one-on-one with them about the vaccine and the importance of the vaccine. Then every month, we host a family support group where families are coming together, and so . . . information about the vaccine is presented every month.” (Urban Community Network, Houston, Texas)

“So, I think one of the things we’re finding is that it does take personal contact with people. You can’t just hand them a flyer; it helps going over it. And I think you’ve got to both create the urgency to do something and then show them how to do it, ‘This is how you could act on it.’ So many times, people don’t really know, ‘Where do I get that? I’m always working, I can’t do it.’ The obstacles overwhelm them.” (Staff member at Gulf Coast Leadership Council, Houston, Texas)
“This older gentleman passed away, one of the oldest members of our church. He was preparing for his 95th birthday and even though he passed away and all of his children contracted COVID, his wife was still very hesitant to get the vaccine. And it took her probably close to a year. She participated in our ‘COVID and Black’ segment [which consist of short videos made by community members and posted online, describing how COVID has affected them] as a result. But my proudest moment is when she called to say, ‘I’m gonna get [the vaccine].’ The fact that she had lost her husband was not enough to move her, but given her age, she came of age during a time where segregation, racism, discrimination was a very real and legislated distress. She was symbolic of what we have been trying to do the entire time. To just give people the information and let them come to their own decision based on the information they have been given.” (Staff member at Allen Temple Baptist Church, Oakland, California)

SOURCES: Ironbound Community Corporation, East Harris County Government.
Summary

Numbers alone cannot convey the extraordinary effort reflected in these KPIs, which makes the images and stories behind the numbers so important. For example, CBO staff described how the hard, incremental work of trust-building was a key element in their efforts to provide assistance (KPI 2), high-quality information (KPI 4), and direct access to vaccination (KPIs 1 and 3). This trust was built one social media post, conversation, or ride to a vaccination site at a time. It was the trust-building through these hyper-local, community-led activities that made KPI 3, shots in arms, possible. It will be this same trust-building and cross-sector, holistic approach to health that will be a critical part of strengthening the U.S. public health system over the longer term.

Impressively, the number of vaccines given by EVI partners continued to increase through January 2022. This is particularly striking because CBOs reported that as time passed, it took more active engagement to get people vaccinated. For example, a staff member at Chicago Community Trust estimated that toward the end of the initiative, 100 vaccines delivered reflected at least 500 conversations or engagements with people about vaccination.

In this chapter, we have focused on what the EVI CBOs did as reflected in these four monthly metrics and the stories and images that represent them. These KPIs tracked progress toward the first goal of the EVI and allowed CBOs to modify their hyper-local strategies in real time. However, the internal capacity of these CBOs, the relationships and networks that they built, and the lasting changes that they made to their processes and infrastructure represent progress towards the second, longer-term goal of strengthening the U.S. public health system, but these are more difficult to quantify. Therefore, Chapter 4 uses qualitative evidence to answer the question: What did the EVI accomplish? We describe the impact of this work not only on individuals in the five demonstration sites, but also their communities, the organizations that serve them, and our broader society.
Chapter 4. Impacts of the U.S. Equity-First Vaccination Initiative

We begin with a conceptual framework to organize our discussion of the EVI’s impact.

Conceptual Framework

We used the socio-ecological model (Figure 4.1) (CDC, 2022a) to organize the various impacts of the EVI that rippled out from the individual level to the community level and then to the organizational level (including inter-organizational relationships), and finally, to society.

Figure 4.1. The Socio-Ecological Model, Adapted to Describe Impacts of the U.S. Equity-First Vaccination Initiative

Impacts on Individuals and Their Communities

The KPIs presented in Chapter 3 (events held, times people were assisted, vaccinations administered, and times that people were reached by communications and messaging) begin to demonstrate what the EVI accomplished and how the EVI affected individuals in priority communities. However, these numbers do not fully represent the initiative’s individual-level impacts. For instance, each event that was held at which vaccination was offered, each time someone received help to get vaccinated, and each connection made between CBO staff and community members might have had potential benefits that extended beyond just getting a COVID-19 vaccine. Social contact at community events (KPI 1) combated loneliness and isolation, major contributors to the increasing prevalence of mental health conditions during the
pandemic (McKnight-Eily et al., 2021; Radhakrishnan et al., 2022). Assistance (KPI 2) might have led to vaccinations delivered by an EVI CBO (KPI 3) or another organization not funded through the EVI (in which case they would not be captured in KPI 3). In many cases, EVI assistance provided critical social and economic supports, including food and housing assistance. Finally, connections (KPI 4) offered an opportunity to provide accurate information about COVID-19 vaccination and “inoculate” people against mis- and disinformation.

**EVI Contributions to Community Vaccination Rates**

It is difficult to determine the causal effect of the EVI on community-level vaccination rates for several reasons. The ever-changing nature of the pandemic, the many different policies and programs other than the EVI being implemented in these communities, the nonrandom selection of the EVI sites, and gaps in data on vaccination by race and ethnicity, among other factors, limit the usefulness of standard rigorous evaluation designs (e.g., before and after comparisons, use of a comparison group). In addition, although the EVI was a large initiative, it was small relative to the size of the cities that it was serving, making it difficult to identify changes that occurred as a result of the EVI efforts. For example, between July 2021 and April 2022, EVI vaccinations typically represented between 0.5 and 2 percent of vaccinations delivered in a given month, although in some cities in some months the proportion was somewhat larger. Although this difference in scale restricts using community-level data to evaluate the EVI, the smaller, more-focused efforts reflect the EVI’s mission—using a community-led, hyper-local approach to build confidence and address access barriers for the most marginalized and hardest-to-reach populations. A final caveat is that it is important to not overgeneralize the findings from these five demonstration sites to all BIPOC populations in all settings.

Despite these limitations, **there is evidence that the EVI reached its target population and played a role in improving vaccination equity.** First, comparing trends in COVID-19 vaccination doses given per month both nationally and in the five EVI cities, Figure 4.2 shows that vaccinations given per month declined nationally, but vaccinations provided through the EVI trended steadily upward from June 2021 to January 2022 (and potentially beyond because incomplete reporting from several of the cities might have underestimated the number of vaccines given). Furthermore, the number of first and second doses delivered by the EVI was relatively constant in later months of the initiative while the numbers at the national level for first and second doses were declining and the overall total was dominated by booster doses. This highlights that the EVI vaccinations were going to individuals who likely had the most access barriers and the most challenges associated with vaccine confidence. In other words, as the EVI progressed, the CBOs continued vaccinating people who, more than one year into the vaccine roll-out, had not yet been vaccinated.

Moreover, the **EVI was successful in targeting vaccination to its priority populations.** We estimate that, across the five cities, over 90 percent of EVI vaccinations for which race and ethnicity were known were given to BIPOC individuals, and about 86 percent of EVI
vaccinations went to Black and Latinx individuals specifically. Looking at the communities more broadly, we see that the increase in vaccination rates in neighborhoods (measured here as ZCTAs) where the BIPOC share of population was greater than 75 percent (outlined in yellow in Figure 4.3) has been at least as high as and in some cases higher than the neighborhoods that have lower BIPOC proportions. For example, in Chicago (Panel B), we see that many of the ZCTAs with the greatest growth in vaccination rates (the darkest purple areas) were the high-proportion BIPOC neighborhoods that EVI partners prioritized. The story is the same across the EVI cities. Although these data are not conclusive, they suggest that the targeted, hyper-local approach that the EVI used was instrumental in increasing vaccination rates for the initiative’s priority populations.
Figure 4.2 Vaccination Doses Given Nationally and in U.S. Equity-First Vaccination Initiative Cities, by Month from June 2021 to February 2022

NOTE: National-level data are reflected in the lefthand graph. EVI city data are reflected in the righthand graph.
Figure 4.3 Change in Vaccination Rates by ZIP Code Tabulation Area and Proportion of Black, Indigenous, and People of Color Population

Baltimore

Chicago

Houston

Oakland

SOURCES: Data request from the California Department of Public Health, 2022; City of Chicago Department of Public Health, 2022c; Houston Health Department, 2022b; Maryland Department of Health, 2022; data request from the New Jersey COVID-19 Information Hub, 2022; U.S. Census Bureau, 2020; U.S. Census Bureau, 2010; U.S. Department of Housing and Urban Development, undated.

NOTE: These maps show the percentage point change in vaccination rate from the end of June 2021 to the end of April 2022, except for Baltimore, which depicts the change to the end of August 2021. Communities, as identified by ZCTAs with > 75 percent BIPOC population, are outlined in yellow. We did not have access to similar data for Newark.
**Impacts on EVI Partners**

The EVI’s primary impact on anchor partners and CBOs was the **capacity they built and continued to strengthen over time**. EVI partners highlighted a number of vital areas in which they felt that the initiative helped them grow and adapt to meet their communities’ needs. We describe these in the following sections.

> “[The organizations doing this work are] tiny, and yet their grasp of the issues, their understanding of how to do it, the sophistication of how they’re thinking about it and recognition of what they can do as players in this space . . . I think it’s a huge success.”

(Staff member at Chicago Community Trust)

**Expanded Their Scope to Include Health-Related Work**

For many organizations, the response to the pandemic and their participation in the EVI was their **first foray into health-related outreach** and certainly their first experience with vaccination promotion and delivery. It was an opportunity for these organizations to demonstrate the value that they can bring in addressing health issues. In Houston, Houston in Action had focused on civic engagement and elections prior to the pandemic. The organization reported that it got involved in the EVI because the pandemic was one of the most important civic moments of our time, and staff saw an opportunity to use their community organizing expertise to address this challenge. They felt that their participation and leadership in these efforts showed their community and elected officials that Houston in Action could be supportive in ways they had not imagined before.

Houston in Action also noted that because health-related outreach was new to them, it was valuable to be part of the EVI learning community: It provided a support network where they could ideate and problem-solve with other organizations that were also navigating the twists and turns of the rapidly evolving pandemic. CBOs who were new to the health area noted that participating in the EVI built their capacity to collect and interpret **health-related data**. Other CBOs explained how regular access to curated and vetted information, specialists in public health and communications, and findings from the EVI learning partners provided many learning opportunities for the CBOs to broaden their knowledge of COVID-19 vaccination.

The learning by no means went only one way. By including a diverse group of CBOs (i.e., not solely focused on health), anchor partners fostered a holistic approach to promoting vaccination equity in the short and long term, one that addressed the connections between social needs (e.g., social determinants of health) and the health of their communities. For instance, organizations distributed bags of food to seniors with limited mobility and shared information about how to access COVID-19 vaccination; enrolled people in health insurance and used this connection point to discuss vaccination; and assisted with childcare, which allowed people to
access vaccination. On the other side of the coin, CBOs that had focused more narrowly on health before the pandemic embraced this cross-sectoral holistic approach and built connections that could be leveraged to continue bringing a holistic perspective to their work after the pandemic.

**Acknowledged, Supported, and Expanded Ongoing Activities**

“Once that opportunity [to participate in the EVI] came, it gave us rocket fuel and a sense of, 'This is absolutely the right thing that we should be doing.'” (Staff member at the Chicago Community Trust)

Several anchor partners noted that they used EVI funding to support work that they had been doing since the start of the vaccination rollout but with fewer resources. This funding was critical to sustain and expand the CBOs’ activities. Providing funding to these organizations acknowledged the contributions that they were making and the value that they brought to the community response. Once funding was in place, the anchor partners felt that their partner CBOs could work at their full potential; compensate community members for their time (such as youth who were serving as vaccination ambassadors); and be agile, quickly adjusting their approach as the pandemic evolved. The funding that the EVI provided gave them the boost that they needed to scale up their efforts and achieve more.

**Built Capacity for Health Communication**

Through the EVI, anchor partners and CBOs had access to health communications training, resources, and technical assistance. For example, the MegaComms team offered CBOs training on such topics as understanding vaccine misinformation and how to counter it, monitoring online platforms, and considerations for health equity messaging. They provided a resource center with a library of images, videos, and message templates that could be used in messaging. They also provided tailored technical assistance to each demonstration site, working with them to address relevant and trending misinformation and develop accurate and effective talking points.

With this support, the CBOs were able to expand their capacity to develop and disseminate effective messages. In Oakland, Roots Community Health Center, through its participation in the EVI, formed a new health communications advisory council that helped ensure that both messages and messengers were responsive to what was being heard and said in the community. Staff delivered messages on the radio and in the newspaper, and wrote letters to the Board of Supervisors, the Public Health Officer, and school board and superintendent. The knowledge, skills, hands-on experience, and infrastructure that the CBOs gained from participating in the EVI remain applicable to other health issues of concern. For example, Roots Community Health Center is using the health communication platform that they built as part of the EVI to develop and amplify messages around mental health.
As part of the EVI, Mathematica, one of the learning partners, supported the CBOs in fielding a **survey to gather information from the communities about their vaccination-related beliefs, concerns, barriers, and motivators** that could inform the CBOs’ strategies to improve vaccine confidence and break down access barriers. Mathematica worked with the anchor partners and CBOs to develop and test different methods for fielding the survey and determining what worked best in their community. Implementing the COVID-19 Vaccination Pulse Survey was not without its challenges, but it provided valuable experience to many CBOs that had not collected data before, allowing them to systematically gather information about the community and use it to guide their efforts. For example, when almost a quarter of Pulse Survey respondents in some of the EVI cities endorsed “worry about having to present identification” as one of the top barriers to vaccination, EVI partners were able to tailor their messaging to directly address this concern (Figure 4.4).

**Figure 4.4. Example of a Flyer from a Houston CBO Specifying That No Identification Was Required to Get Vaccinated**

![Flyer](image_url)  

SOURCE: Greater Auburn Gresham Development Corporation.
Similarly, each anchor partner collected the KPIs from each of the CBOs that they worked with. Tracking all of the activities in a systematic way helped the anchor partners identify what was working and where there were gaps. It also built the capacity of the smaller CBOs to track their activities and demonstrate their impact in ways that could help them secure additional funding to support their work in the future.

Another way that the EVI partners built their capacity in this area was by participating in group and individual trainings on pivot tables (to visualize their KPI data) and Canva (an online graphic design program to display data and information) and developing and refining their own processes for efficiently collecting monthly data on CBOs’ EVI activities.

“We also had a couple of group convenings to make sure that [the CBOs] had a chance to look at the data at a hyper-local level. Those were great because they got a chance to see their own data fed back to them and digest it.” (Staff member at Chicago Community Trust)

Built Networks and Formed Lasting Relationships with Other Organizations in Their Communities and Beyond

CBOs described how, through participation in the EVI, they connected with other local organizations or institutions in ways that might not have happened otherwise. For example, Faith in Action noted that the EVI incentivized CBOs to carve out time to think together, plan, and collaborate, which led to them holding joint events for the public. UWGN described learning about and working with smaller grassroots organizations in the community. These new connections expanded the reach of the EVI and helped these smaller organizations build their capacity and get their feet in the door for additional funding opportunities. Roots noted that the EVI helped spark momentum to build a local partner infrastructure.

“A lot of experience from the EVI is helping inform how we want to structure not just the relationships, but how information might flow, how we decide what is important, what do we need to focus on, where do we need to advocate and what do we need to advocate for, what resources do we need, and how we’re going to use them.” (Staff member at Roots Community Health Center)

The anchor partners also believed that some partnerships, such as between CBOs and local health departments or academic institutions, would have been more difficult to form without the EVI. They also witnessed new relationships being built across sectors (e.g., health, education, criminal justice) once the CBOs recognized one another’s strengths. Houston in Action described how the health department had the vaccines, the churches had the space, and the schools had the parents, so Houston in Action’s role in the EVI as a coordinator and
facilitator allowed these organizations to be more strategic, align around what equity looked like to them, and work together to overcome persistent systemic inequities.

“The funding from Rockefeller helped us cement that role [as a bridge between service providers and trusted messengers] and make those connections and all our communities of focus met their threshold vaccination rates of 50%, many are now at 60% nearing 70%.” (Staff member at Houston in Action)

In addition, CBOs observed that the networks and learning communities and communities of practice that they built as part of the EVI are, in many cases, continuing and can be leveraged in the future. For example, Houston in Action has an ongoing working group that provides the space for CBOs to continue talking about health equity. Similarly, Roots Community Health Center reported that it is leveraging partnerships built through the EVI to address the growing mental health needs in its community. A key contributor to the success of these ongoing relationships is a growing awareness of power dynamics between larger, established organizations and those that are smaller and more grassroots. The EVI anchor partners expressed how they did not want to perpetuate the usual funder-grantee hierarchical relationships, so they intentionally were more flexible with CBO deliverables and overall tried to meet their subgrantee CBOs where they were.

“Being able to be in a space with other leaders in other parts of the country… to share learnings from each place, because each partner had a different expertise, it added to the collective wisdom or knowledge base, which helped inform our service delivery.” (Staff member at Roots Community Health Center)

At the cross-site level, several anchor partners noted how much they valued the opportunity to convene with and learn from organizations in the other EVI demonstration sites. The EVI community provided a support network and a way to share learnings quickly in a rapidly evolving crisis.

Professional Development and Leadership Opportunities

Anchor partners described several professional development opportunities. For instance, a staff member of Gulf Coast Leadership Council in Houston started out as a U.S. Census organizer in 2019. She was hired as her neighborhood’s coordinator for the EVI. This role gave her the opportunity (1) to “be at the table” when decisions and policies were made that would affect her community, and (2) to bring others to the table to use their voice. Following the EVI, this individual frequently is consulted for advice and recommendations. She says that she sees her community in a different way: She sees the inequities, but she also sees who the leaders are and how to effect change. In addition, OSI-Baltimore and the Chicago Community Trust
subgranted to youth-led organizations and hired young people to lead youth-focused vaccination campaigns.

**New Ways of Operating**

EVI CBOs described having the sense that they are gaining valuable experience with best practices and honing existing strengths and skills that are transferrable to other issues in their communities. For example, in Newark, through its work on the EVI, UWGN developed a new model for working with CBOs to address issues in their communities. Rather than approaching challenges at the city level, they (1) identified CBOs in each ward (i.e., geographic area) of Newark, (2) built communities of practice for the CBOs, and (3) connected the CBOs with local experts. UWGN found that, in the case of COVID-19 vaccination, it was critical to facilitate access to public health experts as part of the community of practice so that the CBOs could ask questions and have the most up-to-date information about COVID-19 and the vaccines. UWGN is now applying this model to address other issues in the community including food insecurity and mental health.

“We have an issue at hand, and we geographically look at where we want to target that issue. Instead of trying to blanket the whole target area . . . we pick a partner and not just grant them funds but also set up a community of practice. Give them technical assistance, connect them with experts.” (Staff member at United Way of Greater Newark)

**Increased Advocacy for More-Equitable Policies**

Some of the CBOs described feeling **empowered to advocate** for COVID-19–related policies in their communities, in part because of their involvement with the EVI. For instance, Faith in Action and its partner CBOs advocated for measures to reopen schools more safely in East Oakland, including leading a letter-writing campaign and meeting with the superintendent to share recommendations based on their experiences participating in COVID-19 response through the EVI. Roots Community Health Center also noted that it increased its advocacy for policies to address COVID-19 issues and other issues in the community.

**Readiness to Respond in the Future**

CBOs observed that they feel **better equipped to deal with future public health crises** because of their participation in the EVI. For example, OSI-Baltimore noted that it collectively created a structure for disseminating information and coordinating its activities, which it believes will be vital for addressing future emergencies. Faith in Action noted that the communities that it works with are in a continuous state of crisis, and the EVI has allowed it to develop stronger
relationships with other community organizations and develop strategies that can be applied to other challenges.

Impacts on Society

The EVI had a broader impact on society through the work of the policy and advocacy partners, who amplified the on-the-ground efforts of the CBOs and the lessons learned and evidence gathered by the learning partners. The policy and advocacy partners:

- held regular briefings with the White House and the U.S. Department of Health and Human Services to advise federal leaders on best practices for equitable vaccination uptake and the childhood vaccination rollout (the recommendations were reflected in the federal government’s vaccine distribution plans)
- were in frequent communication with state public health leaders about promising practices to promote vaccination equity
- successfully advocated for explicit inclusion of domestic workers in the federal government’s Essential Critical Infrastructure Workforce Guidance, which substantially increased domestic workers’ access to vaccines as booster doses were being rolled out
- advised the Biden-Harris Health Equity Task Force on ensuring vaccination access for domestic workers
- co-founded the first Essential Workers Board in Harris County, Texas, which made recommendations to county officials on health and safety protections.

Through these efforts, the policy and advocacy partners elevated the hyper-local, grassroots insights from the CBOs to the county, state, and federal levels.

Summary

Both qualitative and quantitative data describe the impacts of the EVI at the individual, community, organizational, and society levels. Another invaluable contribution of this initiative was creating generalizable knowledge—lessons learned—that can guide future equity-first initiatives and inform efforts to strengthen the U.S. public health system more broadly. We discuss these lessons in the following chapter.
Chapter 5. Lessons Learned and Recommendations

In this chapter, we discuss the challenges that the initiative encountered and the lessons learned (and reinforced) as a result. We frame these lessons learned as promising practices for implementing equity-first approaches to COVID-19 vaccination and similar public health interventions. We offer specific policy recommendations for supporting and sustaining this hyper-local, community-led work. We conclude with overarching recommendations for the longer-term goal of strengthening the public health system in the United States.

Challenges Encountered in the Implementation of the EVI

Chapter 4 describes the EVI’s many achievements. Over the course of the year-long initiative, the partners encountered and successfully addressed multiple challenges stemming from the desire to move quickly and related to applying equity-first principles. (Table 5.1).

Table 5.1. Summary of Challenges Encountered in the Implementation of the U.S. Equity-First Vaccination Initiative

<table>
<thead>
<tr>
<th>Related to the Desire to Move Quickly</th>
<th>Related to Implementing an Equity-First Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Formulating a complex initiative in real time and ensuring that each partner’s work informed the other moving pieces</td>
<td>• Navigating power dynamics and establishing and maintaining trust</td>
</tr>
<tr>
<td>• Clearly conveying expectations upfront for the intensity of the anchor partners’ and CBOs’ involvement</td>
<td>• Being mindful of burden on EVI partners</td>
</tr>
<tr>
<td>• Moving funding out quickly to partners on the ground</td>
<td>• Understanding partner needs and offering resources that were most useful for them</td>
</tr>
<tr>
<td></td>
<td>• Addressing burnout, pandemic fatigue, and personal impacts of COVID-19 on partners</td>
</tr>
<tr>
<td></td>
<td>• Taking a broad perspective on impact and how it is demonstrated</td>
</tr>
</tbody>
</table>

Challenges Stemming from the Desire to Move Quickly

Some of the challenges stemmed from the desire to move quickly to keep up with the fast-moving COVID-19 pandemic. In some cases, the moving pieces functioned as a cohesive whole; for instance, when multiple partners facilitated productive discussions around self-care for CBO staff at an EVI community of practice meeting.

Delineating and Communicating Partner Roles

At the beginning of the initiative, it was challenging to delineate and communicate partner roles and articulate the value that the supporting partners, including those focused on learning, communications, and advocacy, brought to the anchor partners and CBOs. Some of the anchor partners felt that the provision of data and insights was more one-way than they were
hoping for, and it was not always obvious to them the benefit of having learning partners collecting and disseminating lessons that were learned internally and externally to the EVI.

It also was challenging to link the moving pieces of the collective impact model together so that, for instance, the on-the-ground experiences of the CBOs as they worked to address vaccination barriers directly informed the advocacy partners’ work in real time. One of the advocacy partners commented that they would have liked stronger feedback loops to ensure that they were prioritizing the issues that would make the most meaningful difference for the EVI communities. The Rockefeller Foundation designed a complex initiative with many different partners whose work was meant to complement and inform one another.

Setting Reasonable Expectations for Anchor Partners and Community-Based Organizations

A second challenge was the intensity of the work, particularly related to expectations of the already stretched-thin anchor partners and CBOs. Upon reflection, The Rockefeller Foundation and supporting partners (e.g., learning, communications, and advocacy partners) agreed that we could have more clearly conveyed expectations to the anchor partners and CBOs from the beginning of the initiative. Because each supporting partner had its own timelines, deliverables, touchpoints with the demonstration sites, and intentions to co-interpret data and co-create materials, the anchor partners and CBOs often felt overwhelmed by the expectations placed on them through the EVI.

“I thought keeping up with everything was daunting. And if we found it daunting, our grantees must have also found it daunting.” (Staff member at Chicago Community Trust)

Efficiently Distributing Funding to Equity-First Vaccination Initiative Partners

Third, implementing partners observed a disconnect between the urgency of the goals for the EVI, reducing COVID-19 vaccination inequities, and the lengthy processes for getting the grant funding out to the anchor partners (and eventually, their subgrantee CBOs). Anchor partners expressed surprise that they were asked to prepare detailed funding proposals and noted that once the proposals were submitted to The Rockefeller Foundation, it took longer than expected to approve them and allocate funding. As one advocacy partner noted, by the time they had received their requested funding, the COVID-19 vaccination landscape had changed, the vaccine was approved for all adults, and the vaccination barriers had shifted. At the same time, one anchor partner noted that the funding arrived more quickly from The Rockefeller Foundation than it did from other funding sources, such as the state and local government.

Both internal and external funding structures can create challenges for establishing and managing community-led work that is dynamic and involves multiple partners. Several anchor partners described having to skillfully navigate internal and external systems to get the CBOs
onboard. For example, OSI-Baltimore said that its own systems required several steps that might have affected its ability to get funds out the door quickly, including having to go through the organization’s grants manager and legal team. Staff also noted that although they welcomed the resources The Rockefeller Foundation provided, the logistics of that support felt overwhelming at times (e.g., a lot of emails and meetings).

Houston in Action also highlighted the logistical barriers to onboarding smaller, lesser-known entities that were not yet 501(c)(3)s. Staff recognized the important contributions and connections that such entities were making in their communities and were willing to take on the increased administrative burden to support them through the EVI. Specifically, Houston in Action noted that onboarding such entities required more work on its end, such as increased technical assistance and creating new subcontract agreements. However, instead of viewing these efforts as a burden, staff identified them as a part of advancing equity. This example highlights what the administrative and onboarding processes were that occurred in the background to ensure that key community voices were actively involved in the EVI were indispensible.

**Challenges with Implementing an Equity-First Approach to the Initiative**

Another set of challenges related to implementing an equity-first approach to the initiative as a whole.

**Remaining Sensitive to Burnout, Fatigue, Trauma, and Personal Loss**

It was critical to be sensitive to the high levels of burnout, pandemic fatigue, trauma, and personal loss that the implementing partners were experiencing. By nature of being from the communities they were serving, the CBO staff were deeply affected by COVID-19 and the ripple effects that the pandemic had on their communities, as well as other tragedies, such as intensifying gun violence. At times, many of their staff members were out sick with COVID-19 or were caring for family members with COVID-19, and they might be attending multiple funerals in one week. One CBO leader noted that her staff needed the same resources and supports they were offering to their community. CBO staff also described finding themselves in the complicated position of being asked to communicate the benefits of COVID-19 vaccination to their community members when they themselves had been exposed to the same mis- and disinformation and the same systemic racism and xenophobia that had influenced their views of the trustworthiness of the public health and health care systems.

A major contributor to burnout was the ever-changing nature of the pandemic, which required the CBOs to recreate themselves continually. With each new variant or change in policy regarding who was eligible for vaccination, the CBOs reframed their work to meet changing needs. The CBOs met this challenge, demonstrating resilience and agility. But they also noted how this constant pressure was exhausting and took a toll on their staff’s mental health and well-being. Given the heavy toll that the pandemic took on many individuals across
the anchor/key partners, CBOs, and communities, many EVI partners wished that they had more time to focus on healing (e.g., counseling and support to process grief and loss) and rest.

“[Our CBO partners have the] ability to successfully recreate themselves over and over and over again. Every time they would get one communication out and done, the messaging would change, and they would have to change it on TikTok and other social media and on their websites…What a burden, but a real testament to who they were, and the evolving nature of COVID in the fact that they managed, really powerfully, to recreate and adapt messages. Over time, one of them was telling the story about this “10 things you should know about COVID” [document] and how many times they’ve had to rewrite that one document, right, because it’s different every 6 weeks.” (Staff member at Chicago Community Trust)

The anchor partners brought their strengths and expertise to bear as they worked to support their CBOs. For example, Bread of Life consistently checked in with people during meetings to see how they were feeling and what support they needed before jumping into the work. Similarly, Houston in Action recognized that personal grief could affect the mental and emotional capacity of the CBOs. However, its staff felt ill-equipped to help because they did not have trained social workers or therapists at their organization who could provide that level of support. Recognizing this challenge, Houston in Action created a space with the CBOs to share their experiences and personal challenges. In one of the organization’s meetings, the anchor partner asked the CBOs to map out what they needed to talk about in terms of the past, present, and future for their personal and professional lives, identifying things that were within their control versus out of their control. They focused the meeting on the things that were within the control of their CBOs and discussed ways in which they could tackle those issues. They also discussed the importance of setting deadlines because it helped the CBO staff members picture the transition from present to future. Furthermore, Houston in Action gave the CBOs opportunities to take breaks when they needed it, such as allowing them to step away from the work for a brief period. Other anchor organizations provided wellness stipends for their staff to get massages, access therapy, or treat themselves to a gift or special meal.

In addition, learning partners tried to coordinate and adapt their requests from implementing partners. For example, instead of a series of monthly reflections that were initially conducted as brief written surveys, our team began to offer anchor partners the choice of a phone conversation if that was their preferred method. To further support the EVI partners, each cross-site community of practice hosted by the equity community manager ended with a mindfulness and wellness check-in. Additionally, from December 2021 to March 2022, the EVI held a monthly meeting focused on wellness and self-care for anchor partners and CBOs.

The next few challenges are specific to the experience of The Rockefeller Foundation and the supporting partners with applying equity-first principles.
Being Mindful of Burden

The supporting partners and The Rockefeller Foundation needed to adjust the intensity of their engagement and modify their touchpoints and deliverables to be **appropriately mindful of the burden** on the CBOs who participated in the EVI. Some anchor partners noted that they wished that the funder and learning partners had provided more information up-front about the workload for and expectations of CBOs participating in the EVI, such as completing community surveys, so that they could better manage all the requirements while supporting their teams, CBOs, and communities. For example, Faith in Action staff were fatigued by requests related to the EVI and had to find other ways to measure impact in the communities without exhausting community members. The initial plan was to collect Pulse Survey data every month. However, the data collection was complex and time-consuming, and many CBOs found it very burdensome. As a result, the plan was adjusted, and Pulse Survey data were collected less frequently. Furthermore, some anchor partners wished that they had more funds to support their CBOs and their own staff because they recognized that their staff and their CBO partners were doing a lot with limited resources. In addition, they wished that they had longer-term grants because the pandemic has continued long past anyone’s expectations.

Understanding Partner Needs and Offering Resources That Were Most Useful for Them

An important lesson reinforced through the EVI was that to truly center communities and put equity first, there needs to be more asking the question *what do you need?* and less telling of *here is what we can offer*. The learning partners, communication partners, and equity community manager—in an effort to share with the anchor partners and CBOs the variety of supports they could provide—each had the experience of creating tools and offering resources that the anchor partners and CBOs did not take up and use. An EVI-wide Slack channel, a misinformation tip line, various types of office hours, offers to support anchor partners in writing op-eds to highlight their work, and an editable infographic displaying the cross-site KPIs are just a few examples of tools and resources that were not used. A more equity-first approach might have been for the learning partners and equity community manager to conduct a rapid needs assessment with the anchor partners and CBOs at the start of the initiative and then develop resources to meet those specific needs.

Navigating Power Dynamics and Establishing Trust Among Partners

Because of the pandemic, it was not possible for the various partners to come together for a kick-off meeting in-person, a step that is often very helpful for forming relationships, establishing trust, beginning to navigate unintentional power dynamics, and setting the tone for the collective impact work ahead. At times, navigating different organizational cultures and defining the scope of work for each partner required a great deal of care. Unfortunately, it was not until well into the EVI or even as the formal collaborations were ending that many of these relationships had matured and trust had been built or rebuilt.
Taking a Broad Perspective on Measuring Impact

Learning partners perceived The Rockefeller Foundation’s strong desire for quantitative evidence of the EVI’s impact. However, because of the limitations of establishing causal impacts of the EVI on vaccination rates in BIPOC communities in the five demonstration sites, The Rockefeller Foundation and the learning partners had to take a broader and unaccustomed perspective when assessing the extent to which the EVI had impact. As demonstrated in this report and consistent with the literature on applying an equity lens to program evaluation (Edmonds, Minson and Hariharan, 2021), **both qualitative data (e.g., stories, quotations) and quantitative data (e.g., KPIs, vaccination rates) are valuable** for evaluating whether the EVI achieved its intended goals.

Lessons Learned: Promising Practices for Implementing Hyper-Local and Community-Led Approaches to COVID-19 Vaccination

We offer the following promising practices for implementing hyper-local and community-led approaches to COVID-19 vaccination and other public health interventions on the basis of the challenges described previously and the insights shared by the EVI partners. Although the first set of practices is specific to COVID-19 vaccination, the others can serve as guiding principles for those involved in designing, implementing, supporting, or participating in any equity-first public health initiative. Importantly, while many of these lessons are not new, the EVI showed that putting these principles into practice can be more challenging than anticipated.
Table 5.2. Promising Practices for Hyper-Local and Community-Led Approaches to COVID-19 Vaccination and Other Public Health Interventions

<table>
<thead>
<tr>
<th>Approaches for Promoting Equitable Vaccination</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dig deeply to understand access barriers and hidden costs of vaccination for those without a social safety net; making vaccines available does not automatically mean that people can access them.</td>
</tr>
<tr>
<td>• Reframe the narrative around access barriers and vaccine confidence: Rather than blaming individuals who are not vaccinated, strive to fix the broken systems (e.g., health care) that create barriers and lead people to mistrust the systems.</td>
</tr>
<tr>
<td>• Approach COVID-19 vaccination holistically, recognizing the intersectionality of structural barriers that people are facing. If people do not have stable housing, are unemployed, or are food insecure, they will not be able to prioritize vaccination.</td>
</tr>
<tr>
<td>• Apply a harm reduction approach; if people, particularly those who have been the recipients of mis- and disinformation, are not ready to get vaccinated or do not plan to be in the future, share information about how they can protect themselves and others from COVID-19.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approaches for Building Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Form authentic, ongoing partnerships that are built on trust. Trust-building is everyone’s responsibility. For instance, trust your partners to know how to use their funding; what data to report to the funder and how; and when partners need to take time to rest, heal, and process.</td>
</tr>
<tr>
<td>• Build bridges across sectors. Vaccination equity intersects with housing, education, employment, food insecurity, and infrastructure, among other social dimensions.</td>
</tr>
<tr>
<td>• Partner with various types of trusted messengers in a community. Think creatively with communities about who their trusted messengers are and go beyond traditional health organizations to create a more inclusive public health workforce.</td>
</tr>
<tr>
<td>• Harness the power of communities of practice for emotional support, technical assistance, and shared problem-solving.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approaches for Working with CBOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Amplify and support but do not direct the CBOs who are doing the grassroots work. As experts in and on their communities, they know what strategies will be most effective.</td>
</tr>
<tr>
<td>• Through resources, trainings, and technical assistance, build capacity within CBOs that will last long after the initiative is over, (e.g., to counter vaccine misinformation, interpret and act on vaccination data, apply for grant funding).</td>
</tr>
<tr>
<td>• Co-create messaging and information campaigns and co-design strategies to expand vaccination access in partnership with affected communities; engage with and listen to communities from the outset, not just when asking for feedback on how something was received.</td>
</tr>
<tr>
<td>• Develop tools, supports, and resources that add value and serve partners on the ground; these should reflect what the partners actually need and should not add extra work to their already full plates. Partners on the ground should have the agency to decline or modify resources and tools that are offered by supporting partners so that they fully meet their needs.</td>
</tr>
<tr>
<td>• Constantly assess and reassess the burden that participating in such initiatives as the EVI places on CBO partners.</td>
</tr>
<tr>
<td>• Acknowledge and address grief, trauma, stress, burnout, and fatigue that are the direct result of the pandemic and of doing this work. Demonstrate flexibility and adaptability to meet the needs of the partners.</td>
</tr>
</tbody>
</table>

NOTE: We presented an earlier version of these promising practices in our interim report, and they have been updated with additional lessons learned and reinforced since the first few months of the EVI.
Options for Policymakers to Support Equity-First Approaches to Vaccination

Policymakers and public health officials at all levels of government, health care organizations, philanthropy, and the private sector each play an important role in providing the resources, leadership, and implementation supports for organizations, such as the EVI anchor partners and CBOs, to do their work successfully and remain engaged in public health efforts over the longer term (Faherty, Ringel, et al., 2022). Table 5.3 summarizes selected external supports, including policy actions, that we identified through (1) a national scan of media and academic literature (Faherty, Schulson, et al., 2022) and (2) interviews with EVI partners.

These supports are implementable in the short term and could make the equitable vaccination strategies that were used in the EVI and across the country more feasible, scalable, effective, and sustainable. These supports also could serve as the beginning of the critical longer-term process of incorporating CBOs into the public health system so that they can contribute to addressing structural inequities within our society in a sustainable and meaningful way.

The supports and policy actions are organized by type of strategy to address each of the categories of barriers that were referenced in Chapter 3 (e.g., providing information, streamlining registration, and appointment processes) and by the groups that are best positioned to provide those supports or enact policies that facilitate implementation of equity-first vaccination approaches. Those who are best positioned to take a leadership role to provide the selected external supports are represented with Xs; those who might act in more of a supportive role are represented with Os.

---

4 This section and the accompanying table are excerpted from our interim report with minor modifications.
## Table 5.3. External Supports and Groups That Are Best Positioned to Provide Them

| External Supports to Facilitate Implementation of Equitable COVID-19 Vaccination Strategies | Who Is Best Positioned to Provide the Supports? |
|---|---|---|---|---|
|  | Federal Policymakers and Public Health Officials | State, Tribal, Local, and Territorial Policymakers and Public Health Officials | Health System Leadership | Private Sector and Philanthropy |
| **Share accurate, trustworthy, and accessible information** |  |  |  |  |
| Provide funding to CBOs to enable them to identify and collaborate with trusted messengers in their communities and/or hire additional staff, such as CHWs | O | X | X | O |
| Coordinate messaging and recommendations with CBOs, giving them time to prepare to amplify the message or work to address any unintended effects | O | X | O | O |
| Build communication capacity and networks among CBOs and other local organizations to address vaccine mis- and disinformation | X | X | X | O |
| Provide resources to primary care providers to equip them for difficult but efficient conversations about COVID-19 vaccination | X | X | X | O |
| **Provide transportation assistance** |  |  |  |  |
| Collaborate with the private sector to offer free or discounted rides to vaccination clinics or events | O | X | O | O |
| Ensure reimbursement by public and private payers for providing transportation | X | X | O | O |
| **Maximize the convenience of receiving the vaccine** |  |  |  |  |
| Ensure that pediatricians can be reimbursed for vaccinating adult caregivers who accompany a child to an office visit or vaccination event | X | X | O | O |
| Streamline the process for in-home vaccination and offer sufficient reimbursement | X | X | X | O |
| Provide financial incentives for providers to vaccinate their patient population | X | X | O | O |
| Provide accessible, high-quality, real-time data that help target vaccination efforts | O | X | X | O |

56
<table>
<thead>
<tr>
<th>External Supports to Facilitate Implementation of Equitable COVID-19 Vaccination Strategies</th>
<th>Who Is Best Positioned to Provide the Supports?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal Policymakers and Public Health Officials</td>
</tr>
<tr>
<td><strong>Streamline registration and appointment processes</strong></td>
<td></td>
</tr>
<tr>
<td>Expand funding for community health workers, patient navigators, and/or case managers to assist with registration, appointments, or locating vaccination sites</td>
<td>X</td>
</tr>
<tr>
<td>Support the development of technologies to streamline registration, document vaccine administration, and provide information to immunization information systems</td>
<td>X</td>
</tr>
<tr>
<td><strong>Offset costs of vaccination</strong></td>
<td></td>
</tr>
<tr>
<td>Involve communities in designing incentives that are tailored to the community, have value, and will promote rather than hinder equity</td>
<td>O</td>
</tr>
<tr>
<td>Ensure employees have paid time off to (1) get vaccinated, (2) assist others to get vaccinated, and (3) recover from side effects, or ensure payments for lost income because of vaccination or side effects</td>
<td>X</td>
</tr>
</tbody>
</table>
What’s Needed to Strengthen the Public Health System in the United States

The EVI has demonstrated that building a community-centered public health system that works at the hyper-local level requires an expanded definition of public health and an expanded notion of who makes up the public health workforce. CBOs with deep roots in their communities that, prior to the COVID-19 pandemic, focused on such issues as voter registration, census participation, and youth empowerment, proved that they could quickly and effectively pivot to address barriers to COVID-19 vaccination. Working in partnership with health departments and health systems, these CBOs—many operating in traditionally nonmedical sectors—demonstrated how critical they are to creating and delivering truly hyper-local public health interventions that are designed by their communities, are tailored to community needs, and redress inequities that extend beyond health care access.

The EVI CBOs have shown that to lead with an equity lens, public health interventions have to consider the intersections of housing, education, immigration status, access to food, and safety. Although the initiative was called the Equity-First Vaccination Initiative, it was always about much more than just putting shots in arms. The EVI partners recognized that vaccination equity is achieved only alongside equitable outcomes in health more broadly, in economic opportunity, and in all other sectors of our society.

To sustain this demanding, time- and labor-intensive work, which requires repeated touchpoints with community members and consistent engagement rather than one-off messaging campaigns, CBOs need resources and supports.

The bottom line: To build an equitable and community-centered public health system of the future, we should expand our definition of the public health workforce and provide those non-traditional partners with

- adequate, consistent, and flexible funding to meet the needs of communities as the pandemic evolves and other crises emerge.
- resources that are allocated equitably, (i.e., according to disease burden).
- access to high-quality, race-disaggregated, hyper-local, and timely data to inform their work.
- resources, technical assistance, workforce capacity-building, and infrastructure to focus on public health communication and be able to disseminate coordinated, evidence-based messaging to the public and policymakers.

The next section discusses each of these recommendations in more detail.

Key Recommendations for Policymakers

CBOs need adequate, consistent, and flexible funding to meet the needs of their communities as the pandemic evolves and other crises emerge. For instance, the EVI’s model of providing funding to anchor partners who then subgranted to CBOs in their demonstration sites
gave those anchor partners great latitude to select partner organizations and remain nimble in a shifting landscape. Anchor partners and key partners saw value in subgranting to organizations that were new to them and organizations with whom they had longstanding relationships. Bringing newer, often smaller CBOs into their coalitions broadened the initiative’s reach, and working with known organizations accelerated the onboarding process, ensured that the priority populations viewed these CBOs as trustworthy, and maximized the EVI’s capacity to reach specific populations. As noted in Table 5.2, it was important for The Rockefeller Foundation to trust the anchor partners to use their funding based on their knowledge of their communities.

Resources to support vaccination must be allocated equitably to achieve equity in public health outcomes. In other words, vaccine doses, messaging materials, members of the public health workforce, and other resources must be preferentially provided to communities that are disproportionately affected by COVID-19 infections, hospitalizations, and deaths (Phillips et al., 2022). To paraphrase an EVI partner, “We’re having twice the number of deaths, so we need to vaccinate twice as many people.”

Policymakers can allocate resources equitably only if they know which populations are bearing the greatest burden of a particular public health challenge. In other words, they need good data. Similarly, CBOs need race-disaggregated, hyper-local, timely, and accessible data on COVID-19 impacts and vaccination to inform their strategies. To support policymakers’ resource allocations and CBOs’ hyper-local strategies, both need stronger public health data infrastructure. Although the quality and completeness of race and ethnicity data related to vaccinations have improved throughout the pandemic and federal efforts, such as CDC’s Data Modernization Initiative, are focusing much-needed policy attention on this gap (CDC, 2022b), there is still much progress required to enable hyper-local, equity-first public health approaches. Some of the EVI cities had public-facing, high-quality data dashboards that allowed for timely analyses of vaccination equity, but these were the exception rather than the norm.

Finally, CBOs need funding, technical assistance, workforce capacity building, and infrastructure to focus on public health communication. The Rockefeller Foundation intentionally integrated communications support into the EVI’s structure from the beginning. Even still, the anchor partners and particularly the CBOs observed that this critical piece of their vaccination efforts takes some time to ramp up if the capacity, technical knowledge, capacity, and infrastructure are not already in place (Friedhoff et al., forthcoming).

Summary

Through its challenges and its successes, the EVI demonstrated several important lessons related to the design and implementation of an equity-first vaccination initiative and pointed to specific policy recommendations for how to support, and sustain, this hyper-local, community-led approach as well as overarching recommendations for strengthening the public health system in the United States.
Chapter 6. Conclusions

The EVI CBOs have demonstrated that to lead with an equity lens, public health interventions must consider the intersections of housing, education, immigration status, accessibility to food, and safety. These intersections therefore require rethinking **who makes up the public health workforce**, if the public health system is to be community-centered and work at a hyper-local level. The EVI has shown that CBOs with deep roots in their communities that, before the pandemic, focused on such issues as voter registration, census participation, and youth empowerment, could quickly and effectively pivot to addressing barriers to COVID-19 vaccination. Working in partnership with health departments and health systems, these CBOs—many working in nonmedical sectors—demonstrate how critical they are to creating and delivering truly hyper-local public health interventions that are designed by their communities, are tailored to community needs, and redress inequities that extend beyond health care access. They have also demonstrated that the impact of the EVI extends well beyond the number of vaccinations administered in the five demonstration sites.

As policymakers and public health officials in the United States and around the world continue to grapple with how to respond to emerging COVID-19 variants and subvariants, they seek to ensure that as many people as possible receive ongoing vaccination doses to protect themselves against severe outcomes from COVID-19 and address waning immunity. The overarching lessons learned from this hyper-local, community-led demonstration initiative can be applied to the global vaccination effort, provided that these lessons are tailored to individual contexts and populations, and the successful strategies can be scaled up domestically and in other countries with the goal of an equity-first approach to COVID-19 vaccination.

**Sustainability of These Efforts**

Although the EVI CBOs have played a key role in addressing inequitable access to public health services that were laid bare by COVID-19, the pandemic and the intensity of community-based work have taken a toll on these organizations. The anchor and key partners recognized that important progress was made through their EVI efforts in building a network of CBOs that can promote health and wellbeing in their communities, but they worry that the EVI was a unique opportunity that provided an extraordinary level of support that they might not receive again. As a result, many expressed uncertainty about the exact nature of their engagement in future vaccination campaigns, whether for COVID-19, influenza, or other vaccine-preventable diseases. They did, however, express newfound confidence that they would be able to pivot to address a variety of public health crises affecting their communities, with several anchor partners and CBOs mentioning the mental health crisis as their next likely priority.
To sustain this demanding, time- and labor-intensive hyper-local work—not just for COVID-19 but for other emerging or longstanding issues affecting their communities—**CBOs should not be seen as stopgaps used to plug holes.** CBOs need to be incorporated into the public health system on a day-to-day basis and consistently, and they need resources and supports: stable and adequate funding, professional development opportunities, formalized relationships within local networks, technical assistance, access to data and actionable information to guide their work, and recognition as experts and empowerment to guide policymaking processes that affect their communities.

The promising practices and specific policy recommendations in this report offer a starting point for lasting change.
Appendix A. U.S. Equity-First Vaccination Initiative Anchor Partners

Overview

The five anchor partners that were selected to lead the equity-first vaccination efforts in each EVI demonstration site vary by type of organization (Faherty, Ringel, et al., 2022). For instance, the anchor partner in Oakland is a community health center, while the anchor partner in Chicago is a community foundation. Although each demonstration site is distinct, they share some vital elements. Anchor partners supported their communities to drive their equity-first vaccination approaches through subgrants to CBOs of varying sizes. The partners also leveraged existing relationships and forged new partnerships to address the myriad needs of BIPOC communities, including, but not limited to, access to COVID-19 vaccination. The CBOs provided hyper-local knowledge and served as trusted messengers. In some of the demonstration sites, The Rockefeller Foundation funded other key partners to advance the work of the EVI. We introduce each of the anchor partners in the following sections.

The Open Society Institute—Baltimore

OSI-Baltimore is a grantmaking organization, founded in 1998, whose mission is “to disrupt the long-standing legacy of structural racism in Baltimore by supporting powerful social change movements led by, and centering the needs, interests and voices of, historically marginalized communities and communities of color” (Open Society Institute-Baltimore, undated). According to its vision statement, OSI-Baltimore focuses on the root causes of three interrelated issues: “addiction, an over-reliance on incarceration, and obstacles that impede youth in succeeding inside and out of the classroom” (Open Society Institute-Baltimore, 2021).

The Chicago Community Trust

The Chicago Community Trust “has convened, supported, funded, and accelerated the work of community members and change-makers committed to strengthening the Chicago region” for over 100 years (Chicago Community Trust, undated). According to its vision statement and strategic plan, to realize the region’s full potential, it is focusing on addressing its “fundamental challenge—racial and ethnic wealth inequity”—by reducing the wealth gap and building toward a “thriving, equitable, and connected Chicago region where people of all races, places, and identities have the opportunity to reach their potential” (Chicago Community Trust, undated).

5 This material is excerpted verbatim from Faherty, Ringel, et al., 2022.
Houston in Action and Key Equity-First Vaccination Initiative Partners in Houston

Houston in Action is a nonprofit organization, founded in 2017, to support “community-led civic participation and organizing culture in the Houston region” (Houston in Action, undated). It is focused on strengthening the “systems, services, and structures” that are designed to support local communities (Houston in Action, undated). Houston in Action’s approach centers on organizing and empowering people and local organizations to drive transformative change, particularly by building an infrastructure that strengthens grassroots capacity. As a collective impact organization that unites partners from various sectors around a common goal, it comprises community members, community leaders, local organizations, and city and county representatives, whose collective mission is to “increase access to, and remove barriers to, civic engagement opportunities” (Houston in Action, undated). The collective also focuses on advocacy, community development and mobilization, and trust-building. Houston in Action has a track record of coordinating with participating members in organizing neighborhood-level projects and campaigns to advance civic participation and community health and well-being.

The Rockefeller Foundation also funded Bread of Life, a separate nonprofit organization in Houston that was a key partner for the EVI. Founded in 1992, Bread of Life provides “services, resources, and support to families in need” and individuals experiencing homelessness in Houston (Bread of Life Inc., 2021).

In September 2021, The Rockefeller Foundation funded the City of Houston to serve as an additional key partner in Houston. The City of Houston, Houston in Action, and Bread of Life were asked to coordinate their EVI efforts closely to maximize resources and opportunities to promote COVID-19 vaccine access and uptake.

United Way of Greater Newark and Key Equity-First Vaccination Initiative Partners in Newark

UWGN, founded in 1923, aims to address the root causes of poverty by convening “local government, funders, foundations, and corporations,” collaborating with those addressing the impacts of poverty (“social service providers, public health sectors, and local food pantries”), and supporting community-based organizations that serve families in Newark (United Way of Greater Newark, 2021).

Key partners of the initiative in Newark included the Tara Dowdell Group, a strategic marketing and communications firm, and Medina = CITI, which provided expertise in visual and multimedia design.
Roots Community Health Center and Key Equity-First Vaccination Initiative Partners in Oakland

Roots Community Health Center (Roots) is a multi-campus, multi-county community health center established in 2008 that provides health services to more than 10,000 residents in East Oakland, many of whom are Black and Latinx individuals who earn low wages. In addition to providing health services, Roots aims to “uplift those impacted by systemic inequities and poverty” (Roots Community Health Center, undated). To do so, health navigators connect patients with needed social and legal services, physical and behavioral health care, benefits enrollment, job training for individuals who were formerly incarcerated, outreach, and advocacy training to mobilize community members in shaping local legislation and policies that affect them (Roots Community Health Center, undated).

The nonprofit organization Faith in Action served as a key EVI partner to help advance vaccine equity in Oakland. Founded in 1972, it is the country’s largest faith-based community-organizing network. Its mission is to promote “racial and economic justice” by organizing congregations of all denominations and faiths that can engage communities to bring local and systematic changes on a variety of public policy issues, such as housing, education, health, and public safety (Faith in Action, undated).
Appendix B. A Logic Model for the U.S. Equity-First Vaccination Initiative

Figure B.1. Logic Model for the U.S. Equity-First Vaccination Initiative

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>ACTIVITIES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funder</strong>&lt;br&gt;• Vision and strategy&lt;br&gt;• Selection of partners&lt;br&gt;• Funding through grants and contracts&lt;br&gt;• Staff and consultants</td>
<td><strong>Funder &amp; Supporting Partners</strong>&lt;br&gt;• Develop collective action approach, establish roles, set expectations, build relationships and trust&lt;br&gt;• Provide technical support, capacity building, and communication assets&lt;br&gt;• Collect data across AP/KPs, CBOs, and communities (e.g., surveys, interviews, Key Progress Indicators)&lt;br&gt;• Disseminate data and learnings among AP/KPs (virtual meetings, online resources, reports) and to external audiences&lt;br&gt;• Advocate for policy change based on learnings from the EVI</td>
<td><strong>Collaboration</strong> across diverse partners and residents representing different communities and sectors&lt;br&gt;• Establishment of site-specific and cross-site communities of practice&lt;br&gt;• <strong>Education and messaging</strong> to community members, public sector (health, education, etc.), and/or policymakers on COVID-19, vaccines and other preventive and treatment options&lt;br&gt;• <strong>Site-specific services</strong> (e.g., vaccination clinics, community events, campaigns), including making almost 14 million connections to share vaccine-related information and messaging; hosting over 5,000 events, and assisting people to get vaccinated over 140,000 times&lt;br&gt;• <strong>Generalizable knowledge</strong> about how to promote vaccination equity, strengthen the US public health system, and implement an equity-centered initiative</td>
<td><strong>Increased vaccination access and vaccination rates in BIPOC communities across EVI sites</strong>&lt;br&gt;• Over 65,000 vaccination doses given&lt;br&gt;• New or strengthened partnerships within and between demonstration sites&lt;br&gt;• <strong>Increased knowledge</strong> of effective strategies and strengthened skills and capacity among local partners through shared learning across EVI sites&lt;br&gt;• Increased understanding of and <strong>trust in the vaccine</strong> among BIPOC communities&lt;br&gt;• Enhanced <strong>trust in local messengers</strong> for addressing public health needs&lt;br&gt;• Additional funding secured to continue or build on EVI work (if applicable)&lt;br&gt;• <strong>Organizational changes</strong> across the local partners in their infrastructure, capacity levels (for partnerships, data collection, advocacy, etc.), approach to advancing health equity, preparedness for future emergencies, etc.&lt;br&gt;• Increased awareness among decision makers about promising practices to promote vaccination equity&lt;br&gt;• Policy change (e.g., to increase domestic workers’ access to vaccination)&lt;br&gt;• Ongoing conversations with policy and decision makers at multiple levels to advocate for change</td>
</tr>
<tr>
<td><strong>Supporting Partners</strong>&lt;br&gt;• Expertise: communication, advocacy&lt;br&gt;• Resources (staff, time, methods and tools, etc.)</td>
<td><strong>Anchor/Key Partners (AP/KP)</strong>&lt;br&gt;• Expertise: building, community engagement, BIPOC populations, equity, topic areas (health, communication, advocacy, etc.)&lt;br&gt;• Connections to local government/other local partners&lt;br&gt;• Data and knowledge of community to inform hyperlocal efforts&lt;br&gt;• Resources (staff, time, funding for subgrantees, space, technical assistance, etc.)&lt;br&gt;• <strong>Community-based organizations (CBOs)</strong>&lt;br&gt;• Expertise: local needs and assets, community engagement, equity, specific sub-populations, topic areas (social determinants, faith, art, etc.)&lt;br&gt;• Knowledge of local context, history, and community resources&lt;br&gt;• Trusted messengers&lt;br&gt;• <strong>EVI Advisory Council</strong>&lt;br&gt;• Expertise and guidance on vision and strategy</td>
<td><strong>Increased vaccination access and vaccination rates in BIPOC communities across EVI sites</strong>&lt;br&gt;• Over 65,000 vaccination doses given&lt;br&gt;• New or strengthened partnerships within and between demonstration sites&lt;br&gt;• <strong>Increased knowledge</strong> of effective strategies and strengthened skills and capacity among local partners through shared learning across EVI sites&lt;br&gt;• Increased understanding of and <strong>trust in the vaccine</strong> among BIPOC communities&lt;br&gt;• Enhanced <strong>trust in local messengers</strong> for addressing public health needs&lt;br&gt;• Additional funding secured to continue or build on EVI work (if applicable)&lt;br&gt;• <strong>Organizational changes</strong> across the local partners in their infrastructure, capacity levels (for partnerships, data collection, advocacy, etc.), approach to advancing health equity, preparedness for future emergencies, etc.&lt;br&gt;• Increased awareness among decision makers about promising practices to promote vaccination equity&lt;br&gt;• Policy change (e.g., to increase domestic workers’ access to vaccination)&lt;br&gt;• Ongoing conversations with policy and decision makers at multiple levels to advocate for change</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C. Methods

Applying an equity-centered approach (Edmonds, Minson, and Hariharan, 2021), we used both qualitative and quantitative methods for this analysis, and we intentionally incorporated the voices of the partners as experts on promoting vaccination equity in their communities. Qualitative methods allowed us to explore the EVI’s implementation in detail; quantitative data at the city level provided external context for the work of the EVI; and KPIs provided a way for partners, learning partners, and the funder to measure the outputs from the initiative and track progress over time.

Qualitative Data Collection and Analysis

Over the course of the EVI, we conducted three virtual semistructured interviews with organizational leaders and staff from the anchor and key partners and collected monthly reflections about their work on the initiative through an online survey or brief discussion. We also conducted virtual semistructured interviews with a sample of nearly a dozen CBOs across the five demonstration sites, who the anchor partners nominated because of their engagement in the work and anticipated availability to be interviewed. In addition to these interviews, we reviewed informal notes taken by the RAND team during the community of practice meetings, including the national EVI network and city-specific meetings that occurred throughout the year.

This report draws on the information gathered throughout the project but focuses heavily on the interviews conducted with the anchor partners and key partners in spring 2022, and CBOs in summer 2021 and spring 2022. In these discussions, we focused on the process of selecting CBOs for the EVI, approaches used by CBOs to promote vaccination uptake, impacts of the CBOs’ work, collaboration among partners, successes and challenges, sustainability of their efforts, and reflections about preparedness for future crises. We also obtained the photos that are included in this report from CBO websites or social media pages, or they were provided by anchor partners.

Two RAND staff participated in each interview: One facilitated the discussion and the other took detailed notes. The interviews also were recorded to ensure that all of the details were captured and quotes were accurate. We used a qualitative descriptive approach to analyze the interview notes, identifying themes and illustrative quotations and noting similarities and differences between the sites.

To supplement these interviews and notes, we collected screen captures of flyers, photos, and other public posts from the social media pages of the EVI CBOs, and a few of the anchor partners responded to an invitation to provide photographs of their EVI events for inclusion in this report.
Quantitative Data Sources and Analysis

Key Progress Indicators

As the EVI was being formed, RAND worked with The Rockefeller Foundation and the EVI partners to define the KPIs that could be used to track the activities of the EVI in the demonstration sites: vaccination events, assistance to get vaccinated, vaccinations, and communication. We developed detailed definitions for each indicator, provided examples of what might be included in the category, indicated the preferred disaggregation (e.g., event types, vaccinations by race and ethnicity, online or offline communication), and described other considerations. Recognizing that data are most useful if they inform the actions of those who collect data day-to-day, we sought input from the anchor partners as we developed the KPIs to ensure that they measured the most important outputs of the initiative and that the anchor partners would find them useful in monitoring and guiding their work.

We provided a reporting template that the anchor partners could use to submit the KPIs but did not require that the template be used. To minimize the burden on the anchor partners, we asked them to report their KPIs in the format that worked best for them. Most sites did use the reporting template but adapted it to fit their needs.

Anchor partners reported KPIs monthly starting in July 2021 (one anchor partner started in June) and continued through April 2022. We built a one-month lag into the data reporting process, giving the anchor partners time to gather and compile the data from the CBOs with whom they were working. For example, we asked that July KPI data be submitted by early September.

Each month, we compiled the data from all sites. We entered the data into an internal dashboard where anchor partners could access and analyze their data using pivot tables and figures. We also aggregated the KPIs across sites. Because we provided flexibility to the anchor partners in how and what (e.g., different types of events, different types of communications) they reported, doing this aggregation required some recoding and standardization. For example, each anchor partner reported a somewhat different set of event types and we recoded them into a standard set of broader categories. The aggregated KPIs were reported to The Rockefeller Foundation monthly and shared at meetings with the anchor partners, the data leads in each site, and the learning partners.

While, on the whole, KPI reporting was very strong, there was a drop-off in reporting in the last several months of the EVI. The Omicron variant surge in late 2021 and early 2022 imposed a heavy toll on the anchor partners and the CBOs and limited their ability to focus on KPI data collection. Consequently, the KPI data from the last several months of the initiative are incomplete and provide an underestimate of the activities conducted during those months.
Community-Level COVID-19 and Population Data

We compiled and analyzed quantitative data on COVID-19 vaccinations, cases, and deaths by race and ethnicity in the five EVI demonstration cities. Data availability and granularity varied. For Baltimore, Chicago, and Newark, we drew exclusively on publicly available data on COVID-19 vaccinations, cases, and deaths from city and state websites. For Houston and Oakland, we supplemented publicly available data with detailed data by race and ethnicity from the Houston Health Department and the California Department of Public Health. For some metrics of interest, high-quality data were available only at the county level—this was the case for data covering Newark (Essex County) and for COVID-19 deaths in Oakland (Alameda County). We encountered other challenges in obtaining timely, granular data including changes in data availability and large numbers of individuals of unknown race or ethnicity in the data. We describe these challenges in greater detail in the following section.

We processed the data from disparate data sets to make them as uniform as possible across cities. We then combined these data with population estimates from the U.S. Census Bureau’s American Community Survey. We used the 2019 American Community Survey to obtain full population and vaccine-eligible population (ages 5 and older) estimates for each city by race and ethnicity. We estimated the vaccine-eligible population and its racial and ethnic distribution for ZCTAs using American Community Survey five-year estimates spanning 2016 to 2020. These reflect the most up-to-date estimates available by age and race or ethnicity at these levels of geography; however, they are several years old, and population changes in very recent years could result in our over- or underestimating the actual vaccination rate for racial and ethnic groups across the cities. We describe this limitation in greater detail in the following section.

Combining population data and data on vaccinations, cases, and deaths allowed us to create a set of figures that display the burden of the pandemic on racial and ethnic groups, visualize trends in vaccinations by race and ethnicity, and explore vaccination rates in communities with larger or smaller BIPOC populations and with different levels of social vulnerability. When possible, we present information on the racial and ethnic distribution of booster dose receipt as well, showing the share of the boosted population in each group side-by-side with the proportion of the fully vaccinated and vaccine-eligible population in each group.

Data Limitations

Community-Level COVID-19 Data

We compiled data from a mix of public websites and via data requests to state and local health departments. In some cases, cities provided regularly updated, full time series data, allowing us to construct measures consistently over time and account for any revisions to prior period data. In others, public-facing dashboards provided point-in-time data that we pulled down at periodic intervals, but this created challenges in analyzing data over time.
Inconsistent data availability over time compounded this challenge. Notably, in early December, Baltimore stopped updating its COVID-19 dashboards because of a “network security incident” that resulted in a “pause” of data sharing between Maryland Department of Health and Baltimore City Health Department. As of this writing, vaccination, cases, and deaths data by race and ethnicity for the City of Baltimore had not been updated on the city’s dashboards and the most-recent data available are from November 2021. Additionally, the State of New Jersey dashboard also stopped providing county-level information on deaths due to COVID-19 by race and ethnicity in early 2022.

The rollout of booster doses presented an additional challenge. In the early months of the booster campaign, data availability on boosters was very limited, and booster doses might have been conflated with first or second primary series doses in the data systems. More recently, many city and county websites have begun separately tabulating boosters, including by race and ethnicity, and we received data on booster recipients via our data requests to Houston and California. However, difficulties distinguishing between third or “additional” doses, and more recently, the possibility of multiple counting for multiple boosters, persists.

Another common challenge across the cities was the proportions of vaccinations, cases, and to a lesser extent deaths, with unknown race or ethnicity in the data. These rates varied across the cities and can affect the patterns by race and ethnicity displayed in the charts. For example, the higher the share of unknown race or ethnicity vaccinations in the data, the lower the vaccination rates for each race or ethnicity group can be expected to be. High shares of unknowns also can contribute to a racial or ethnic group’s proportion of vaccinations (or of other measures) falling below its population share because unknown is not a category in the Census data. Our figures use the total number of cases, deaths, and vaccinations as the denominator for calculating the portion accounted for by each racial and ethnic group, and below each figure, we note the percentages of unknown race or ethnicity.

Population Denominators

Our analyses use 2019 ACS data to form the population denominators for each race and ethnicity group at the city level and 2016–2020 five-year ACS estimates to estimate the denominators for ZCTAs and the City of Oakland as proxied by the aggregation of 15 ZCTAs whose populations are wholly or partially in that city. This is consistent with the approach taken by other analysts: These remain the most-current available estimates by both age and race or ethnicity at these levels of geography. However, it introduces the possibility of under- or over-estimating vaccination rates to the extent that the racial and ethnic group populations have increased or declined in very recent years or because of differences between how people identify themselves when receiving a vaccination and how they are tabulated in Census data.

We anticipate that Latinx vaccination rates might be somewhat lower than calculations using 2019 population data suggest, while White, non-Latinx vaccination rates might be somewhat higher. This is because of ongoing changes in the population. At the national level, the Latinx
population grew by 23 percent from 2010 to 2020, while the White, non-Latinx population declined (Jones et al., 2021). Shares vaccinated for small populations, e.g., the Asian population in most demonstration cities and the Latinx population in Baltimore, also might overstate the share vaccinated to the extent that the population has grown in very recent years, because of differences in recording of race and ethnicity data in the vaccination data versus in the Census data, or because of both.

Because their small sizes magnify this issue and make data less reliable, we are not able to show American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, multiracial, and other races in the exhibits, because their vaccination rates often appear to exceed 100 percent.
Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIPOC</td>
<td>Black, Indigenous, and People of Color</td>
</tr>
<tr>
<td>CBO</td>
<td>community-based organization</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CHW</td>
<td>community health worker</td>
</tr>
<tr>
<td>COVID-19</td>
<td>coronavirus disease 2019</td>
</tr>
<tr>
<td>EVI</td>
<td>Equity-First Vaccination Initiative</td>
</tr>
<tr>
<td>KPI</td>
<td>key progress indicator</td>
</tr>
<tr>
<td>OSI-Baltimore</td>
<td>Open Society Institute—Baltimore</td>
</tr>
<tr>
<td>UWGN</td>
<td>United Way of Greater Newark</td>
</tr>
<tr>
<td>ZCTA</td>
<td>ZIP Code Tabulation Area</td>
</tr>
</tbody>
</table>
References


Baltimore City Health Department, “Baltimore City COVID-19 Vaccination Dashboard,” webpage, last updated December 3, 2021. As of May 23, 2022: https://baltimore.maps.arcgis.com/apps/dashboards/4b64b6e8c0014b6998d767fcf077bfaf


CDC—See Centers for Disease Control and Prevention.


Centro Legal de la Raza, homepage, undated. As of June 10, 2022: https://www.centrolegal.org/

Chicago Community Trust, “About Us,” webpage, undated. As of October 13, 2021: https://www.cct.org/about/


Faith in Action, homepage, undated. As of October 14, 2021: https://www.faithinaction.org/


Roots Community Health Center, homepage, undated. As of October 13, 2021:
https://rootsclinic.org/

Sarah Ward Nursery, homepage, undated. As of June 10, 2022:
https://sarahwardnurseryorg.wordpress.com/

U.S. Census Bureau, ZCTA to Place Relationship File, 2010. As of May 17, 2022:

———, American Community Survey, 1-Year Estimates Detailed Tables, 2019, Tables B02001 (“Race”) and B03002 (“Hispanic or Latino Origin by Race”) at the County, Place, and Zip Code Tabulation Area (ZCTA) levels of geography, 2019. As of May 24, 2022:
https://data.census.gov

———, American Community Survey, 5-Year Estimates Summary File, 2016-2020, Tables B01001 (“Sex by Age”), B02001 (“Race”), and B03002 (“Hispanic or Latino Origin by Race”) at the County, Place, and Zip Code Tabulation Area (ZCTA) levels of geography, 2020. As of May 17, 2022:
https://www2.census.gov/programs-surveys/acs/summary_file/2020/data/5_year_entire_sf/

U.S. Department of Housing and Urban Development, “HUD USPS ZIP Code Crosswalk Files,” webpage, undated. As of May 17, 2022:
https://www.huduser.gov/portal/datasets/usps_crosswalk.html

United Way of Greater Newark, homepage, 2021. As of October 13, 2021:
https://uwnewark.org/