HHS Public Access

Author manuscript

J Public Health Manag Pract. Author manuscript; available in PMC 2024 January 01.

Published in final edited form as:

J Public Health Manag Pract. 2023 ; 29(4): 539–546. doi:10.1097/PHH.0000000000001688.

Experiences of Health Departments on Community Engagement and Implementation of a COVID-19 Self-testing Program

Christi Lane-Barlow, MSc[1,2], **Isabel Thomas, MPH**[1,3], **Libby Horter, MPH**[1,2], **Jamilla Green, DrPH**[1], **Ramona Byrkit, MPH**[1], **Krishna Juluru, MD**[4], **Andrew Weitz, PhD**[4], **Jessica N. Ricaldi, MD, PhD**[1], **Rachael Fleurence, PhD**[4], **Diana Valencia, MSc**[1]

[1]CDC COVID-19 Response Team

[2]Goldbelt C6, LTD, Chesapeake, Virginia

[3]Oak Ridge Institute for Science and Education, Oak Ridge, Tennessee

[4]National Institutes of Health

Abstract

Context—Health departments (HDs) work on the front lines to ensure the health of their communities, providing a unique perspective to public health response activities. Say Yes! COVID Test (SYCT) is a U.S. federally funded program providing free COVID-19 self-tests to communities with high COVID-19 transmission, low vaccination rates, and high social vulnerability. The collaboration with nine HDs, was key for the program distribution of 5.8 million COVID-19 self-tests between March 31–November 30, 2021.

Objective—The objective of this study is to gather qualitative in-depth information on the experiences of HDs with the SYCT program to better understand the successes and barriers to implementing community-focused self-testing programs.

Design—Key informant (KI) interviews

Setting—Online interviews conducted between November–December 2021.

Participants—Sixteen program leads representing nine HDs were purposefully sampled as KIs. KIs completed 60-minute structured interviews conducted by one trained facilitator and recorded.

Main Outcome Measures—Key themes and lessons learned were identified using grounded theory.

Results—Based on perceptions of KIs, HDs that maximized community partnerships for test distribution were more certain that populations at higher risk for COVID-19 were reached. Where the HD relied predominantly on direct-to-consumer distribution, KIs were less certain that communities with higher risk were served. Privacy and anonymity in testing were themes linked to higher perceived community acceptance. KIs reported that self-test demand and distribution levels increased during higher COVID-19 transmission levels.

Corresponding author: Diana Valencia ile9@cdc.gov.

Conclusion—HDs that build bridges and engage with community partners and trusted leaders are better prepared to identify and link high-risk populations with health services and resources. When collaborating with trusted community organizations, KIs perceived that the SYCT program overcame barriers such as mistrust of government intervention and desire for privacy, and motivated community members to utilize this resource to protect themselves against COVID-19.

Keywords

COVID-19 self-test; local health departments; social vulnerability; community partners; qualitative study

INTRODUCTION

Health departments (HDs) provide a unique perspective to public health response activities. HDs serve on the frontlines providing essential services and resources to the communities they serve, either directly or through collaboration with community partners. Say Yes! COVID Test (SYCT) is a program that was implemented by U.S. federal health agencies along with academic and private sector partners, in collaboration with HDs. SYCT provided 5.8 million free rapid antigen COVID-19 self-tests to residents in selected jurisdictions experiencing a surge, to help reduce COVID-19 community spread.[1] The National Institutes of Health (NIH) in collaboration with the Centers for Disease Control and Prevention (CDC) launched three phases of the SYCT program between March and November 2021, when self-tests were not widely available on the U.S. market.[2, 3] Criteria for selection of the jurisdictions included a surge in COVID-19 transmission, larger population size, low vaccination rates, ethnic or racial diversity, and high social vulnerability*. [see Supplemental Figure and Table for context of HD SYCT implementation]

HDs were then responsible for identifying communities of interest within their jurisdictions (e.g., populations with higher social vulnerability index (SVI), lower vaccination rates)[4], managing program scope, identifying and communicating with local partners for community distribution of self-tests, performing inventory of test distribution, reviewing of educational materials, preparing press releases, communicating with media, and conducting media campaigns.

Positive public opinion has been indicated regarding socially inclusive COVID-19 testing technologies and guidelines.[5] Common barriers to testing include access, concerns about consequences of positive results, logistical issues such as transportation to testing sites, and uncertainty around eligibility for testing.[5–8] High SVI has been associated with increased risk for COVID-19, and differences in testing motivation have been found across race/ethnicity, education levels and by socioeconomic status.[9, 10] National strategies implementing home-based, high-frequency self-testing have been predicted to improve COVID-19 pandemic control[11, 12], and jurisdictional and community-supported testing

*Social Vulnerability Index (SVI) is a CDC measure at the county-level based on 15 census variables grouped into 4 themes (socioeconomic status, household composition and disability, minority status and language, and housing type and transportation) and calculated as a composite rank score to measure a county's social vulnerability (ability to prevent human suffering and financial loss in a disaster). CDC/ATSDR Social Vulnerability Index (SVI)

programs for COVID-19 have been associated with increased testing in populations at higher risk for the disease.[13, 14] The objective of this study is to gather qualitative in-depth information on the experiences of HDs with the SYCT program to better understand successes and barriers to implementing community-focused self-testing programs.

METHODS

Design

Using purposive sampling, invitations to participate as key informants were extended to primary contacts representing the HDs in the 9 jurisdictions participating in the SYCT program between March 31–November 30, 2021. Video conference interviews were scheduled for 60–90 minutes with each participating HD. A structured interview guide following four high-level subject areas was developed by the study team, and pilot-tested internally with a CDC audience, resulting in a final interview guide with minimal changes which was utilized for this study (see Supplementary file). Consistency was maintained by employing the same facilitator to conduct all interviews, which were recorded and then transcribed by the study team.

All key informants (KI) provided verbal consent for the recording of the interviews with the assurance that their comments or quotes would not be linked to specific people or locations. This activity was reviewed by CDC and was conducted consistent with applicable federal law and CDC policy.[‡]

Setting

Interviews with HD KIs (one call per HD) were conducted using Microsoft Teams.

Participants

KIs were project and communication leads from HDs who agreed to participate in this capacity. An e-mail invitation was sent by the principal investigator of this study to all HDs that had participated in the SYCT program requesting a convenient time and date for an interview with one or more members of their team.

KIs received no compensation for their interviews.

Data Analysis

The transcription and coding of results were completed in Microsoft Excel following the high-level grouping below, with transcription aligned to each of the questions in the interview guide. Responses were placed in order of the questions in the guide, regardless of when in the discussion the KIs responded to the question. The interview was guided by the following topline summary topics:

1. **Community of Interest** i.e., the population considered by the HD to be at higher risk for COVID-19 and expected to benefit most from the program.

[‡]45 C.F.R. part 46, 21 C.F.R. part 56; 42 U.S.C. Sect. 241(d); 5 U.S.C. Sect. 552a; 44 U.S.C. Sect. 3501 et seq

2. **Planning, Strategy, Operationalizing** including coordination with sponsor, study team and HDs goals and objectives, time and effort, and staffing.
3. **Community Implementation Partnerships** specifically community partners identified to help with implementation, existing vs. new partners, their expected contribution, program structure, and how such partnerships operated.
4. **Lessons Learned** including successes, failures, sustainability.

Using grounded theory techniques, identification of themes and sub-themes within and across the responses was completed independently by all team members.[15, 16] A schematic summary was created to facilitate organization of the results. Key quotes were extracted from the interview recordings to further clarify KIs' positions.

RESULTS

Characteristics of KIs

Sixteen KIs participated in the interviews and included SYCT program and communication leads representing HDs in 8 of the 9 jurisdictions participating in the SYCT program. Structured interviews were conducted independently with each HD from November 22 through December 16, 2021, with 1–3 KIs per interview. The structured interviews lasted 60–75 minutes.

Themes identified from KIs interviews

Four key themes were distilled from the KI responses and mapped to the sequential process of implementing the program: 1) Identifying Communities of Interest, 2) Mobilizing Community Partners, 3) Translating Learnings to Action, and 4) Closing Gaps and Improving Access; Figure 1 provides a schematic linking key themes. The first step in implementation was identifying populations and reaching selected communities. The next step was to expand communication via networking and media to mobilize community partners. Through iteration, lessons learned were translated into process improvements, which allowed closing of gaps (knowledge, process, logistical), and improved access to tests. Community-level engagement bolstered public health perceptions within the communities targeted by this program and allowed greater access to self-tests as the cycle continued.

Identifying communities of interest

All programs focused on specific zip codes in urban settings with high population density and acted through community partners to reach populations at higher risk for COVID-19 (except for New Hampshire, which reached out to the entire state). One KI shared that they were:

> "Reaching out to marginalized communities that had higher rates of COVID-19 infection and lower rates of vaccinations…SYCT was an initiative that was presented to us that fit very nicely with what we were already trying to do."

Specific channels, including schools, faith organizations, and shelters, were used to distribute self-tests to their populations. According to interviews, in county-level programs, outreach to selected communities worked well, with community partners receiving and

distributing self-tests within their networks. Programs launched in large geographical areas (i.e., New Hampshire) experienced limitations for reaching some communities, as there was no funding for delivering kits to community partners. Some communities, such as persons experiencing homelessness, were identified as difficult to reach. This motivated some HDs to expand their network of community partners to reach the most local "grassroots" levels. KIs identified rural communities, school populations, and ethnic minority groups as communities that needed more lead time to prepare appropriately translated and targeted information. Some HDs had no experience in trying to reach communities through intermediary organizations, and therefore needed more time to build their network of community partners. A KI stated:

> "*Some of the groups* [community partners] *that we normally work with are not necessarily the folks who would most benefit in those zip codes*. [We had] *to reach down to another layer* [of community partners] *to try to target those who probably are a better resource to get to the community that we were trying to reach."*

For these HDs, additional work needed to be done before they could begin the program in their selected communities.

Mobilizing community partners

HDs engaged with a wide range of community-based organizations serving specific groups, including religious organizations. They also partnered with private businesses such as *tiendas*, *bodegas*, or other ethnically oriented shops; employers; and with community institutions, such as schools, Federally Qualified Health Centers (FQHCs), libraries, YMCAs, firehalls and other geographically appropriate services. In addition to physical distribution through known community locations, some community partners used events such as races, farmers markets, and Thanksgiving food pantry baskets to distribute test kits to the public. In some locations, public health nurses, social workers and public officials went door-to-door providing information on COVID-19 as well as free test kits. Community partners also acted as a conduit for social media broadcasts and e-mailed information about the availability of tests to be ordered online or picked-up directly at events or physical locations.

The community partners' most critical role was as a trusted intermediary with grassroots connections to the communities with greatest need. A KI shared:

> *"We were able to learn and bridge and strengthen a relationship with our* [redacted] *community by working on this program, so we were able to develop a stronger relationship with that community partner and develop the relationship and understanding that we are here to help."*

Through close collaboration with community partners, HDs were able to overcome multiple barriers, including language barriers and online ordering barriers by utilizing a hotline and door-to-door canvassing to aid in test kit ordering for those unable to access the program website.

The most effective community partners had a community engagement plan and already had followers via their social media accounts, mailing lists, and membership lists and were

effectively linked to their grassroots communities. They were also a source of feedback, including anecdotes and ground-truthing, to the HDs. Creating trust through partners engaged with the community was explained by one KI:

> "These were folks that were in unvaccinated communities where we were really trying to help create that bond of trust in hopes that one day they will trust us to vaccinate…We knew that they were a source for them for some need, whether it was food or social or mental support…they were gatekeepers, if you will."

FQHCs were highly efficient distributors of test kits and functioned well as a cohesive network within their county, unlike other systems such as schools, where there was less facile communication between locations and limited ability to share and disseminate information to their staff, students, and families. One HD focused predominantly on distribution through large employers and churches and may not have been able to reach some populations at higher risk for COVID-19 who are unemployed and not part of a congregation. Some locations, like shelters, indicated that they had other sources for testing within their networks.

The variety of communication channels used was extensive and highly creative, employing social media influencers, social media pages, website links, press releases in both English and Spanish, local radio, national and local television, print, billboards, bus stops, and screens on gas pumps, among others. Some KIs participated in live TV interviews or live demonstrations and had high-level support from their government leaders. Links for online test ordering were included on community partner, HD, and other government websites. Members of the media showed interest in the program, and coverage was overwhelmingly positive and supportive. HDs routinely had a telephone helpline available that could assist with ordering kits and answering requests for information on quarantine and isolation. In some locations, word of mouth was all that was required to ensure community members were aware of and could take advantage of the free self-tests. In other locations, Facebook, WhatsApp groups or influencers were used to conduct outreach to specific age groups and ethnicities.

Anecdotal responses from KIs indicate that interactive media such as influencers, live demonstrations on TV, and live media coverage of events garnered the greatest response. One KI noted that their go-to methods of media were not enough, and that they needed to expand their modes of communication:

> *"I think we are changing from normal* [media]…*newspaper, radio, and websites, we are just moving more towards social media and things like that. I think* [social media] *definitely helped us see avenues to try to better communicate with communities that may not have access to* [traditional media sources] *things."*

Translating learnings to action

The methods of distribution offered both advantages and disadvantages. Direct to consumer (DTC) distribution was convenient for those able to access the internet in English or Spanish, and those who did not mind providing their name and address for shipment. This method was free of charge and did not require action by the HD. Some KIs indicated that

they had received feedback on DTC distribution issues from program participants, relaying delays in delivery and that delivered kits lacked instructions about the program, requiring participants to return to the website to understand what was expected. The DTC websites restricted test allocation based solely on zip code. Telephone helplines established by HDs assisted people who could not access online ordering systems and otherwise would have been excluded.

Distribution to community members, whether through organizations or at events, had varying degrees of reach and in some cases had prohibitive cost. KIs mentioned that it was more efficient to distribute COVID-19 self-test kits than to manage testing clinics in terms of reach and durability of testing capacity. HDs without shipping support for bulk distribution relied on community partners to pick up their kits at a central location. Once kits were delivered to community partners, kits were provided to anyone who requested them without requiring any confirmation on whether they lived in a community at higher risk for COVID-19. Registration and identification were not required to receive the tests, thereby allowing the recipient greater privacy and anonymity.

According to KIs, daily inventory of distribution was burdensome. HDs switched to weekly accounting, or simply accounting for the number of overall kits distributed to community partners. Daily accounting for distribution through community partners was described as a barrier:

> *"That* [daily update] was *… painful. We're still struggling with that. They were excited to give* [test kits] *away, but I think in terms of, because they were not physically handing them out like our locations, it has been interesting trying to describe what the numbers are and how they got distributed. That is something that we are still trying to get right. That is … one of the reasons why we did not have them distribute it from so many locations just because of the responsibility of trying to track that information was a lot."*

KIs mentioned that HD staff were overwhelmed and did not have time to learn the program details, and the inventory reporting requirements were considered onerous for those that relied on community distribution, rather than DTC ordering from a website. Regarding staff burden, one HD shared:

> "We had our network of folks that were helping distribute, but even the groups that we had, you just need higher number of staff and resources, a bit more of a commitment to do it, because it is an extra thing that people have to do."

In some locations, competing initiatives such as vaccine/booster drives made staffing and management of community partners an overwhelming burden for HDs.

Closing gaps and improving access

Once SYCT program participants realized the test kits were free and available for use at their own convenience, in the privacy of their own home, and without mandatory reporting, response levels improved. A common response from KIs was that there was a learning curve. A KI said:

> *"I don't think there was a great understanding at first…that you can take* [the test] *at home, do it at home, in the privacy of home, 10 minutes* [to obtain results] *…towards the tail end there was a lot more understanding in that."*

Some KIs felt that the program expectation, of testing two to three times weekly, regardless of symptoms over a 4-week period was not realized. However, the KI believed that the tests were useful as a prevention strategy, particularly when people made plans to visit relatives who were at high-risk for COVID-19 or wanted to know their COVID-19 status prior to or returning from travel. One KI shared:

> *"We know people held onto* [test kits] *to test only when they felt they've been exposed…many, many people used it as a safeguard 'I'm going on a trip, I'm going to somebody's house, I'm afraid, you know, I want to make sure I'm not infectious…we do know that many people were hoarding these and testing when they had symptoms or thought they had been exposed."*

Regarding how the program could be improved, KIs recommended continued access to at-home testing. This could be sustainable with financial support for physical distribution, and continued engagement of community partners, HDs desired to see this program expanded to reach rural populations and communities who did not participate previously:

> *"We wanted to cover the urban, rural, and sort of everybody in between. I think in a lot of ways, even though our distribution sites were in the city, this is a small city, and people from outside* [redacted] *within the county also got kits."*

DISCUSSION

Staff from participating HDs felt the program had a positive influence on their communities, and that their efforts were worthwhile contributions in support of community education, behavior, and attitudes toward the HD response to COVID-19. The HDs with existing relationships with community outreach organizations reaped the benefits of their early groundwork in relationship building, while those with less familiarity with community outreach organizations and their competencies had to quickly ramp up to find and vet organizations with deep community ties, which posed challenges to quickly implementing the program. Some HDs that did not partner with community organizations, or for whom those channels were too costly, slow, or time-consuming, still had good success at reaching people through DTC ordering on websites.

To effectively reach populations at higher risk for COVID-19, and ultimately affect behavioral change, HDs could work through their grassroots community agencies and trusted intermediaries, including non-English media companies, religious organizations, and local retailers.[17] Collaborating with these community partners to explore and understand the challenges and barriers to health within populations at higher risk for COVID-19 will help HDs engage more effectively with their communities of interest and reach the least-served parts of the population. Mapping out the intersectionality of their population, and the overlapping points of contact with sub-populations, adds layers of exposure to messaging.[18, 19] A summary of lessons learned from SYCT is shown in Table 1.

Despite the acknowledged value in community engagement for emergency preparedness, mandates and capacity for community engagement have not increased significantly.[20, 21] By devoting resources to exploring and expanding the relationships between communities and their partners, HDs can close the gaps in communication and mobilize the most effective solutions to reach specific populations based on their unique characteristics including geography, language, age group, gender, cultural and religious identity, and possibly political ideology.[18, 22, 23] Distribution through DTC online ordering systems may reach significant numbers in a given population, but risks leaving out those without digital access because of age, socio-economic disadvantage, language skills, lack of internet access or mailing locations. The populations with higher risk for COVID-19 may in fact be the furthest from digital access.[24] The desire for privacy and anonymity in testing made the self-tests particularly suitable. Awareness of this strong desire for privacy amongst some communities may be a consideration for future mass-testing. Improvement in message testing is needed to avoid future circumstances where trust in the messaging of health agencies at local, state, federal, and global levels is unequally shared by populations. Additionally, the most impactful messaging is sensitive to cultural and community barriers and is delivered through partnerships with trusted intermediaries who are well-known in their respective communities.

The findings of this study are subject to several limitations. First, many of the insights provided by HDs were based on their perceptions rather than specific data on community distribution or specific program objectives. They were therefore providing opinions rather than facts about the uptake and acceptance of this program. This study did not examine reach, attitudes, or effectiveness of the testing program from the perspective of the community or community partners. Second, several months had passed between the completion of the first five SYCT programs and the KI interviews. There may therefore have been differing levels of recall bias across the phases of the program. Third, the qualitative nature of this work subjects the interpretation of the results to the perspectives and experience of the researchers. As employees and contractors to NIH and CDC, the ability of the authors to remain impartial is limited. Most of the study team was not involved directly with the SYCT program, and every effort has been made to accurately reflect what was said by the KIs by recording and transcription. Lastly, the awareness by KIs that CDC was conducting the interviews may have created sponsor bias in their responses.

The SYCT program included a small number of jurisdictions, which may not be representative of the experiences of all U.S. HD jurisdictions. Perhaps with larger numbers of SYCT programs, additional approaches and efficiencies would have been identified. KIs from 8 of the 9 programs were interviewed, and their experiences provide a comprehensive and candid perspective of the involvement of HDs in this self-testing program.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

County, Local and State Health Departments; Alicia Dunajcik[1], Tomi Ademokun[1], Caroline Bennett[1], Charles Braxton[1], Denise Sheriff[1], Laura Hill[1], Rebecca Sabo[1], Rieza Soelaeman[1].

Disclosure of Funding:

The author(s) received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

1. Ciccone EJ, Conserve DF, Dave G, et al. Correction to: At-home testing to mitigate community transmission of SARS-CoV-2: protocol for a public health intervention with a nested prospective cohort study. BMC Public Health. Jan 21 2022;22(1):151. [PubMed: 35062914]
2. Kepczynski CM, Genigeski JA, Koski RR, Bernknopf AC, Konieczny AM, Klepser ME. A systematic review comparing at-home diagnostic tests for SARS-CoV-2: Key points for pharmacy practice, including regulatory information. J Am Pharm Assoc (2003). Nov-Dec 2021;61(6):666–677 e662.
3. Jaklevic MC. Molecular COVID-19 Test Gains First EAU for At-home Use. JAMA. Apr 20 2021;325(15):1499.
4. Mackey K, Ayers CK, Kondo KK, et al. Racial and Ethnic Disparities in COVID-19-Related Infections, Hospitalizations, and Deaths : A Systematic Review. Ann Intern Med. Mar 2021;174(3):362–373. [PubMed: 33253040]
5. Bevan I, Stage Baxter M, Stagg HR, Street A. Knowledge, Attitudes, and Behavior Related to COVID-19 Testing: A Rapid Scoping Review. Diagnostics (Basel). Sep 15 2021;11(9).
6. Boum Y, Eyangoh S, Okomo MC. Beyond COVID-19-will self-sampling and testing become the norm? Lancet Infect Dis. Sep 2021;21(9):1194–1195. [PubMed: 33857408]
7. Rubin R. COVID-19 Testing Moves Out of the Clinic and Into the Home. JAMA. Oct 12 2021;326(14):1362–1364. [PubMed: 34550303]
8. Atchison C, Pristera P, Cooper E, et al. Usability and Acceptability of Home-based Self-testing for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Antibodies for Population Surveillance. Clin Infect Dis. May 4 2021;72(9):e384–e393. [PubMed: 32785665]
9. Perry BL, Aronson B, Railey AF, Ludema C. If you build it, will they come? Social, economic, and psychological determinants of COVID-19 testing decisions. PLoS One. 2021;16(7):e0252658.
10. Oates GR, Juarez LD, Horswell R, et al. The Association Between Neighborhood Social Vulnerability and COVID-19 Testing, Positivity, and Incidence in Alabama and Louisiana. J Community Health. May 9 2021.
11. Paltiel AD, Zheng A, Sax PE. Clinical and Economic Effects of Widespread Rapid Testing to Decrease SARS-CoV-2 Transmission. Ann Intern Med. Jun 2021;174(6):803–810. [PubMed: 33683930]
12. Zai AH, Caffrey M, O'Brien CS, Jiang D, Kanyat R, Silacci S. The Implementation and Acceptability of a Combined Mobile Application with a COVID-19 at-Home Test Kit. Telemed J E Health. Dec 13 2021.
13. Baker DR, Cadet K, Mani S. COVID-19 Testing and Social Determinants of Health Among Disadvantaged Baltimore Neighborhoods: A Community Mobile Health Clinic Outreach Model. Popul Health Manag. May 24 2021.
14. Hernandez JH, Karletsos D, Avegno J, Reed CH. Is Covid-19 community level testing effective in reaching at-risk populations? Evidence from spatial analysis of New Orleans patient data at walk-up sites. BMC Public Health. Apr 1 2021;21(1):632. [PubMed: 33789647]
15. Glaser BG, Strauss AL The discovery of grounded theory: strategies for qualitative research. New York: Aldine de Gruyter; 1967.
16. Charmaz K. Constructing grounded theory: a practical guide through qualitative analysis. Thousand Oaks, CA: SAGE; 2012.

17. Merzel C, D'Afflitti J. Reconsidering community-based health promotion: promise, performance, and potential. Am J Public Health. Apr 2003;93(4):557–574. [PubMed: 12660197]

18. Tan NQP, Cho H. Cultural Appropriateness in Health Communication: A Review and A Revised Framework. J Health Commun. 2019;24(5):492–502. [PubMed: 31132946]

19. Kreuter MW, McClure SM. The role of culture in health communication. Annu Rev Public Health. 2004;25:439–455. [PubMed: 15015929]

20. Schoch-Spana M, Nuzzo J, Ravi S, Biesiadecki L, Mwaungulu G Jr., The Local Health Department Mandate and Capacity for Community Engagement in Emergency Preparedness: A National View Over Time. J Public Health Manag Pract. Jul/Aug 2018;24(4):350–359. [PubMed: 29283954]

21. Schoch-Spana M, Ravi S, Meyer D, Biesiadecki L, Mwaungulu G Jr., High-Performing Local Health Departments Relate Their Experiences at Community Engagement in Emergency Preparedness. J Public Health Manag Pract. Jul/Aug 2018;24(4):360–369. [PubMed: 29084119]

22. Fawcett S, Schultz J, Watson-Thompson J, Fox M, Bremby R. Building multisectoral partnerships for population health and health equity. Prev Chronic Dis. Nov 2010;7(6):A118. [PubMed: 20950525]

23. Mays GP, Scutchfield FD. Improving public health system performance through multiorganizational partnerships. Prev Chronic Dis. Nov 2010;7(6):A116. [PubMed: 20950523]

24. Chang BL, Bakken S, Brown SS, et al. Bridging the digital divide: reaching vulnerable populations. J Am Med Inform Assoc. Nov-Dec 2004;11(6):448–457. [PubMed: 15299002]

Implications for Policy & Practice

- Through efforts to increase community level awareness, self-administered public health interventions using direct-to-consumer distribution methods can have greater reach and acceptance within communities at higher risk for COVID-19 and other emerging public health concerns.
- By investing time and effort in partnerships between health departments, trusted leaders and organizations serving communities at higher risk, health promotion practitioners can more readily support public preparedness. The communities' confidence in the message may be impacted by the messenger.
- Engaging communities through tailored language, media type and location increase the exposure of high-risk communities to messaging and helps them more rapidly accept messages and respond with behavior change or other mitigation efforts.

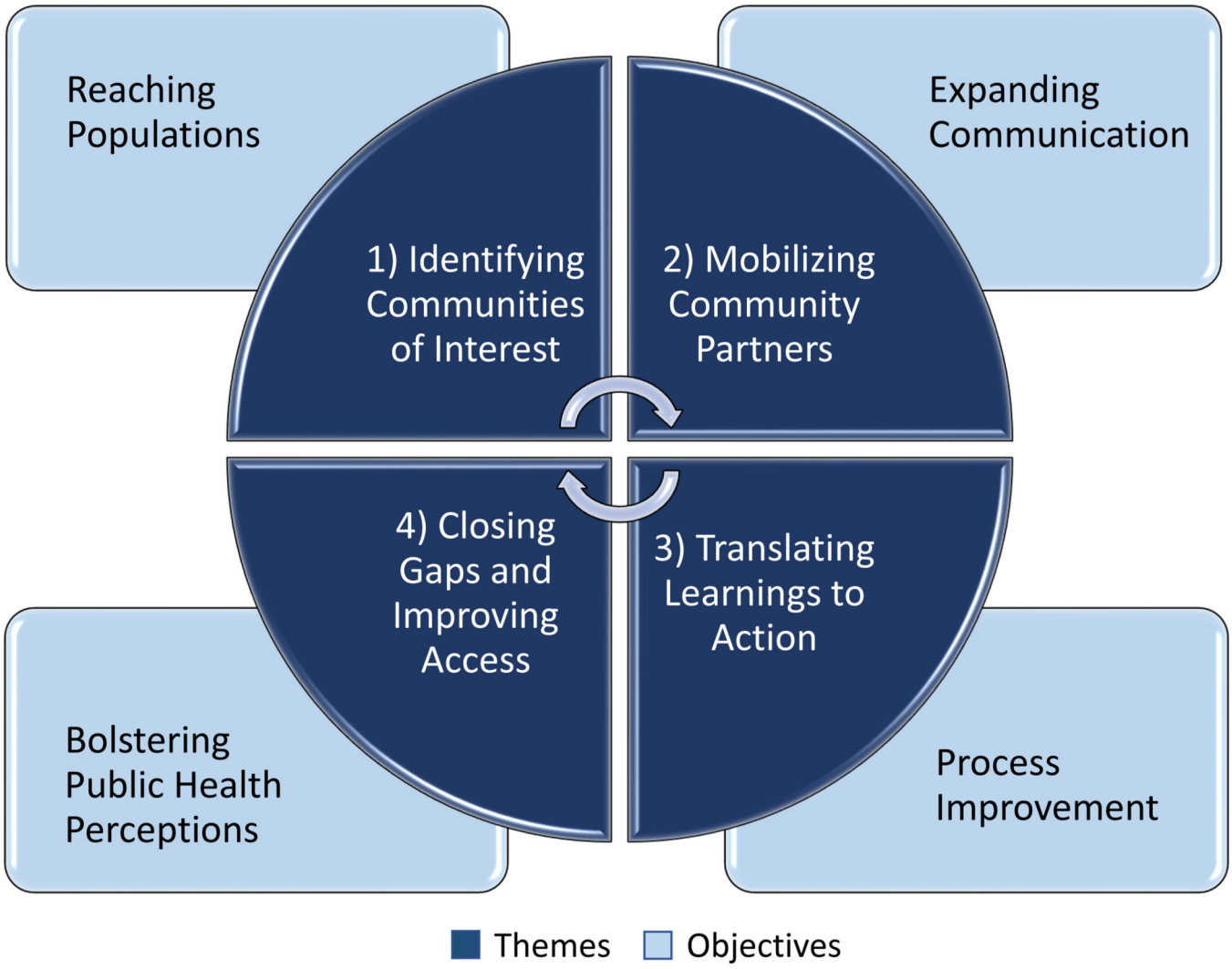

Figure 1.
Health Department Experience With Say Yes! COVID Test: Themes and objectives identified from key informant interview

Table 1.

Learnings for Future Programs

1. HD benefit by continuously building relationships with community partners as part of their routine public health activities as there was not enough time to build new bridges during rapid implementation of programs during an emergency response.
2. Some community groups resisted this program until more clarity was obtained. Ensuring transparent, easily understood communication is essential to success.
3. More translation support is needed to reach populations at higher risk for COVID-19 beyond Spanish; the languages and dialects of the communities of interest should be considered in development of program materials.
4. Some community groups could not participate in this program without any financial support for events and transportation to pick up test kits.
5. DTC distribution offered turn-key implementation for HDs, but there was uncertainty whether communities at higher risk for COVID-19 were reached.
6. There is more perceived efficiency in distributing COVID-19 self-test kits than in managing testing clinics in terms of reach and durability of testing capacity but testing results were not readily available to HDs.
7. Competing initiatives, such as vaccine and booster rollouts, can be too large a burden for the HD to manage simultaneously, so ensuring integration with other programs, or providing paid surge staff support may be needed.
8. The desire for privacy and anonymity in testing and reporting results was a highly desired feature of this program.
9. Expanding the program across jurisdictions to reach more populations with higher risk for COVID-19 would improve disease mitigation efforts.
10. The lessons learned from program planning and implementation offer tips for useful process improvement for future programs where community mobilization is needed to extend the reach and acceptance of public health programs.