

# Partnering for Vaccine Equity (P4VE) Program

Summary of Activities to Increase Equity in Adult Immunization May 2021–March 2022



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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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# **Executive Summary**

# Background

The COVID-19 pandemic illuminated disparities in morbidity and mortality for racial and ethnic minority communities. In July 2020, CDC hosted a listening session of subject-matter experts with diverse community perspectives to better understand potential strategies to reach racial and ethnic minority populations experiencing disparities in adult immunization. COVID-19 funding allowed CDC to use these insights to launch the Partnering for Vaccine Equity (P4VE) Program, a broad partnership network that was the first of its kind to address inequities in adult immunization. P4VE's primary goal was to increase the equitable access to and uptake of COVID-19 and influenza vaccinations for disproportionately affected adult populations.

The P4VE program provided over \$260 million in Fiscal Year (FY) 2021 and FY 2022 funding to national, state, local, and community-level, minority-led medical and professional associations, and social media partners. The program's goals were to build vaccine confidence and increase vaccine access and uptake through partners that have longstanding, trusted relationships in their communities. Overall, these efforts contributed to approximately 1.7 million COVID-19 and flu vaccine doses and boosters administered between May 2021 and March 2022.

This report provides insights from an in-depth review of P4VE partner-reported data on funded activities in the first year of the COVID-19 vaccine rollout. In addition, the report highlights P4VE partnership development, community activities, successes, and challenges, and provides lessons learned. Report findings can be applied to future implementation of evidence-informed vaccine strategies across CDC and for CDC-funded partnership programs.

# Report Findings

This report is based on monthly and quarterly reports submitted by 61 primary recipients (national level partner organizations), and over 500 subrecipients from May 2021 to March 2022. <u>Partnership groupings</u> include:

- National Organizations (e.g., Conference of National Black Churches, Unidos US),
- State, Local, and Community (SLC) Organizations (e.g., Springfield Urban League, Colorado Latino Leadership, Advocacy, & Research Organization),
- Minority-Led Medical and Professional Associations (e.g., National Medical Association, National Council of Urban Indian Health), and
- Social Media Partners (e.g., The Ad Council, The Public Good Project)

The primary and sub-recipient reports reflect the measures taken to build vaccine confidence and increase vaccine access and uptake. The findings are presented across three broad domains:

- 1. Partnership activities, including program development and vaccine implementation
- 2. Community engagement, including training influential messengers and developing health communication messages
- 3. Challenges and barriers

# Challenges and Barriers

### Overview of P4VE Partnership Activities

Figure 1. Descriptive summary of P4VE partnership activities from May 2021-March 2022

# **Partnership Activities**

14,491



New partnerships with local organizations, coalitions, and community projects to promote COVID-19 and/or influenza vaccines



1.74 Million

COVID-19 [any dose or booster] or flu vaccines administered at any vaccination site established due to any partnership

# **Community Engagement**



108

**Educational campaigns** focused on adults in racial or ethnic populations experiencing disparities in vaccine uptake



94

Healthcare organizations with two or more classifications reached through new strategies and resources



10,299

Informational sessions or webinars held for COVID-19 and influenza



204,583

New community-level spokespersons educated, empowered, or trained



601,755

Communication products developed to promote vaccinations (COVID-19 only)



42

Social media campaigns initiated that **pre-bunk vaccine mis- and disinformation**, and/or promote vaccine confidence



3,548

People who attended social media trainings and skill-building workshops



394 Million

**People reached** by social media campaigns



The P4VE program resulted in a growth of community-level partnerships; with over 14,000 new partnerships formed to promote COVID-19 and/or influenza vaccines among racial and ethnic local communities. The partnership network provided over 1.7 million COVID or influenza vaccines administered in less than one year's time.

The P4VE network provided strategic reach to facilitate collaboration with local and community-based organizations to expand vaccine related community efforts. Several community engagement activities included collaborating with local organizations, influential messengers, and vaccine providers to host vaccination sites and conduct vaccine education campaigns.

Frequently reported challenges and barriers to access COVID-19 and flu vaccines were: COVID-19 fatigue (challenge reported later in the COVID-19 vaccination rollout); vaccine mis- and disinformation; vaccine hesitancy; the lack of readily available culturally aligned educational materials; and rapidly changing COVID-19 vaccination recommendations. Partners overcame several of these challenges by recruiting and training influential messengers and community leaders to co-develop vaccine messages and disseminate the information to their communities.

### Conclusion

P4VE program primary and subrecipient partners made extraordinary efforts to advance vaccine equity in the first year of the program. The number and diversity of partners were critical to reaching racial and ethnic minority populations at community levels in both urban and rural settings. The many lessons learned informed program improvement for P4VE's second year and findings can be used to inform future adult vaccination programs.



### Introduction

The COVID-19 pandemic underscored the importance of addressing long-standing health disparities, as racial and ethnic minority populations were disproportionately affected by COVID-19.¹ Thus, when the COVID-19 vaccine rollout for the general population began in April 2021, the Centers for Disease Control and Prevention (CDC) was committed to achieving vaccine equity, where everyone has fair and just access to COVID-19 vaccination.

In July 2020, CDC hosted a listening session with subject-matter experts with diverse experience in adult vaccination and racial and ethnic community perspectives. The purpose was to better understand disparities in adult immunization for racial and ethnic minority populations and how to improve reach to these communities. CDC used insights to launch a broad partnership network in 2021, the Partnering for Vaccine Equity (P4VE) Program, to increase equitable access to influenza and COVID-19 vaccination for disproportionately affected adult populations. This partnership was the first of its kind to address adult immunization disparities.

The purpose of this report is to present the findings from data collected from May 2021—March 2022 from P4VE partners. Key insights are organized according to the following domains:

- 1. Partnership activities, including program development and vaccine implementation.
- 2. Community engagement, including training influential messengers and developing health communication.
- 3. Challenges and barriers

<sup>&</sup>lt;sup>1</sup> Trends in Racial and Ethnic Disparities in COVID-19 Hospitalizations, by Region — United States, March—December 2020 | MMWR (cdc.gov)

### **About P4VE**

The P4VE program focused on building a nationwide network of partners that could drive community-level engagement and increase equity in COVID-19 and influenza vaccination access, confidence, demand, and coverage in racial and ethnic minority communities (see <a href="Appendix A.1">Appendix A.1</a>). Several of the funding mechanisms of P4VE followed a similar structure developed from previous influenza vaccination funding opportunities. P4VE consisted of 61 <a href="primary partners">primary partners</a> supported by CDC and subrecipient partners to increase vaccine equity in racial and ethnic minority communities by:

- Building partnerships across communities, national and local organizations, and vaccination providers.
- Evaluating and implementing effective strategies and interventions to increase vaccine access, confidence, and uptake in disproportionately affected communities.
- Establishing the Learning Community, the <u>Vaccine Resource Hub</u>, and Data-Informed Technical Assistance, which collectively supported partners through webinars, tailored educational materials, coaching, peer-to-peer information sharing, and more.
- Engaging trusted messengers who conducted vaccine education and outreach through culturally and linguistically appropriate messaging.

P4VE partner types included national organizations, medical and professional associations, state, local, and community (SLC) organizations, social media partners, and more. The network also included existing national, state, local and community-level partners funded through CDC's longstanding Racial and Ethnic Approaches to Community Health (REACH) program.

Many P4VE partners with existing relationships to the CDC addressed a variety of health topics prior to the start of the program. Although, since these funded activities may not have been specific to vaccine or vaccinations it was critical to have a novel set of partners focused on influenza and COVID-19 vaccination for successful local engagement. Partners drew on their knowledge, expertise, and longstanding trust in their communities to improve vaccine confidence and increase access.

The national organizations, SLC organizations, medical and professional associations and social media partners were funded to:

- build partnerships within communities (e.g., partner with local faith congregations, barber shops, grocery stores, employers)
- increase vaccine education and access (e.g., provide mobile clinics or transportation for individuals to access vaccination sites, describe vaccine benefits, risks, and myths) and
- develop and disseminate resources to inform, organize, and implement programmatic vaccination uptake opportunities at the community level (e.g., design tailored health messages for social media, provide translated communication materials).

Figure 2. Description of P4VE partner groups' funded activities by partner type.



# National Organizations

Build partnerships with communities

Provide technical support for community-based organizations

Deploy educational campaigns

Develop and compile resources for community-based organizations

Enhance vaccine education and access



# Medical and Professional Associations

Develop vaccine strategies and resources for healthcare providers, clinicians, and healthcare organizations

Develop vaccine resources and evidence base by collaborating with and contributing to a peer-learning community



### State, Local, and Community Organizations

Implement influenza and COVID-19 vaccine-related activities

Promote vaccination opportunities

Share evidence-based vaccine information with communities

Equip influential messengers



### Social Media Partners

Fact check and implement interventions to address mis- and disinformation online

Increase digital health literacy among population(s) of focus

Identify trends regarding vaccine intentions through social media listening tools and techniques

# **CDC Support**

The P4VE program partners received over \$260 million in Fiscal Year (FY) 2021 (\$155M) and FY 2022<sup>2</sup> (\$105M) in COVID-19 supplemental funding. The program funded over 500 primary and subrecipient partners to support and inform vaccine confidence and uptake activities at the community level. Although the program initially focused on COVID-19 and influenza disparities, it has since become a collaborative and extensive national network of partners. The national, SLC organizations, medical and professional associations, and social media partners have mobilized community-action to improve vaccine equity across all adult-recommended vaccines.

To further support the P4VE network, CDC developed the following partner services:

A Learning Community (LC) was established to foster partner engagement within the P4VE network. This platform facilitates one-on-one coaching, peer-to-peer and group learning sessions, and access to subject matter experts. LC managers oversaw this community of over 500 interconnected partners, providing direct assistance through personalized

<sup>&</sup>lt;sup>2</sup> A total of \$105M was awarded in FY 2022, which includes a portion of funding awarded after March 2022.

trainings, webinars, and workshops. Partners were encouraged to collaborate and share knowledge, enhancing the collective capacity to achieve vaccine equity goals. Furthermore, the LC provided an opportunity for partnership among P4VE recipients. Partners not only attended webinars and trainings together, but also shared vaccine-related implementation best practices.

- The <u>Vaccine Resource Hub (VRH)</u> serves as a public repository of curated adult vaccination materials and resources developed by partners. During the COVID-19 emergency response, the VRH resources underwent fact-checking. The VRH offers partners a trusted source to access and customize culturally relevant materials to inform their initiatives. These resources encompass infographics, toolkits, videos, and more, available in multiple languages.
- Data-Informed Technical Assistance (DITA) provides data analysis and technical support to local P4VE partners. This assistance aids in planning and implementing efforts aimed at increasing vaccine confidence and uptake. DITA offers tailored information and consultation to partners regarding specific geographic areas where focused outreach and vaccine access enhancements are needed. Several factors such as low vaccination coverage, identified barriers, and other risks including COVID-19 hospitalization rates inform DITA's guidance.



## **Methods**

Qualitative and quantitative data obtained from P4VE partner monthly and quarterly progress reports range between May 2021 to March 2022. These progress reports included activities, outputs, and challenges experienced by primary funding recipients and their sub-awardees (i.e., medical and professional associations, SLCs, national organizations, and social media partners).

CDC awarded COVID-19 supplemental funding during the pandemic and COVID-19 vaccine rollout in early 2021. However, all partner groups were not funded simultaneously resulting in staggered reporting dates. Table 1 summarizes the reporting frequency and timeframe for each partner group:

Table 1. P4VE Partners Reporting Overview

Partner Group <sup>1</sup>	Reporting Timeframe	Reporting Frequency
National Organizations <sup>2</sup>	May 2021 to March 2022	Monthly
SLC Organizations <sup>3</sup>	May 2021 to March 2022	Monthly
Medical and Professional <sup>4</sup> Associations	July 2021 to March 2022	Monthly
Social Media Partners <sup>5</sup>	July 2021 to March 2022	Quarterly

<sup>&</sup>lt;sup>1</sup> P4VE partner groups not listed include the National Association of County and City Health Officials (NACCHO), National Association of Community Health Centers (NACHC), and evaluation-focused subrecipients. NACCHO and NACHC were not included because they used a separate monitoring system for reporting and were not required to report P4VE activities. Evaluation-focused partners were not included because their focus was to conduct environmental scans of effective vaccination strategies and build the evidence-base before implementation. Their activities were ongoing during the period of this report's analysis.

Notes: P4VE = Partnering for Vaccine Equity

VRH and LC managers reported quarterly on the successes, challenges, and the contributions resulting from partnerships developed within the P4VE network. Analysis included the P4VE partner feedback collected through LC surveys. Further analysis comprised of aggregated DITA report survey findings and partners' feedback on DITA services, technical assistance, and reports.

Other P4VE funded partners such as evaluation-focused organizations were not included in this report. Evaluation-focused partners were tasked to conduct environmental scans of effective vaccination strategies to build the evidence-base of vaccine activities during the reporting periods of this report. Therefore, evaluation-focused partners did not start reporting on implemented activities to increase vaccine access, confidence, or uptake until after the timeline of data analysis. Additionally, the National Association of County and City Health Officials (NACCHO) and the National Association

<sup>&</sup>lt;sup>2</sup> A list of primary national recipients can be found in Appendix A.1

<sup>&</sup>lt;sup>3</sup> SLC organizations were subrecipients funded by three national organizations, CDC Foundation, Community Catalyst, and Urban Institute. Additionally, SLC organizations include REACH partners (see Appendix A.1)

<sup>&</sup>lt;sup>4</sup> A list of medical and professional associations can be found in Appendix A.1

<sup>&</sup>lt;sup>5</sup> Social media partners were subrecipients funded by two national organizations, CDC Foundation and UnidosUS (see Appendix A.1)

of Community Health Centers (NACHC)-funded P4VE partners were not included in this report. These two organizations used a separate monitoring system to report their activities.

Data extracted from partner reports were submitted through the REDCap reporting system and analyzed in Microsoft Excel. A full description of the qualitative and quantitative analyses can be found in the Methodology and Data Analysis section in <a href="Appendix B.1">Appendix B.1</a>. The list of REDCap qualitative and quantitative questions are included in <a href="Appendix B.2">Appendix B.2</a>, respectively.

# **Key Findings**

Key findings from both qualitative and quantitative data sets were analyzed by P4VE partner group. Reported activities were described according to the domains of partnership development and implementation, community engagement activities (including influential messengers and health communication), and challenges and barriers. Overall, these combined efforts contributed to approximately 1.7 million COVID-19 and flu vaccine doses and boosters administered between May 2021 and March 2022.

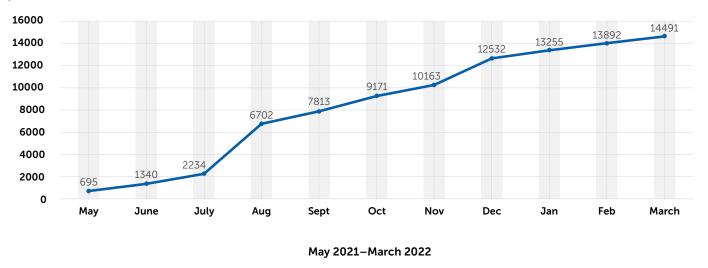
## Development and Implementation of Partnerships

The P4VE partnership network started by supporting 31 REACH organizations to deliver vaccination activities. CDC provided additional funding to eight national organizations with established connections to specific communities. Their goal was to foster sustainable change in communities of color that face immunization inequities. By further collaborating with hundreds of community-based organizations, these partners aimed to enhance confidence in and access to COVID-19 and influenza vaccines. These partnerships, rooted in over 20 years of collaboration, have swiftly expanded beyond REACH to hundreds of national and SLC organizations. As a result, P4VE partners naturally established over 14,000 partnerships with additional entities beyond the program's original scope. These collaborative efforts have continued to evolve and facilitated coordination between community organizations and vaccine providers to broaden vaccination opportunities. For example, partners communicated and shared insights, successes, and lessons learned through the LC and the VRH, using the partner directory to strengthen collective endeavors.

Between May 2021 and March 2022, national and SLC organizations established 14,491 partnerships entities across the United States. This was often facilitated through trusted and culturally aligned messengers who could reach people in their communities. Building partnerships and collaborating to expand community outreach and access is essential to programmatic work for national and SLC organizations. Partnerships were established with community-based organizations (CBOs), Hispanicand Black-focused organizations, and media platforms to ramp up vaccine equity efforts and expand vaccine education campaigns.

Figure 3: Number of New Partnerships

Cumulative sum of partnerships with local organizations, coalitions, and community projects to promote COVID-19 and/or influenca vaccine related information



# **Community Engagement Activities**

### National and SLC Organizations

Community outreach was the main engagement strategy used by national and SLC organizations to encourage community collaboration and improve vaccination access. Partners highlighted effective community outreach strategies including:

- home visits,
- phone calls or text messages,
- mobile and pop-up clinics,
- town halls.
- local festivals,
- health awareness and education events,
- Vaccinate with Confidence 'boot camps', and
- engagement with local businesses and schools.

SLC organizations reported conducting these activities with extended hours (i.e., evenings and weekends) at accessible locations to accommodate for community members' schedules and public transportation limitations.

# National Alliance for Hispanic Health

"To engage harder to reach populations such as seniors, homeless, incarcerated, and low-income individuals, funded affiliates have increased engagement through promotoras (CHWs) and events in partnerships with faith-based institutions and local businesses."

SLC organizations specifically reported the following engagement activities that were effective in reaching P4VE partner communities:

- Recruiting influential messengers and community leaders to identify accessible vaccination sites.
- Providing foreign language translation and interpretation on-site, and
- Developing culturally appropriate messaging for rural populations, persons experiencing homelessness, and Asian, Black, Indigenous, Latino and Hispanic, Native Hawaiian and Pacific Islander populations.

### Minority-Led Medical and Professional Associations

Medical and professional associations represent physicians of color who serve racial and ethnic minority groups. These associations reported on activities supporting the development and dissemination of vaccination strategies and resources to healthcare providers and healthcare organizations. Training healthcare professionals to provide updated vaccine guidance, address vaccine misinformation, and promote improved immunization practices in clinical care was identified as a key activity.

In addition, several P4VE partners trained healthcare professionals to take leadership positions in their communities and become part of the decision-making process to improve health equity and health outcomes. For example, the National Hispanic Medical Association (NHMA) recruited Hispanic providers into their NHMA Leadership Fellowship program to become champions of the <u>Vaccinate For All / Vacunas Para Todos</u>. This CDC-funded project connected 'champions' to promote and increase vaccine access and uptake among Hispanic/Latino communities.

Figure 4. Cover image and pages of a toolkit included in P4VE progress reporting. Toolkit developed by the National Congress of American Indians (NCAI), National Education Association (NEA), Indian Health Services (IHS), and CDC.







Medical and professional associations also engaged SLC organizations, and media outlets serving racial and ethnic minority populations to develop audio and video public service announcements (PSAs). The PSAs featured medical doctors, residents, and medical students disseminating vaccine information. Additionally, healthcare providers leading vaccine education sessions was reported as a useful intervention to increase vaccine confidence and demand. Vaccine education sessions included hosting webinars, town halls, and community speaking events. Healthcare providers and medical organizations also used traditional media outlets such as radio, television, and print media to share vaccine messaging. The Association of American Indian Physicians (AAIP) reported that radio usage was an important platform to share vaccine messaging for American Indian populations. Several of these radio and television PSAs played on Native-focused National Public Radio programs featured Native clinicians recommending the COVID-19 and influenza vaccine for American Indian communities across the country.

### Association of American Indian Physicians

"Through our video and radio PSAs airing in targeted television regions and on Native news related websites, AAIP is seeing an increased reach of Native clinicians across the country. AAIP is being asked by our Member Physician base to expand the coverage areas for these PSAs."

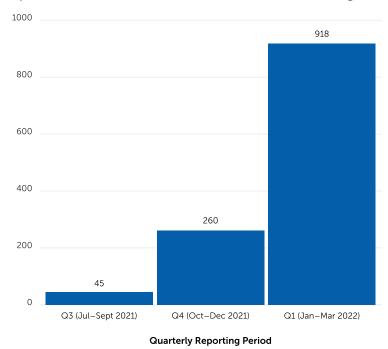
### Social Media Partners

Social media partners implemented a variety of strategies to increase digital health literacy and provide culturally appropriate content about influenza and COVID-19 vaccination. One of the strategies considered noteworthy by partners was conducting social media outreach to tackle vaccine misinformation. Partners trained social media <u>influencers</u> to identify misinformation, address vaccine hesitancy, and communicate credible vaccine information.

Additionally, P4VE social media partners established contracts with influencers to receive specialized training to lead social media campaigns focused on reducing vaccine misinformation and the debunking of false COVID-19 vaccine claims. These partners reported the significance of using influencer marketing strategies and culturally relevant branding for initiatives led by influencers. The social media influencers played a pivotal role in expanding both individual and community involvement to combat vaccine misinformation.

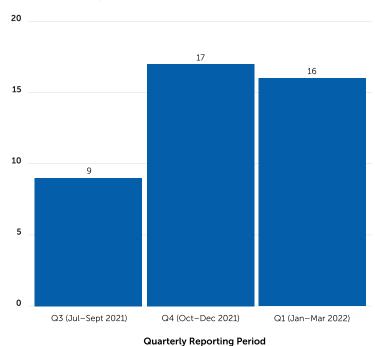
Figure 5: Number of Trained Community-Level Spokespersons

Community-level spokespersons or social media influences trained among social media partners



Social media partners also engaged in "pre-bunking" efforts to anticipate and prevent mis- and disinformation related to COVID-19 vaccines and vaccinations before it spread online and in their community. Pre-bunking campaigns were commonly promoted on broadcast channels (e.g., radio), social media, and outdoor advertisements.

Figure 6: Campaigns to Pre-Bunk Misinformation and Disinformation to Promote Vaccine Confidence Number of new campaigns initiated that pre-bunk vaccine misinformation and disinformation, and/ or promote vaccine confidence among social media partners



Another frequently reported strategy to reach persons identifying as Hispanic or Black was to partner with existing Hispanic/Latino and Black/African American media platforms. These partnerships enabled the funded social media partners to conduct virtual events, webinars, and ad campaigns about COVID-19 vaccines in both Spanish and English. Furthermore, they disseminated radio PSAs, newsletters, and developed a website with resources and materials in Spanish for community members. Additionally, partnerships with The Public Good Projects helped track the spread of vaccine misinformation and disinformation in Spanish by monitoring the number of views, clicks, downloads, and messages circulating online. Lastly, social media partners highlighted the importance of developing local partnerships to create communication tools and conducting community media literacy events to address vaccine misinformation.

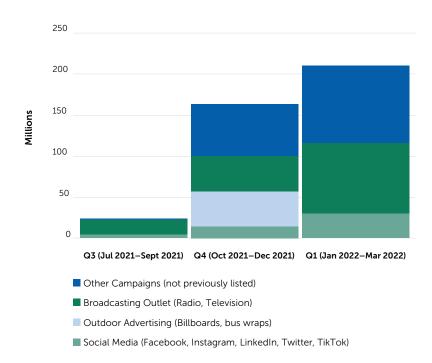


Figure 7: Number Of People Reached By Campaigns, By Type Among Social Media Partners

## Influential Messengers

All national, SLC organizations, medical and professional associations, and social media partners engaged influential messengers to increase COVID-19 and influenza vaccine uptake.

Types of influential messengers included:

- community health workers
- healthcare professionals
- faith-based leaders
- business owners
- community leaders
- social media influencers

# National Urban League

"People want information from within their circle. We've partnered with higher profile individuals from the community who reflect the target demographic who'd publicly taken a stance against becoming vaccinated but have since become vaccinated."

-Milwaukee Urban League

However, the definition of influence in one community may not carry the same significance in others. Therefore, a hyper-localized and personalized approach tailored to each community was considered essential to select influential messengers. Partners provided further insight into the definition of influential messenger (as outlined in Appendix D: Key Terms and Definitions), portraying them as individuals within the community who can relate racially, ethnically, and culturally to community members. Examples include influential messengers who are proficient in communicating in the local language or dialect spoken by community members. Partners emphasized the importance of having community members present at testing sites and vaccination clinics rather than relying on external interpreters. Examples included a Hmong speaker from the Northeast Wisconsin Hmong community or a Spanish speaker originating from a country or region with a similar background to Spanishspeaking community members.

Partners educated and trained influential messengers to ensure accurate vaccine messaging. A significant number of partners engaged youth and young adults to reach their peers to build community trust, increase vaccination demand and engagement, and provide language skills to translate, interpret, or communicate with other community members.

### Asian & Pacific Islander American Health Forum

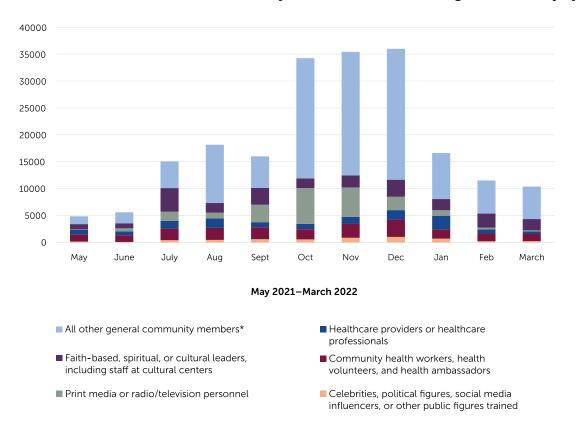
"Having a Burmese outreach worker on site from the community of the target population has been very helpful in bringing Burmese adults and their children to our mobile vaccine clinic, especially Rohingya Burmese community members who have not been receiving our Burmese social media communication. This particular outreach worker has contacts in most of the different Burmese ethnic groups." -Southeast Asian Mutual Assistance Associations

Coalition (SEAMAAC)

Influential messengers implemented vaccine education or vaccination events in their work, volunteer service, or sermons, notably:

- community leaders and faith-based leaders holding vaccination events at their place of worship,
- linking vaccine messaging with faith,
- faith-based organizations encouraging the utilization of social media platforms within religious networks,
- vaccine navigators who spoke Indigenous languages, and
- sharing educational resources on vaccine misinformation on social media platforms.

Figure 8: Number of State- Local-, and Community-Level Influential Messengers Trained, by Type



### Health Communication

P4VE partners identified using health communication resources and implementing health communication activities as a driving factor in building and strengthening community engagement. All partners were tasked with developing and implementing health communication activities to increase digital and health literacy about flu and COVID-19 vaccines. Several partners prioritized health communication to debunk COVID-19 vaccines and vaccination mis- and disinformation.

CDC partner support services, such as DITA, helped organizations identify neighborhoods to focus messaging, resulting in an increase of the number of people reached through various in-person events, social media campaigns, broadcasts, and educational videos. Multiple P4VE partners also used DITA reports to identify opportunities for

### National Alliance for Hispanic Health

"Salud Para La Gente used technology to provide information to reach individuals for less commonly seen languages by creating QR codes that can play audio information about COVID-19 in Mixteco. La Clinica de La Raza also developed an educational video in the Mam language to provide information about COVID-19."

potential partnerships with community-based organizations that leveraged existing networks and communication infrastructure to reach a more diverse audience. These varied health communication activities emphasized the importance of tailoring health communication resources to be culturally and linguistically appropriate.

Partners accessed the VRH and LC for vetted and available health communication resources (i.e., factsheets, flyers, toolkits). VRH and LC managers implemented health literacy trainings for partners

after receiving constructive feedback from partners that increasing health literacy in their respective communities was an area of interest. Managers also noted increased partner engagement with the VRH resources after they were modified with plain language strategies.

Partners highlighted the importance of customizing resources to incorporate best practices for audio-visual and written communication, such as:

- developing social media ads and posts in multiple languages,
- working with community health workers, translators, and interpreters to ensure linguistic accuracy,
- creating visual aids with graphs and culturally appropriate images,
- creating QR codes linked to audio files, and
- providing video testimonials from trusted community members who received COVID-19 or influenza vaccinations.

Influential messengers are important communicators to promote vaccine-related information within their community. Furthermore, engaging local influencers and social media promoters to address vaccine misinformation through PSAs, live sessions, and podcasts were all reported as helpful in combatting vaccine hesitancy and misinformation.

Partners continued to be engaged in health communication activities by sharing their materials for public use via the VRH and LC network. This further developed the evidence-based health communication resources to support diverse, culturally relevant, and accurate health information.

# Challenges and Barriers

Partners reported several challenges and barriers to increasing vaccine access, confidence, and uptake among racial and ethnic minority community members. Common challenges and barriers to implementing activities are described in this section.

### Barriers to Vaccination Accessibility

Partners who worked directly with community members reported that lack of public transportation and lack of vaccination events outside traditional working hours were barriers to increasing vaccine access. Extending vaccination events into the evenings or weekends and expanding mobile vaccination clinic opportunities were successes reported to overcoming these challenges and barriers.

# Initial Lack of Linguistic and Culturally Appropriate Health Communication Resources

Several partners had limited health communication resources that addressed misinformation about vaccine side effects and safety in the preferred language of their communities. Notably, some partners

described the difficulties with providing information solely through social media and technology to communities who had lower levels of access to the internet. Despite this challenge, the overall development and distribution of resources across partners through the VRH and LC network

### **CDC Foundation**

"CBOs have reported that non-English speaking community members hesitate to get boosters because they have to fill out cumbersome paperwork at health departments, even if they have already completed the paperwork to get their initial vaccination."

increased the number of tailored communication tools used for their communities. Additionally, partnerships with Hispanic and Latino, and Black and African American organizations within and beyond the P4VE network were valuable to disseminate vaccine-related information to their established and diverse audiences.

### COVID-19 Vaccine Mis-and Disinformation Fuels Hesitancy

Partners noted a persistent rise in mis- and disinformation about COVID-19 vaccines, including its development process, safety, effectiveness, booster shots, and potential side effects. Additionally, updates to COVID-19 vaccination guidelines and the emergence of new variants such as Delta and Omicron amplified misinformation surrounding vaccine efficacy. Furthermore, vaccine hesitancy appeared to have worsened because of this misinformation, with growing community mistrust towards public health authorities and government agencies. Medical and professional associations reported instances of COVID-19 vaccine hesitancy among parents considering vaccination for their families and children, underscoring the necessity for healthcare providers to help address vaccine misinformation and concerns related to COVID-19 with their patients. Several social media partners' primary activities were to identify COVID-19 mis- and disinformation and subsequently debunk them through effective communication practices. Social media partners often shared their vetted COVID-19 vaccine materials or talking points to the P4VE network on the LC and VRH so partners could communicate proactively to their communities.

# "COVID-19 Pandemic Fatigue" Affecting Community Members and P4VE Partners' Staff

Throughout the reporting period, partners reported that community members experienced 'COVID-19 fatigue' and community members' sentiments that COVID-19 vaccinations were no longer necessary. Furthermore, COVID-19 fatigue was reported to have affected the willingness to receive vaccinations within communities as some expressed feeling tired, uninterested, and burned out from hearing COVID-19 vaccine information. Similarly, several staff members from partner organizations experienced COVID-19 fatigue and burnout, leading to a limited number of staff that were available to implement vaccination promotion activities.

### National Hispanic Medical Association

"The high transmissibility of the Omicron variant and the associated increase in breakthrough infections among vaccinated people seems to have been unduly/incorrectly fueling misguided vaccine misinformation on social media that sows doubt in vaccine effectiveness."

When mask mandates were lifted, some believed that vaccinations were no longer needed because the pandemic was over. However, several partners overcame COVID-19 fatigue by co-hosting COVID-19 vaccination opportunities with other health and social services (e.g., eye exams, routine physical check-up, voter registration, family nutrition classes). These additional services were provided by non-vaccine partners and reported as extremely helpful to motivate and reach a larger population that would not have been reached with only COVID-19 vaccination services.

### **P4VE Partner Success Stories**

Partners reported several success stories of how community-level action was effectively mobilized to provide creative and tailored solutions for reducing vaccination disparities. Despite the challenges reported above, P4VE partners harnessed local partnerships and met community members on the ground to listen and address mis- and disinformation about the COVID-19 vaccines.

Several of these successes are shared in the vignettes below with more stories available online at P4VE: Stories from the Field and Vaccine Resource Hub: Success at a Glance.



Team members from the African Women's Cancer Awareness Association outreach event in Prince George's County, MD. Photo courtesy of African Women's Cancer Awareness Association

### Debunking Myths and Encouraging Prevention Through Vaccination: African Women's Cancer Awareness Association (AWCAA)

In August 2021, the AWCAA organized two COVID-19 outreach events in partnership with Prince George's County, MD, and the Nigerian Nurses Association. Nurses and staff provided encouragement and answers to questions and concerns about COVID-19 vaccination for community members, as well as interpretation services for community members who spoke Igbo, Yoruba, and Hausa.

One such example is of AWCAA staff who spoke with a young man refusing to get vaccinated. They debunked myths about the COVID-19 vaccine for him and he changed his mind and got vaccinated. Afterwards, the young man volunteered with the AWCAA for the remainder of the day to encourage other young adults to get vaccinated.



Read the full story here: <u>Success Story:</u> AWCAA



Individuals vaccinated for COVID-19 at the Center for Independent Living of Broward office, FL. Photo courtesy of the Center for Independent Living of Broward

### Supporting the Deaf and Hard of Hearing Community: Center for Independent Living of Broward (CIL of Broward)

For the Deaf and hard of hearing community, obtaining accurate information about COVID-19 vaccines can come with increased challenges. In Broward County Florida, vaccination sites lacked American Sign Language (ASL) and other language interpreters. The CIL of Broward hosted several vaccination clinics at their office, providing ASL and Spanish language interpreters to help community members receive accurate information in their own language and in a familiar, trusted space where they felt safe.



Read the full story here: <u>Success Story: CIL</u> of Broward

19



Mobile vaccination site set up in the Hispanic Center of Western Michigan's parking lot. Photo courtesy of the Hispanic Center of Western Michigan

# Overcoming Barriers to Vaccination: The Hispanic Center of Western Michigan

The Hispanic Center of Western Michigan collaborated with Michigan's Community Foundation of the Holland/Zeeland Area, the University of Michigan Health-West, and the Kent County Health Department to provide COVID-19 vaccines to Hispanic residents from November 2021 through January 2022 via weekly mobile vaccination clinics. One of the strategies to increasing vaccination uptake for the Hispanic community was eliminating the requirement for state identification and/or proof of health insurance at vaccination clinics. The Center's Communications and Development Coordinator noted, "Questioning people about their health insurance makes them more hesitant to move forward with receiving the vaccine. A large portion of our community members do not have health insurance. By providing solely vaccines at the Hispanic Center, and removing those questions, we were able to give access to this service to the community."



Read the full story here <u>Success Story:</u> The Hispanic Center



Bishop Arthur Jack being vaccinated at his church, Holy Tabernacle Church in Boston, MA. Photo courtesy of BMA TenPoint

# Boston Faith-Based Alliance Offers Community Safe Spaces for Vaccination: BMA TenPoint

The BMA TenPoint alliance of churches, faith-, and community-based organizations serves diverse communities throughout the Greater Boston area. With a legacy dating to the 1960s civil rights movement, BMA TenPoint drew on long-standing community partnerships to host vaccination clinics in safe and familiar faith-based spaces. Through the Organizing for Health and Wealth initiative, the BMA TenPoint alliance partnered with community health centers to hold vaccination clinics in local churches. One member of Bethel A.M.E church who was initially apprehensive told clinic staff that seeing the COVID-19 vaccine offered at her church helped her make the final decision to get vaccinated.



Read the full story here: <u>Success Story: BMA</u>
<u>TenPoint</u>



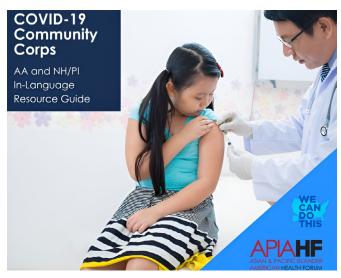
Flyer from the "All of the Above" campaign to promote vaccination and mask wearing. Photo courtesy of Colorado Health Institute

# "Old-School" Approach Succeeds in Remote Colorado Community: Colorado Health Institute

In the rural community of Nederland, Colorado, many residents lack telephone and internet access, and have limited transportation options. These barriers make it challenging for people to travel to a clinic for the COVID-19 vaccine. The Peak to Peak Housing and Human Services Alliance worked with The Metro Denver Partnership for Health to implement innovative approaches for this hard-toreach population. By "going old school", the Alliance went beyond social media and used traditional forms of communication such as running newspaper ads and mailing postcards. Additionally, they relied on conversations between trusted friends and neighbors to spread information about weekly vaccination clinics. Their "All of the Above" campaign was tailored to the mountain community's values, focusing on health, facts, and connectedness. The photo above was specifically chosen so the community saw themselves in the campaign, enhancing its success.



Read the full story here: <u>Success Story:</u> <u>Colorado Health Institute</u>



COVID-19 Community Corps In-Language Resource Guide cover image. Photo courtesy of the Asian & Pacific Islander American Health Forum

### COVID-19 Community Corps In-Language Resource Guide: The Asian & Pacific Islander American Health Forum (APIAHF)

The national-level partners at APIAHF worked with community members, leaders, and other national and community-based organizations to create a community library of Asian American, Native Hawaiian, and Pacific Islander (AA and NHPI) inlanguage resources on COVID-19. The resources include fact sheets, infographics, reports, webinar trainings, websites, videos, and more. The project was community-powered with resources and materials translated in over 45 different languages. In addition to translated materials, the APIAHF enhanced language access for persons with low literacy levels by incorporating translated voiceovers into their resources. APIAHF shared several of these curated resources on the VRH for P4VE partners and other organizations to access and download.



Read more about APIAHF and its COVID-19 resources here: <u>Success Story: APIAHF</u> COVID19 Resources



Flyer from the "Be A Good Relative" campaign to promote vaccinations. Photo courtesy of the National Council of Urban Indian Health

# **Be A Good Relative:** COVID-19 and Influenza Vaccination: The National Council of Urban Indian Health (NCUIH)

The NCUIH has supported equitable vaccination access for urban American Indian and Alaska Native (AI and AN) people. With support from CDC, the NCUIH promoted equitable adult vaccination by enhancing the resource and evidence base. NCUIH developed effective strategies for healthcare organizations and created culturally appropriate materials for clinicians that reflect the needs of urban-dwelling AI and AN people. NCUIH partnered with three Urban Indian Organizations to launch the "Be A Good Relative" campaign, a series of educational materials and four videos on COVID-19 and influenza vaccines that are culturally tailored to Native and urban Native communities. The messaging focused on getting vaccinated to protect yourself and your loved ones. The campaign was one of NCUIH's most successful campaigns, with an overwhelming number of AI and AN persons who work in AI and AN serving facilities agreeing that the videos represented their community.



Read more about NCUIH and the #BeAGoodRelative campaign here: Success Story: NCIUH



"Let's fight misinformation in our communities." Photo courtesy of El Beacon and The Public Good Projects

### Mobilizing Social Media Partners to Fight Misinformation in our Communities: The Public Good Projects (PGP)

PGP partnered with the Hispanic Communications Network (HCN)/La Red Hispana to create El Beacon, a network of everyday people who want to make a difference in their communities by sharing trusted health information online. El Beacon is a network of Hispanic and Latino digital mobilizers in the United States who are committed to using social media and other media platforms to spread fact-based health information while fighting misinformation about COVID-19 vaccines and boosters within their own communities. PGP equipped social media influencers with resources to help guide the development of their content and promote capacity- and coalition-building activities. PGP, HCN, and World Voices Media (WVM) campaigns—which include Spanish multimedia messages on digital platforms, radio stations, and print media—addressed the latest Spanish-language misinformation by developing and distributing information using La Red Hispana's established communication channels via affiliate radio stations. Additionally, they integrated messaging into its programs Bienvenidos America, Dr. Isabel, and En Privado and a dedicated page on the La Red Hispana website.



Read more about PGP and El Beacon here: <u>Success Story: PGP and HCN; Success Story:</u> El Beacon Network

## **Lessons Learned**

Several lessons learned from P4VE partner reports from May 2021–March 2022 are highlighted below.

### **P4VE** Activities

- Localized vaccination strategies and partnerships across organization levels can drive an increase in vaccine uptake and confidence among racial and ethnic minority groups.
- Health communication resources should be tailored for specific populations and local needs to improve vaccine education and overall health literacy.
- Influential messengers should be engaged to disseminate health- and vaccine-related information to build vaccine confidence and trust among community members.
- A multi-level approach is essential to establishing and maintaining a network of national and SLC partnerships to promote vaccination. This approach includes ongoing technical assistance and training, continuous community engagement opportunities for one-on-one, peer, and group learning and maintaining a repository of trusted resources.

### Barriers and Solutions to Vaccine Access

- Early vaccination registration challenges occurred for community members who lacked technology access, digital literacy to navigate appointments, and convenient appointment times. Notable strategies to overcome these barriers included permitting walk-in appointments and extending vaccination hours into the evenings and weekends.
- Several activities implemented to address these challenges included setting up mobile clinics or providing transportation vouchers for those far from routine vaccination clinics. Onsite interpreters for individuals who need or prefer languages other than English was also a reported successful strategy.

## Health Equity

- Developing focused partnerships with on-the-ground organizations, especially those with longstanding trust with racial and ethnic minority communities, can reduce the existing disparities in vaccine confidence, access, and uptake experienced by these populations.
- Influential messengers in one community may not be considered influential in other communities; a hyper-localized approach tailored to each community is crucial when selecting influential messengers.

# **Conclusions**

From May 2021 to March 2022, the P4VE program's 500+ primary and subrecipients developed over 14,000 partnerships with health- and non-health-focused organizations. Overall, this led to over 200,000 influential messengers trained, 600,000+ health communication products developed to promote COVID-19 vaccines, and approximately 394 million persons reached by social media vaccine campaigns. These effective activities increased vaccine confidence, access, and uptake. As a result, the expansive P4VE network administered 1.7 million doses of COVID-19 and flu vaccines.

However, P4VE partners also reported persistent challenges to improve vaccine equity among their respective communities. Vaccine hesitancy was pervasive due to vaccine mis- and disinformation concerning the origins, development, and potential side effects of COVID-19 vaccines. P4VE partners reported existing health disparities and the mistrust of public health and government agencies regarding COVID-19 as challenges to increasing vaccine uptake. Initial registration challenges to schedule COVID-19 vaccine appointments and the lack of vaccine access early in the COVID-19 vaccine rollout hampered uptake of the vaccine.

Despite these challenges, the P4VE program exemplifies the importance of consistent engagement between health and non-health federal, state, and local partners. The network's focus on implementing localized vaccine strategies, disseminating tailored vaccine communication, and empowering influential messengers in the community were all key activities to advance vaccine equity. Success stories from partnerships were shared with the P4VE network for other organizations to learn about the various vaccine programs and activities implemented across communities in the U.S. Further, P4VE partners helped build the evidence-base for vaccine promotion and vaccination strategies via the VRH and LC.

This report highlights the impact of the P4VE program's efforts and its extraordinary role to advance adult vaccine equity in the first year of the COVID-19 vaccine rollout. Throughout the timeframe of these efforts, disparities in COVID-19 adult vaccination coverage, particularly among racial and ethnic populations, decreased. However, achieving equity in adult immunization—across all adult-recommended vaccines—will require continued work, and the lessons learned shared through this report can help inform future endeavors.

The resulting P4VE infrastructure has started to lay the groundwork to effectively address racial and ethnic adult vaccination disparities. This foundation can be leveraged for future adult vaccination programs in the ongoing effort to build and maintain trust with communities, with the ultimate goal of increasing and maintaining vaccine confidence, access, uptake, and equity.

# **Appendices**

# Appendix A.1: P4VE Primary Recipients

Primary Recipients	No. of Partners	Purpose	Primary Recipient Organizations <sup>1</sup>
National Organizations	205	Fund and support local affiliates (SLC) to lead vaccine confidence and access activities in their communities, build partnerships, and build the evidence base	<ul> <li>Asian &amp; Pacific Islander American Health Forum (APIAHF)</li> <li>Conference of National Black Churches (CNBC)</li> <li>National Alliance for Hispanic Health (NAHH)</li> <li>National Council of Negro Women (NCNW)</li> <li>National Minority Quality Forum (NMQF)</li> <li>National Urban League (NUL)</li> <li>Northwest Portland Area Indian Health Board (NPAIHB)</li> <li>UnidosUS</li> </ul>
Medical/ Professional Associations	4	Support medical professionals and providers of color with tools and resources	<ul> <li>Association of American Indian Physicians (AAIP)</li> <li>National Council of Urban Indian Health (NCUIH)</li> <li>National Hispanic Medical Association (NHMA)</li> <li>National Medical Association (NMA)</li> </ul>
Foundations/ National Organizations	235	Fund and support community-based organizations (SLC) to lead vaccine confidence and access activities in their communities, build partnerships, and build the evidence base	<ul> <li>CDC Foundation (CDCF)</li> <li>Community Catalyst</li> <li>Urban Institute</li> </ul>

Continued on next page

Primary Recipients	No. of Partners	Purpose	Primary Recipient Organizations <sup>1</sup>
Racial and Ethnic Approaches to Community Health (REACH) Program Recipients	38	Build on long-standing health equity work in racial and ethnic minority communities to build confidence in and access to COVID-19 and flu vaccines	<ul> <li>Alaska Native Tribal Health Consortium</li> <li>Allegheny County</li> <li>American Heart Association</li> <li>California Department of Public Health</li> <li>Cicatelli Associates Inc. Buffalo</li> <li>City of Hartford</li> <li>City of Miami Gardens</li> <li>City of Minneapolis—Minneapolis Health Department</li> <li>City of San Antonio Metropolitan Health District</li> <li>City of Worcester</li> <li>County of San Diego (Health and Human Services Agency Public Health Services)</li> <li>Cuyahoga County District Board of Health, DeKalb County Board of Health</li> <li>Eastern Michigan University</li> <li>Geisinger Clinic</li> <li>Greater Flint Health Coalition, Inc.</li> <li>Health and Hospital Corporation of Marion County</li> <li>Health Partners Initiative DBA Partnership for a Healthy Lincoln</li> <li>Houston County Board of Health / North Central Health District</li> <li>Leadership Council for Healthy Communities</li> <li>Lowell Community Health Center</li> <li>Mississippi Public Health Institute</li> <li>Montgomery Area Community Wellness Coalition</li> <li>Multnomah County Health Department</li> <li>National Kidney Foundation of Michigan</li> <li>Partners In Health, Penn State Health Milton S. Hershey Medical Center</li> <li>Pima County Health Department</li> <li>Presbyterian Healthcare Services</li> <li>Public Health Advocates</li> <li>RAO: Rosedale Assistance &amp; Opportunities, Seattle-King County Public Health Department</li> <li>Southern Connecticut State University</li> <li>Southern Nevada Health District (SNHD)</li> <li>The Institute for Family Health, University of Arkansas for Medical Sciences</li> <li>Wabanaki Public Health &amp; Wellness</li> <li>Young Men's Christian Association of Coastal Georgia, Inc.</li> </ul>

Continued on next page

Primary Recipients	No. of Partners	Purpose	Primary Recipient Organizations <sup>1</sup>
National Association of County and City Health Officials (NACCHO) and National Association of Community Health Centers (NACHC)	2	Work with local health departments and community health centers on COVID-19 and flu vaccine access and confidence activities	<ul><li>NACHO</li><li>NACHC</li></ul>
Evaluation- focused organizations/ Academic Institutions	40	Fund local partners in 5 or more communities, evaluate projects, and disseminate best practices	<ul> <li>Association of State and Territorial Health Officials (ASTHO)</li> <li>Michigan State University (MSU)</li> <li>National Network of Public Health Institutes (NNPHI)</li> <li>Public Health Institute (PHI)</li> <li>University of Florida (UF)</li> </ul>

<sup>&</sup>lt;sup>1</sup> During the reporting period, the P4VE program focused on efforts for racial and ethnic minority groups and did not include other partners supporting vaccine equity for other disproportionately affected adult populations.

# Appendix B.1: Methodology and Data Analysis

### Qualitative Evaluation

A team of seven reviewers used content analysis techniques to review qualitative data exported from P4VE partners' REDCap reports into Microsoft Excel. These reports comprised descriptive responses to questions posed about partner activities. Inductive coding was used to identify the patterns that emerged from the reports by labelling and organizing the data into concepts and themes. Some of the questions posed crossed multiple domains including partnership development and implementation; community engagement activities; influential messengers; health communication; challenges and barriers (see Appendix B.2 for qualitative questions).

The reviewers read through the monthly and quarterly reports submitted by partners and assigned codes to statements and sections of text. All seven reviewers were each assigned a set of questions that they would review for all P4VE partners (e.g., one reviewer would code all partner reports for questions related to vaccine programmatic successes) to ensure consistent coding across the reports. Additionally, weekly meetings were held to identify new codes and revise codes within the codebook as necessary to ensure a consistent and comprehensive analysis. The team consolidated codes when deemed appropriate by all seven reviewers. Lastly, a code was developed to capture nonresponses (i.e., N/A, 0's and blanks) and verified with the REDCap surveys to identify any potential data quality issues between Microsoft Excel and REDCap.

### **Quantitative Analyses**

The quantitative data reported by P4VE partners in REDCap related to output- and outcome-oriented metrics (e.g., number of trainings, health communication products developed, social media reach, vaccination clinics, vaccinations) were used to complement qualitative findings. The P4VE program monitoring team compiled summary descriptive statistics from REDCap and analyzed in Microsoft Excel. Where feasible, data visualizations were developed in Microsoft Excel to illuminate trends over time and cumulative totals for output and outcome metrics to complement qualitative findings (see <a href="https://example.com/Appendix B.3">Appendix B.3</a> for quantitative questions).

# Appendix B.2: Qualitative Questions from P4VE Partner Reports

### **National Organizations Report**

**Q4.** Describe newly launched or recently expanded national educational campaigns focused on adults in racial or ethnic populations experiencing disparities in vaccine uptake.

Provide details about the topics covered, development and launch strategies, new communication outlets or methods used to expand reach, and specific populations of focus the campaign(s) aims to reach.

**Q5.** If applicable, describe **how your organization used** national, state, local, and/or community-level **partnerships to launch or sustain your national-level educational campaign(s) this past month**.

If applicable, please include specific details about how subrecipients working with you on this award supported activities related to the campaign

Q7. If applicable, describe any noteworthy work conducted by your state, local, or community-level partners that other recipients may wish to adapt and/or that CDC may feature in program communications (e.g., creative outreach, successful activities)

**Q8.** If the program were to feature your organization in an upcoming webinar or program-wide communication, what new, major national-level **successes** would you like to share?

- Successes may include, but are not limited to, the following: partnerships to deliver campaign content adapting CDC or Learning Community materials unique ways of reaching or engaging populations of focus incorporating influenza/COVID-19 vaccination and other health messaging into existing communication campaigns and strategies. If applicable, include the web addresses related to the new, major national-level successes mentioned in your response.
- **Q9.** What new, major national-level **challenges** would your organization like to discuss during future program check-ins with CDC and/or with other partners in the Learning Community? Challenges may include, but are not limited to, the following: technical assistance and/or CDC support needed extending the reach of national-level messaging to more diverse audiences coordinating in-person and virtual events supporting state, local, or community-level partner
- **Q10.** What **additional context** would you like to share about any of the answers provided in this report? If applicable, include any **new evidence** and **resource base insights about common factors that contribute to disparities in vaccine uptake.** Also mention any solutions or lessons learned that could reduce these factors.

Q10a. What would you like to share about coordinating subrecipients?

Q10b. What would you like to share about educational campaigns?

Q10c. What would you like to share about evidence and resource base?

### **Medical and Professional Associations Report**

### Section 1: Strategies and Resources for Clinicians

**Q4:** Describe any **other strategy or resource used to engage individual clinicians** providing healthcare, including educational campaigns.

### Section 2: Strategies and Resources for Healthcare organizations

Q11: Describe any other strategy or resource used to support healthcare organizations, and/or providers, staff members, or community health workers affiliated with healthcare organizations enhance their ability to improve vaccination access and administration among those experiencing disparities in vaccination uptake.

#### Section 3: Enhance the Resource and Evidence

Q15: Describe any new resources shared with the Learning Community.

Q16: Describe any best practices, lessons learned, or insights shared with project officers in check-ins or with the Learning Community through hosted webinars or office hours.

**Q17**: Describe any **challenges or barriers experienced when attempting to engage with the Learning Community** or share resources, best practices, lessons learned, or insights with other members of the program.

### Section 4: Successes, Challenges and Additional Information

**Q18.** If the CDC were to feature your organization in upcoming webinar or program-wide communication, what **new, major successes** you like to share?

**Q19**: What **new, major challenges** would your organization like to discuss during future program check-ins?

**Q20**: If applicable, describe any **new community-level activities to engage individual clinicians or healthcare organizations** that your organization has led or supported since your most recent report submission.

**Q21**: What **additional context** would you like to share about any of the answers provided in this report?

**Q21a**: What would you like to share **about clinicians**?

Q21b: What would you like to share about healthcare organizations?

Q21c: What would you like to share about resource and evidence base?

### **Social Media Partners Report**

### Section 1: Social Media Listening and Understanding

**Q1**. For each of the topics below, **list any messages and recurring language** that your organization has identified since your last report around COVID-19 and influenza (flu) across social media platforms using social media listening tools or techniques (e.g., Meltwater, Sprinklr, Sprout Social)

#### 1.1 Vaccine Misinformation and Disinformation

#### 1.2. Vaccine Intentions

**Q2.** Using social media listening tools or techniques, did your organization detect any noteworthy trends or changes in frequency or reach of messages related to vaccine misinformation and disinformation, correlated to vaccine intentions?

#### 1.1 Vaccine Misinformation and Disinformation

#### 1.2. Vaccine Intentions

### Section 4: Proactive Culturally Relevant Messaging

**Q14**. If applicable, describe any **new efforts** your organization began or supported **to increase digital health literacy among the population(s) of focus**. Be specific about the methodology and content your organization or your partner(s) used.

### **Section 5: Successes and Challenges**

**Q15**. If applicable, describe any **noteworthy work that your organization's partners** (e.g., local organizations, coalitions, community project partners) **have conducted that other recipients may wish to adapt and/or that CDC may feature in program communications**.

**Q16.** What new, **major successes** would you like to share if the program were to feature your organization's efforts in an upcoming webinar or program-wide communication? If applicable, please include any lessons learned

**Q17.** What new, **major challenges** would your organization like to discuss during future program check-ins?

**Q18**. What **additional context** would you like to share about any of the answers provided in this report?

- Q18.1 What would you like to share about social media listening?
- Q18.2 What would you like to share about social media platform policy?
- Q18.3 What would you like to share about reactive intervention and fact checking?
- Q18.4 What would you like to share about proactive messaging?

### State, local, and community (SLC) Partners Organizations Report

- **Q1.** Based on new community-level input, describe **common factors that contribute to disparities in vaccine uptake** that were not included in previous reports.
- **Q2.** Based on new community-level input, **describe solutions or lessons learned** that could reduce **factors that contribute to disparities in vaccine uptake.** Include your organization's plans to apply these insights to upcoming activities.
- **Q20.** If applicable, describe any **new educational campaigns conducted for healthcare providers or healthcare professionals, including topics covered and types of providers and professionals reached**
- **Q21.** If the program were to **feature your organization in an upcoming webinar or program-wide communication,** what **new, major successes** would you like to share? If applicable, include the web addresses related to the new, major successes mentioned in your response
- **Q22.** What **new, major challenges** would your organization like to discuss during future program check-ins?
- **Q23.** What additional information would you like to **share about any partnerships** with local organizations, coalitions, community projects, vaccination providers, or health departments? List the names of new partners and their contributions to program activities when possible.
  - Q24a. What would you like to share about equipping influential messengers?
  - Q24b. What would you like to share about vaccination opportunities and provider partnerships?
  - **Q24c**. What would you like to share about barriers to vaccine uptake?

# Appendix B.3: Quantitative Questions from P4VE Partner Reports

### **National Organizations Report**

**Q1.** How many new educational campaigns focused on adults in racial or ethnic populations experiencing disparities in vaccine uptake did your organization conduct this quarter?

**Q3a.** How many states were reached by your organization's national educational campaigns this quarter?

### **Medical and Professional Associations Report**

**Q13.** If known, provide the total number of healthcare organizations reached through any new strategies and resources (e.g., reference materials, trainings, educational materials). If not known, leave blank.

- Non-profits and non-governmental organizations, only
- Private healthcare organizations, only (e.g., nursing homes, dental offices, outpatient clinics)
- Public and/or federally subsidized healthcare organizations, only
- Any other healthcare organizations, only (not otherwise captured in 13.1-13.3)
- Healthcare organizations with 2 or more classifications (e.g., non-profit, private, public, other)
   (e.g., any combination of 13.1-13.4)

### **Social Media Partners Report**

**Q5.** List the total number of new trainings or skill-building workshops provided to empower organizations and individuals to intervene with COVID-19 and influenza (flu) misinformation and disinformation.

- Community-based organizations or coalitions
  - Healthcare providers or healthcare professionals
  - Community-level spokespersons or social media influencers
  - Any other audiences trained

**Q11.** List the total number of new campaigns initiated that pre-bunk vaccine misinformation and disinformation, and/or promote vaccine confidence.

**Q12.** Estimate the total number of people reached through all campaigns reported in question 11, by type.

- Social media-based campaigns (e.g., Facebook, Instagram, LinkedIn, Twitter, TikTok)
- Outdoor advertising-based campaign (e.g., billboards, bus wraps)
- Broadcasting outlet-based campaign (e.g., radio, television)
- All other campaign types not listed above

### State, local, and community (SLC) Partners Report

Q4. Total number of new communication products developed to promote vaccinations, by type

- Commercials or spots on television and radio
- Outdoor advertisements (e.g., carboard cutouts, billboards, bus wraps, lawn signs)
- Phone call or mobile texting scripts
- Print media developed (e.g., flyers, pamphlets, mail inserts)
- Social media posts developed (e.g., Facebook, Instagram, Twitter, TikTok, LinkedIn)
- All other communication products developed (e.g., email blasts, online or print articles, blogs, website content)

**Q6.** Total number of new events held to promote vaccinations, by type.

- Informational sessions or webinars, with or without live questions and answers
- Discussion sessions or town halls, led by an expert or professional
- Community skill-building workshops
- All other types of events

# Appendix C: Additional P4VE Resources

### Vaccine Resource Hub

https://vaccineresourcehub.org/

#### **P4VE** Website

https://www.cdc.gov/vaccine-equity/php/about/index.html

# Appendix D: Key Terms and Definitions

**Campaign**—Two or more communication products that build on each other through related information, usually connected via a branded slogan or hashtag, and are shared with the public through various communication channels over a determined amount of time.

**Community based organizations (CBOs)**—Private, nonprofit organization which is representative of a community and acts on a local level.

**Culturally appropriate**—Any educational or outreach product informed by research or assessment for which one or more members of the population of focus assessed or tested its relevance and appropriateness prior to its release.

**Digital health literacy**—The ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.

**Disinformation**—False information, which is intended to mislead, especially propaganda issued by a government organization to a rival power or the media.

**Faith-based organizations**—Religious or faith oriented organization which is representative of a congregation, community, national network, or freestanding religious organization.

**Healthcare provider**—A Doctor of Medicine or Osteopathy, or nurse practitioner, who is authorized to practice by the state and performing within the scope of their practice as defined by state law. Additionally, any other individual that is licensed to provide healthcare treatment and advice based on formal training and experience, including but not limited to community health workers, pharmacists, nurses, and students who meet state requirements and operate under appropriate supervision by licensed healthcare professionals.

**Influencer**—Someone who has built a reputation for their knowledge or expertise on a specific topic and whose actions may impact the decisions of others they are connected to.

**Influential messenger**—Any spokesperson identified as being recognizable, trusted, and credible within the community and encouraged by a program recipient to share or otherwise distribute information or resources related to COVID-19 or influenza vaccines with other members of the community.

**Linguistically appropriate**—Any educational or outreach product informed by research or assessment for which one or more members of the population of focus assessed or tested its words or characters for accuracy and understandability prior to its release.

**Misinformation**—False information that is spread, whether intentionally (disinformation) or not.

**Outreach**—Any interaction or written/audiovisual product that provides information about vaccination services or vaccine-related assistance, usually involving direct or virtual contact with members of populations disproportionately affected by disparities in vaccine uptake.

**Partnership**—A mutually beneficial relationship that outlines specified and joint responsibilities involving close cooperation on vaccine-related education and/or outreach.

**Population of focus**—Racial and ethnic minoritized groups, or other groups of focus, disproportionately affected by disparities in COVID-19 and/or influenza vaccine uptake.

**Pre-bunk**—Aim to anticipate and prevent misinformation and disinformation before this untrue or partially true content is uploaded and spread via social media platforms.

**Primary recipient**—Non-research focused partners who received direct funding from the Centers of Disease Control and Prevention to implement evidence-based strategies to reduce COVID-19 and/or influenza vaccination disparities.

**Reach**—Number of individuals who have been exposed to messaging from campaigns.

**Social media platform**—Computer-based technology that facilitates the sharing of ideas, thoughts, and information, such as Facebook or LinkedIn.

**Subrecipient**—Partners who received funding from primary recipients through a subaward to implement evidence-based strategies to reduce COVID-19 and/or influenza vaccination disparities.

**Technical assistance**—Advice, assistance, or training to support program development, implementation, and/or evaluation.

**Town hall**—An in-person or virtual event at which an expert or professional moderates a discussion with and answers questions from members.

**Vaccination provider**—Any healthcare provider, clinic, or healthcare professional group, such as pharmacies, local primary care clinics, federally qualified health centers, or any combination of providers who administer COVID-19 or influenza vaccines at a vaccination site.

**Vaccination site**—Publicly-accessible, traditional or non-traditional location where an individual can receive an influenza or COVID-19 vaccine with or without an appointment or referral.

**Webinars**—A live, online, educational presentation during which participating viewers can submit questions and comments.

