MAPPING BARRIERS AND ENABLERS OF COVID-19 VACCINE UPTAKE

The Role Federally Qualified Health Centers (FQHCs) Can Play in Addressing Health Inequalities in the Latinx Community
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Since 1983, LCDP has provided health care, social connection, and resources for immigrant families from Central and South America. La Clínica annually serves nearly 5,000 Latinx (gender neutral for Latino) women, men, youth, and children in Washington, D.C., and Prince George’s County, Maryland. La Clínica aims to address health inequities by providing primary care, mental health and substance abuse services; HIV/AIDS care; school-based mental health services; interpreter services; and comprehensive health education. In 2021, La Clinica’s Community Health Action department recorded 181,862 touch points, a measure tracking any area of staff interaction with a patient or potential patient. All direct service staff are bilingual, and most are first-generation Latinx immigrants.
ABSTRACT

Federally qualified health centers (FQHCs) are community health centers meeting stringent federal requirements to provide primary health care services to all people regardless of their ability to pay or documentation status. La Clinica Del Pueblo (LCDP) is an FQHC in the Washington, D.C. metropolitan area (DMV) serving low-income Latinx immigrants while garnering the immigrant community’s trust. Despite their effectiveness in producing high-quality health outcomes, there is little research on how FQHCs can assess and monitor community needs and assets to inform service delivery and policy change. In 2021, LCDP fostered strategic partnerships to address education about and navigation to COVID-19 vaccines for a majority of out-of-care Latinx immigrants. Additionally, LCDP sought to understand the community’s barriers and enablers regarding vaccination. The organization surveyed 673 individuals to ensure comprehensive, equitable perspectives in COVID-19 vaccine education/distribution efforts. Participants reported three common factors that influenced their decision on whether to get vaccinated, including a lack of confidence in the vaccine (35.9%), insufficient information in Spanish (17.9%), and the inability to miss a day of work to get vaccinated (17.9%). Participants also reported that the factors that motivated and helped them receive the vaccine included the convenience of a mobile vaccination clinic (17.9%), motivation from family members (15.6%), concern for personal health (13.4%), a trusted vaccination site (11.9%), and Spanish-language vaccination services (11.3%). Survey results demonstrate why FQHCs can benefit from conducting community assessments to inform policy and service delivery while tailoring successful vaccination campaigns. Additionally, FQHCs and academic institutions stand to benefit by developing community-based participatory research approaches that could promote inclusion for immigrant communities.
COVID-19 IMPACT

Like in the United States, hospitalization rates and deaths in the DMV area have been higher in Latinx communities compared to white communities. \(^1\) Prince George’s County, Maryland, recorded the most COVID cases and deaths in the state. The most affected neighborhoods were Hyattsville, College Park, Langley Park, Beltsville, and Adelphi, where more than 50% of residents are Latinx\(^2\) and speak limited or no English.

VACCINE HESITANCY AND UPTAKE IN THE LATINX POPULATION

The drivers of vaccine hesitancy in the Latinx population are multifaceted. Previous research identified a lack of confidence in health authorities, with approximately 1 out of 3 individuals stating that they do not trust their local health department for information about the COVID-19 pandemic.\(^3\) Additional drivers of hesitancy include insufficient information on the COVID-19 vaccine,\(^5\) language barriers,\(^6\) healthcare mistrust due to historical mistreatment,\(^7\) and concerns about vaccine side effects, efficacy, and safety.\(^8\)

While issues of vaccine hesitancy range from lack of access to medical care, misinformation, and medical distrust, a proven public health intervention that has increased vaccination rates is expanded access to primary care.\(^9\) Individuals are more likely to trust their own doctor on issues relating to vaccination compared to local, state, or federal health authorities.\(^3\) In fact, a 2022 study showed that increasing the number of primary care physicians in an area was significantly associated with higher vaccination rates after controlling for other potential confounders.\(^10\) Therefore, access to culturally appropriate, primary care for Latinx immigrants is a core component to take into account when delivering vaccines.
In May 2021, La Clínica del Pueblo received a grant from the Centers for Disease Control and Prevention (CDC) to explore vaccine barriers among the Latinx community in the Washington, D.C., metropolitan area. It was administered by UnidosUS as part of their Esperanza Hope for All campaign, which seeks to mitigate the health, economic, and education effects of the COVID-19 pandemic on Latinos. In total, 673 individuals were surveyed.

Among survey participants willing to provide their state of residence, 74.3% were residents of Maryland (n=494) and 25.7% were residents of Washington, D.C. (n=173). The most common zip code for respondents was 20783, which covers the Hyattsville, Adelphi, and Langley Park (n=196) communities. The second most common was 20010, which covers the Columbia Heights and Mount Pleasant neighborhoods in Washington, D.C. (n=70). There was a substantial number of participants who were either unwilling or unable to disclose their zip code (n=120).

Males made up slightly over one-half of the survey sample, comprising 52.1% (n=349) of participants. Women made up 47.61% of respondents (n=319), and less than 1% identified as gender non-conforming (n=1).

In addition, 79% of participants were between the ages of 25 and 64 (n=528). Additional demographic details are provided in Table 1.

### Table 1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n = 673</th>
</tr>
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<tbody>
<tr>
<td><strong>Residence</strong></td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>494 (74.3%)</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>173 (25.7%)</td>
</tr>
<tr>
<td>Virginia</td>
<td>6</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>349 (52.1%)</td>
</tr>
<tr>
<td>Female</td>
<td>319 (47.6%)</td>
</tr>
<tr>
<td>Gender non-conforming</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
</tr>
<tr>
<td><strong>Age in Years</strong></td>
<td></td>
</tr>
<tr>
<td>0-14: Children</td>
<td>8 (1.2%)</td>
</tr>
<tr>
<td>15-24: Youth</td>
<td>115 (17.1%)</td>
</tr>
<tr>
<td>25-64: Adults</td>
<td>528 (79%)</td>
</tr>
<tr>
<td>65+: Seniors</td>
<td>18 (2.7%)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>Respondent Does Not Know</td>
<td>323 (48.3%)</td>
</tr>
<tr>
<td>Multiple Races</td>
<td>143 (21.4%)</td>
</tr>
<tr>
<td>Indigenous</td>
<td>92 (13.8%)</td>
</tr>
<tr>
<td>White</td>
<td>50 (7.5%)</td>
</tr>
<tr>
<td>African Descent</td>
<td>6 (0.9%)</td>
</tr>
<tr>
<td>Other</td>
<td>55 (8.2%)</td>
</tr>
<tr>
<td>No Response</td>
<td>94</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>618 (91.8%)</td>
</tr>
<tr>
<td>Non-Hispanic/Latinx</td>
<td>7 (1.0%)</td>
</tr>
<tr>
<td>No Response</td>
<td>48 (7.1%)</td>
</tr>
<tr>
<td><strong>Level of English</strong></td>
<td></td>
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<tr>
<td>None</td>
<td>315 (46.8%)</td>
</tr>
<tr>
<td>Beginner</td>
<td>184 (27.3%)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>111 (16.5%)</td>
</tr>
<tr>
<td>Advanced</td>
<td>62 (9.2%)</td>
</tr>
<tr>
<td>No Response</td>
<td>1 (0.2%)</td>
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SURVEY DESIGN

This survey was conducted during the COVID-19 vaccination stage for four main reasons:

1. To better understand, within the Latinx community, what barriers prevented individuals from obtaining the COVID-19 vaccine and what factors motivated them to get the vaccine.

2. To assess their health insurance status, English proficiency, and other social needs affecting their lives during the pandemic.

3. To identify how the previously mentioned factors interact with, interrelate to, and impact people’s relationships with the healthcare system.

4. To inform key stakeholders, including community organizations, public health government agencies, policymakers, and academic institutions who want to conduct successful vaccine campaigns in the Latinx community.

SURVEYS FEATURED QUESTIONS THAT FELL INTO SIX CATEGORIES:

1. Demographics
2. English Proficiency
3. Access to health insurance
4. Barriers to vaccination
5. Factors that helped the participant get vaccinated
6. Social needs or other worries (See Appendix)

Data collection occurred over a seven month period, from May 7th, 2021, through November 16th, 2021. As this period encompassed a variety of developments in both the nature of the pandemic and the public health response, the surveys utilized in data collection were adapted accordingly. Questions were updated to provide increased relevance to the present stage of the pandemic (e.g. to reflect the impact of the Delta variant in motivating vaccination) or to account for the venue of the questionnaire (e.g. whether the convenience of a mobile clinic was a factor in the decision to get vaccinated).
Responses to the surveys were collected by La Clínica del Pueblo Community Health Workers (Promotores de Salud) at thirty community events. Other than one event in Anne Arundel County, Maryland, all events occurred in either Washington, D.C., or Prince George’s County, Maryland, with most events taking place in the neighborhoods of Columbia Heights and Mount Pleasant (Washington, DC) or Langley Park (Prince George’s County). Key inter-sectoral partnerships with Luminis Health, Crossroads Farmers Market, and CASA allowed for strategic data collection at community events where attendees received services such as health screenings, HIV tests, health education materials, food vouchers, etc.

The events in which survey collection took place varied widely to improve the odds of surveying a representative sample of individuals. Events occurred on each day of the week except for Sunday, and data collection times ranged from 9:00 a.m. to 8:30 p.m. to improve access to workers with irregular work hours. Of the 30 events, 12 featured on-site vaccinations. Non-vaccination related events included farmers markets, food distribution events, HIV testing events, community festivals, and street outreach events.

Surveys were conducted in-person by Promotores de Salud. To reduce bias due to literacy level or language barriers, survey questions were asked verbally by the facilitator. Upon hearing the participant’s response, the facilitator selected the response that most closely matched that of the participant on the Microsoft Form. If the response provided did not fit any of the pre-determined response categories, it was marked as “Other” with a written description of the response to be used for later analysis and categorization. Frequent responses that were not initially included in the set of pre-determined response options were added to the list of selectable responses to facilitate the conduction of future surveys.
ADVANTAGES:

- La Clínica del Pueblo is a trusted institution among the Latinx community in the Washington, D.C., area. This community trust and the relationships forged with local residents, activists, and other community-based organizations improves La Clínica’s ability to collect truthful responses from individuals who may otherwise be fearful of participating in a survey.

- La Clínica’s strong partnerships allowed access to a diverse set of community networks and events which provided the opportunity to survey many individuals who would otherwise be difficult to reach. Including the responses of these survey participants improves the validity of the findings for use in generating recommendations that will improve vaccine access for the community as a whole.

- Promotores are well-embedded within the community, and their expertise in working with this population ensured that the surveys were administered in a culturally and linguistically accessible manner appropriate to local conditions, including direct feedback to inform survey improvement.

- Promotores from LCDP receive continuous training in multiple topics such as health equity, social determinants of health, data collection, facilitation, and outreach techniques, equipping them with the needed training for community outreach.

- Because La Clínica’s staff analyzed results every month, this allowed the organization’s internal health communication team to develop a video that addressed the most pressing barriers that could prevent individuals from getting the vaccine.

LIMITATIONS:

- The survey design and data collection occurred in the midst of an ongoing crisis—as such, it was not as rigorous as a formal academic study. In addition, the objective of the survey was to quickly address community concerns about and barriers to vaccines and inform health departments and policymakers on future efforts. Thus, these results could potentially feature higher levels of accidental bias or other errors.

- As surveys were conducted at community events that featured health resources and/or COVID-19 vaccination, there could be bias in the attending populations, who have a greater sense of trust in organizations like La Clínica del Pueblo that offer community health services. This could skew the results, as we may not have reached individuals who are less trusting of community events or less likely to get vaccinated.
Although the questions asked in the surveys remained consistent, changes to the list of pre-selected response options could influence the findings, as not every survey participant was eligible to select every possible response. For example, the most common response to the question “What helped/motivated you to get vaccinated today?” was “The mobile clinic made it easy to get vaccinated.” However, only some participants were surveyed at a mobile clinic site, and participants surveyed soon after the introduction of vaccines would likely be ineligible to select this response as vaccination at a mobile clinic was not yet an option. As such, we are likely under-reporting this response and the utility of using mobile clinics to improve vaccination rates could be even greater than reported.

Many survey participants provided multiple responses per question which could lead to an overestimation of the importance of certain barriers or drivers. If a participant listed both the lack of information in Spanish and the inability to take a day off work as reasons for why they have not yet been vaccinated, both responses were weighted equally in the survey results. However, one of those may have been a greater barrier than the other.

Race identity results showed that 70% (472) of participants answered either “I do not know” or ended up selecting “other” because they were not sure. This is a common challenge when trying to capture Latinx racial identity through a standard race question and it has to do with racial concepts that were developed during colonialism. For example, terms such as mestizo, criollo, and mulato were part of the caste system during the Spanish colonization. These divisions remain a part of Latinx identity. 

Watch our video on addressing barriers to vaccination.
After the completion of data collection, the survey results were exported into Microsoft Excel to create a database for use in data analysis. Microsoft Power BI was used to clean data, categorize responses, and develop graphics. Response frequencies were compared to assess associations between socio-economic barriers to vaccination and vaccine acceptance.
The three most common reasons for respondents choosing to not get vaccinated were a lack of confidence in the vaccine (35.9%), insufficient information in Spanish (17.9%), and the inability to miss a day of work to get vaccinated (17.9%). Additional responses of note included issues with internet access or navigating online registration systems (8.0%), previous ineligibility for vaccination (5.8%), and the fear of needles or side effects (5.6%).
Among surveyed participants who chose to get vaccinated, a common motivating factor included the convenience of a mobile vaccination clinic (17.9%). It should be noted that this response option was only available for individuals interviewed at a mobile clinic site, and so the true percentage of individuals selecting this response is likely higher. Other common drivers of vaccination included motivation from family (15.6%), concern for personal health (13.4%), a trusted vaccination site (11.9%), and Spanish-language vaccination services (11.3%). Overall, answers varied widely, resulting in a substantial number of responses categorized as “other,” such as school/employer vaccine requirements, travel requirements, encouragement from television and church services, and more.
To better understand the role geographic location plays in vaccine acceptance, the data was further stratified by state. One important thing to note is that 81.2% of surveys conducted in Maryland occurred at events featuring vaccination (defined as an event at which vaccination services were available but may or may not have been the primary focus of the event), while only 24.3% of surveys conducted in D.C. occurred at events featuring vaccination.

Among Maryland respondents, 38.7% reported a lack of confidence in the vaccine as a factor in why they had not yet been vaccinated, while only 29.2% of D.C. respondents claimed this as a factor. Similarly, 21.1% of Maryland respondents stated that the inability to miss a day of work to get vaccinated is a factor, compared with only 10.1% of D.C. respondents. Insufficient Spanish-language information was noted as a barrier to vaccination for 17.8% of Maryland respondents and 18.5% of D.C. respondents.

COLOR KEY FOR VACCINE RELUCTANCE BY STATE

- Lack of confidence in the vaccine
- Inability to miss a day of work
- Lack of information in Spanish
- No reason provided
- Issues with internet access or online registration systems
- Previous ineligibility for vaccination
- Fear of needles or side effects

MARYLAND

- Lack of confidence in the vaccine: 39%
- Inability to miss a day of work: 21%
- Lack of information in Spanish: 18%
- No reason provided: 12%
- Issues with internet access or online registration systems: 7%
- Previous ineligibility for vaccination: 4%
- Fear of needles or side effects: 4%

DISTRICT OF COLUMBIA

- Lack of confidence in the vaccine: 29%
- Inability to miss a day of work: 10%
- Lack of information in Spanish: 18%
- No reason provided: 11%
- Issues with internet access or online registration systems: 10%
- Previous ineligibility for vaccination: 10%
- Fear of needles or side effects: 9%
Among the factors promoting vaccination, 24.3% of Maryland respondents stated that the convenience of a mobile clinic encouraged them to get vaccinated. As most D.C. respondents were not surveyed at a mobile clinic site, there is insufficient data to provide a D.C. comparison for this response. Similarly, 17% of D.C. respondents noted their familiarity with and trust of La Clínica del Pueblo as a factor that motivated them to get vaccinated. This question was not relevant for most Maryland respondents who lived and worked far away from La Clínica’s D.C. location.

Among Maryland respondents, several additional factors were noted as being helpful for encouraging vaccination. These include family motivation (16.0%), concern for personal health (14.1%), Spanish-language vaccination services (13.4%), familiarity with the vaccination site (13.2%), and the assistance of a family member to register for a vaccine appointment (12.0%).
D.C. respondents similarly stated that family motivation (15.2%), concern for personal health (12.1%), and familiarity with the vaccination site (9.1%) were notable factors in the decision to get vaccinated. Spanish-language vaccination services (4.8%) and the assistance of a family member to register for a vaccine appointment (3.6%) were seen as less important.
Access to primary care is proven to be associated with increased vaccination rates, but many Latinx immigrants lack health insurance that would improve access to primary care. For this reason, questions pertaining to health insurance were asked to better understand the intersection of health insurance status and vaccine acceptance.

Overall, 64.5% of surveyed individuals reported being uninsured. Among uninsured individuals, 42.7% reported not knowing how to apply for insurance as a cause for being uninsured and 39.9% reported being ineligible. While the survey did not include specific questions regarding why individuals were not eligible for insurance, a common cause of eligibility among the Latinx population is immigration status, including individuals who are waiting for their immigration cases to be decided in the courts. Even among insurance-eligible individuals, many individuals are employed in jobs that do not include employer-sponsored health insurance, may not meet Medicaid requirements, and do not earn enough to afford private health insurance through the health insurance marketplace.
HEALTH INSURANCE STATUS

- Insured 64%
- Uninsured 35%
- Unsure 1%

REASON FOR LACK OF INSURANCE

- Unsure How to Apply: 43%
- Ineligible: 40%
- Insufficient Time to Apply: 20%
- Unable to Afford Insurance: 12%
There were notable differences in insurance rates when it comes to gender and geographic area. Men were somewhat more likely (69.1%) to be uninsured than women (60.5%) in the survey sample.

Insurance rates were also much higher among D.C. respondents (68.2%) compared with Maryland respondents (22.9%).
Among the uninsured in D.C., 33% reported ineligibility as a factor in being uninsured, and 21% stated that they did not know how to apply for insurance. These numbers are much higher in Maryland where 41% of uninsured respondents reported ineligibility as a factor in being uninsured, and 46% reported not knowing how to apply for insurance. This disparity may be partially attributable to the availability of insurance programs for low-income and undocumented individuals in DC that are not available in Maryland.

### REASONS FOR LACK OF INSURANCE

**MARYLAND**

- 45% Unsure How to Apply
- 41% Ineligible
- 19% Insufficient Time to Apply
- 13% Unable to Afford Insurance

**DISTRICT OF COLUMBIA**

- 33% Ineligible
- 27% Insufficient Time to Apply
- 21% Unsure How to Apply
- 2% Unable to Afford Insurance
Overall, the main barriers to vaccination identified through the analysis were a lack of confidence in the vaccine, insufficient information in Spanish, and the inability to miss a day of work. The main drivers of vaccination included a trusted and convenient vaccination site, motivation from family, concern for personal health, and Spanish-language vaccination services. While not surprising, these results indicate several distinct areas in which future vaccination promotion campaigns should focus.

Approximately three quarters of the individuals surveyed reported having only basic or no English proficiency. As such, monolingual vaccine promotion will be insufficient in reaching a large proportion of the Latinx population in the D.C.-metropolitan area. Future campaigns must include linguistically appropriate promotion materials and vaccination services.

While organizations and entities providing vaccinations may not have influence over the work schedules of the population they are trying to reach, they are able to ensure that their venues for vaccination are accessible. Vaccine availability should not be limited to working hours during the work week and should instead be offered during “off-peak” times, including evenings and weekends. Venues must also be geographically accessible, especially in the case of populations that may have limited access to personal transportation community feel comfortable attending.

Vaccination services should also be provided in collaboration with trusted community organizations to ensure members of the community feel comfortable attending regardless of immigration status.

Providing vaccination services at community events proved to be another successful means for reaching the Latinx population. Throughout this project, La Clínica partnered with a variety of community stakeholders on vaccine outreach, and while some events were strictly vaccine-related, others included vaccination as just one of many services. These events included farmers markets, community festivals, youth programming, and HIV-testing events, and they allowed La Clínica staff to reach a larger number of diverse individuals including women, children, and the elderly. Although data was not collected to confirm if community events were more successful at promoting vaccination compared to vaccine-only events, the number of vaccine-eligible individuals surveyed at community events indicate that it would be prudent to utilize the draw of these events to connect the community to vaccination services.
Distrust of the vaccine is not limited to the Latinx community and addressing this issue will be more complex, as successful solutions must involve collaboration across all levels of the public and private health sector. Culturally, linguistically, and scientifically appropriate materials must be created in collaboration with trusted members of the community, and the messaging should reflect the cultural values of the Latinx community. As reflected in the findings, these include not only personal health benefits, but also a focus on how vaccination can protect one’s family. This messaging should be disseminated through a variety of accessible channels, including social media, radio, newspapers, and television and should take into consideration countries of origin of the target Latinx community.

Comparing responses collected from Maryland and D.C. reinforce the main findings noted above. One additional finding of note was a striking geographic disparity in health insurance status. D.C. respondents in the sample were almost three times more likely to have health insurance compared to Maryland respondents, and this could play an influential role in not only vaccination rates but also overall health equity and access. Additional research on this disparity would be useful to further explore its effect on health outcomes.

LCDP serves low-income Latinx immigrants in Washington, D.C., and Prince George’s County, MD. This population is excluded from many social services such as primary care healthcare, mainly due to immigration status and low English proficiency, among other factors. Due to the disproportionate impact of the pandemic on this community, it was important to assess the barriers to vaccination and what factors could motivate and enable them to take the vaccine. Survey results allowed La Clínica to generate a community health communication video that answered these questions and provided guidance for alleviating some of the barriers that were identified in the survey. This exemplifies how FQHCs can benefit from conducting health assessments that can inform policymakers, public agencies, and other community organizations.

Additionally, this assessment demonstrated how a large portion of the immigrant population is left out of the healthcare system, especially primary care, which is an effective tool to educate and deliver vaccines. Conducting regular community assessments can allow FQHCs to advocate for more inclusive primary care policies. Lastly, conducting this assessment showed how community organizations such as La Clínica benefit from having deep knowledge of and connection to Latinx immigrants in the DMV area. Specifically, at LCDP, programs such as Promotores de Salud and the implementation of culturally appropriate strategies and partnerships have resulted in gaining the trust of the community.
1. HEALTH DEPARTMENTS SHOULD PRIORITIZE LANGUAGE ACCESS AND CULTURAL COMPETENCE WHEN DEVELOPING PROMOTIONAL AND EDUCATIONAL CAMPAIGNS:

- Provide Spanish-language vaccine promotion materials: Ensure that vaccine promotion materials are available in Spanish to promote accessibility.

- Provide Spanish-language vaccination services: Given the complexity navigating the vaccination process during the early phases of the COVID-19 vaccination push, ensuring that vaccine providers are able to provide linguistically appropriate services will be necessary to ensure that the Latinx population is able to access vaccines regardless of their English ability.

- Emphasize specific cultural values: Messaging should be informed by the cultural values identified as important by community members, including personal health and the role of family. This can be approached both in terms of vaccination as an action that protects family and also messaging asking individuals to ask their family members to get vaccinated.
Employ trusted community voices: The vaccine promotion campaign should include trusted community voices that educate and reassure the Latinx community about taking the vaccine.

Provide vaccination services on evenings, weekends: Many respondents were unable to take time off of work to get vaccinated. Vaccine availability should not be limited to traditional working hours, but should instead also be offered during “off-peak” times, including evenings and weekends.

Provide vaccination services at community events: Community events are great places to offer the vaccine, given the high level of foot traffic and family-friendly atmospheres. Farmers markets located in Latinx neighborhoods are just one example, as they often attract families with children and accept public assistance funds, such as the Supplemental Nutrition Assistance Program (SNAP) and Women, Infants, and Children Fruit and Vegetable Checks (WIC). Community events increase the likelihood of connecting with a vaccine-eligible individual who may otherwise be difficult to attract to a vaccination event.

Provide conveniently located vaccination services with navigation: Vaccination venues must be geographically accessible, especially in the case of populations with limited access to personal transportation. Accessibility can be improved through the careful, informed selection of vaccination venues that are easily served by public transportation, and through the use of mobile clinics. In addition, it is important to have promotores on site to help people complete forms and answer questions or concerns, so they feel comfortable and confident about the vaccine.
3. POLICY MAKERS SHOULD UTILIZE A HEALTH EQUITY FRAMEWORK TO ADDRESS SYSTEMIC BARRIERS AND INCREASE CONFIDENCE IN VACCINE CAMPAIGNS AND THE HEALTHCARE SYSTEM FOR THE IMMIGRANT COMMUNITY:

- Establish strong relationships with trusted community partners to provide vaccination services: Trusted community partners should be engaged in directly providing vaccination services to ensure that community members feel comfortable going to the vaccination site regardless of English ability or immigration status.

- Advocate for laws that will make health insurance accessible: Health insurance status directly impacts vaccination rates and Latinx immigrants make up the highest number of uninsured people in the U.S. Advocating for laws and programs that will increase health insurance accessibility will be a key step towards addressing socio-economic determinants that decrease vaccine access. This includes facilitating access to primary care services.

- Advocate for laws that will decrease the fear of undocumented members of the community: Many undocumented individuals may be hesitant to attend a vaccination event due to the fears and uncertainty that come with their status. Advocating for laws that protect the rights of undocumented members of the community will ease this fear and make it more likely for community members to access vaccination services regardless of immigration status.

- Advocate for labor protection laws to ensure all individuals have an equal chance to receive and recover from vaccines.
We are grateful to our 673 participants for their time and willingness to express their opinions. This report would not have been possible without the efforts of our Promotores de Salud: Michelle Restrepo, Selene Lara, Abraham Castañeda, and Sophia Uriburu. Additionally, we would like to thank Alicia Gregory for her work in editing this document, Camilo Vargas for his technical support on how to use Microsoft Power BI, Daniel Hafner for data cleaning and Ricardo Vivanco for support in data visualization. Finally, we would like to acknowledge the active engagement and partnership by CASA and Luminis Health, and express our appreciation for funding by UNIDOSUS.
REFERENCES


LOCATION OF EVENTS WHERE DATA WAS COLLECTED
APPENDIX

GENDER SEGMENTATION

Stratifying survey responses by self-identified gender provided notable results. As only one respondent identified as “transgender/gender non-conforming” comparisons were limited to respondents identifying as male or female for clarity. It should also be noted that men were more likely (74.2%) to have been interviewed at an event featuring vaccination than women (57.7%).

Male respondents were older overall (45.3% over the age of 40 compared with 35.7% of women over the age of 40), had a higher level of English proficiency (57.3% of men had at least basic proficiency and 27.8% had intermediate or advanced proficiency, compared with 47.8%, and 22.7% of women, respectively), and were more likely to be uninsured (69.1% compared with 60.5% of women).

BARRIERS TO VACCINATION BY GENDER

The top three barriers to vaccination identified by men included not having confidence in the vaccine (32.0%), being unable to miss a day of work to get vaccinated (23.7%), and insufficient information in Spanish (20.4%).

For women, the top three barriers included not having confidence in the vaccine (40.6%), insufficient information in Spanish (15.4%), and being unable to miss a day of work to get vaccinated (11.2%).

Within the sample, 85.3% of men and 88.1% of women reported a single dominant factor for why they have not yet been vaccinated. As respondents reporting multiple factors did not specify which of their responses were most important, the following analysis categorized respondents who have provided multiple responses as “Multiple Answers” to improve the ability to identify which factors had the greatest influence on the decision to not get vaccinated.

Among men identifying one main barrier, the top three identified included not having confidence in the vaccine (25.7%), being unable to miss a day of work to get vaccinated (16.8%), and insufficient information in Spanish (13.2%).
For women, the top three included not having confidence in the vaccine (34.6%), insufficient information in Spanish (9.8%), and being unable to miss a day of work to get vaccinated (9.1%).
The top three factors that helped or motivated men to get vaccinated included the convenience of the mobile clinic (19.1%), familiarity with the vaccination site (13.7%), and the assistance of a family member to register for a vaccine appointment (13.4%).

The top three factors that helped or motivated women included family motivation (18.5%), concern for personal health (17.0%), and the convenience of the mobile clinic (16.3%).

Within the sample, 81.8% of men and 80.4% of women reported a single dominant factor that helped or motivated them to get vaccinated.

Among men identifying one main motivating factor, the top three identified included the convenience of the mobile clinic (17.9%), familiarity with the vaccination site (10.6%), and the assistance of a family member to register for a vaccine appointment (9.1%).
For women, the top three single factors included the convenience of the mobile clinic (14.8%), concern for personal health (10.7%), and family motivation (9.3%).
VIDEO ON ADDRESSING BARRIERS TO VACCINATION

To view video go to: https://www.youtube.com/watch?v=TW82nUwS22c or scan QR code below.