Are People Hesitating—Or Just Postponing—to Get the Covid-19 Vaccine? Vaccine Outreach in Marginalized Urban Communities

Lauren Kogen¹, Deborai A. Cai¹, Cornelius Pitts¹, Patricia Imms², Mitch Perkins¹, and Kathleen Reeves¹

Abstract
Across Philadelphia, approximately 80% of adults are fully vaccinated against Covid-19. However, many zip codes in the city remain far below the city-wide vaccination rate. These zip codes correspond to marginalized sections of the city and to neighborhoods with a high proportion of residents of color and high levels of poverty. In-depth interviews were conducted with representatives from 15 community-based organizations (CBOs) that serve such communities in the city to (1) learn why people are not yet vaccinated and (2) evaluate methods for encouraging vaccination. A qualitative thematic analysis of interview transcripts was conducted to evaluate why people are not getting vaccinated. Together, the findings suggest that distrust toward the vaccine, the government, and the healthcare system, combined with a host of matters considered by residents to be more urgent—such as missing work, cost concerns, and concerns around presenting identification—result in what might be better described as vaccine postponement rather than vaccine refusal. For many, vaccination is simply not a priority. The findings from this analysis illuminate some of the lesser discussed reasons for vaccination delay and provide insights into how to promote vaccinations both for the current Covid pandemic and for future vaccination efforts.

¹Temple University, Philadelphia, PA, USA
²Miriam Medical Clinics, Philadelphia, PA, USA

Corresponding Author:
Lauren Kogen, Klein College of Media and Communication, Temple University, 2020 N. 13th St., Philadelphia, PA 19122, USA.
Email: Lauren.Kogen@temple.edu
The global Covid-19 pandemic has already claimed over six million lives globally (BBC News, 2022) and over one million lives in the United States (Centers for Disease Control, 2022). Vaccinations have been shown to be highly effective in curbing the spread of the disease, including variants, reducing the likelihood of severe disease effects, hospitalization, and death (Centers for Disease Control, 2021; Iuliano et al., 2022).

However, despite the overall success of vaccines in reducing severe complications from Covid-19, many people living in the United States remain hesitant to get vaccinated (Laughlin & Lai, 2021). The reasons for hesitation are varied and complex; they include skepticism due to historical injustices within the American healthcare system (Lozano, 2020), distrust of current political institutions (Lerer, 2021), as well as a variety of beliefs regarding the speed in which the vaccine was developed, the efficacy of the vaccine, the risk of side effects, and the perceived threat of Covid-19 itself.

Vaccination rates in the city of Philadelphia have been greatly affected by vaccine hesitancy. Many zip codes in the city are far below the city-wide vaccination rate of 74% for those aged 12 and older (City of Philadelphia, 2022). These zip codes correspond to marginalized sections of the city and to neighborhoods with a high proportion of residents of color and high levels of poverty. People living within many zip codes still have vaccination rates under 60% and more than half of the residents in many of these regions live in poverty (compared to the city-wide poverty level of 23%) (U.S. Census Bureau, 2019).

To support its effort to increase vaccination rates in these neighborhoods, The Lewis Katz School of Medicine at Temple University received a grant from the City of Philadelphia’s Department of Public Health (PDPH) with Federal Emergency Management Agency (FEMA) funds from the U.S. government beginning April 2021. The School of Medicine later recruited faculty members from the Klein College of Media and Communication at Temple University to help with outreach efforts and to design tailored campaigns to reach diverse communities across Philadelphia with vaccination clinics.

This study will describe the results from in-depth interviews conducted among North Philadelphia community partners for two purposes: understanding hesitancy and developing plans for vaccination campaigns. These results are compelling because, although data collection relates to particular neighborhoods within Philadelphia, themes derived from this research suggest that the lessons learned are useful for developing strategies elsewhere that recognize and address societal issues fundamental to present and future vaccination hesitancy.
Overall, recommendations resulting from these community interviews focus on vaccine postponement, safety concerns, and a lack of trust. First, although current media narratives around vaccine hesitancy focus on “anti-vaxxers” who refuse vaccination, our findings suggest that many people are not completely opposed to vaccination but rather delay vaccination for several reasons. In marginalized communities, higher priority may be placed on other daily challenges people face. Second, although narratives around vaccine hesitancy emphasize a general distrust of government, our findings add nuance to this generalization, including an appreciation for the legitimate fear of government expressed by many.

Background and Theoretical Framework

Vaccine hesitancy has been a popular topic in the U.S. news media since the Covid-19 vaccines were first approved. However, the term vaccine hesitancy has evolved to have two quite distinct meanings. This term has, at times, referred specifically to concerns around vaccine safety, such as how quickly the vaccines were developed, or risks of potential side effects, or beliefs that the dangers of the Covid-19 virus are exaggerated (Karni & Kanno-Youngs, 2021). One reason for vaccine hesitancy is associated with vaccine safety: This aspect of vaccine hesitancy is a general distrust of the medical establishment. The most often cited historical episode linked with this distrust is the Tuskegee Experiment (Aslan & Wanamaker, 2016). This event and others have had a major negative impact on the relationship communities of color have with healthcare and governmental systems.

A second understanding of vaccine hesitancy is rooted in material concerns. This aspect has received much less attention in the press: vaccination delay may result from lack of access to vaccine clinics, concerns about missing work, and concerns about having to provide identification (Feldman, 2021). These barriers have little relation to vaccine safety but are consequential to the marginalization of communities without adequate resources.

These two narratives have been used to explain low vaccination rates in high-poverty regions or neighborhoods with high proportions of residents of color. In Philadelphia—the location of the current project—the five zip codes with the lowest vaccination rates (Laughlin & Lai, 2021) have high poverty (four of the five zip codes have median household incomes between $30,633 and $37,345) and a high proportion of Black residents (80–91%) (U.S. Census Bureau, 2019). Within these types of neighborhoods, the distrust narrative has been widely used to explain why residents might be reluctant to get the vaccine (Laughlin & Lai, 2021), especially referencing historical mistreatment within the U.S. healthcare system.

To be sure, distrust regarding the safety of the vaccine and the healthcare institutions that administer them exist. But other types of barriers have received far less attention. Tom Frieden (2021), former director of the U.S. Centers for Disease Control, posited that “most of the people who are not yet vaccinated aren’t strongly opposed to being vaccinated, they just haven’t had the vaccine be as convenient as it should be.”
Frieden argued that the focus on vaccine hesitancy, defined as distrust often fueled by misinformation, has been featured prominently in the news media because of how politicized the vaccine has become in the United States.

These two understandings of vaccine hesitancy—one regarding vaccine safety and one regarding material barriers to vaccination—align with two aspects of Fishbein and Cappella’s (2006) integrative model of behavior, and each suggests different pathways toward vaccination decision making. Fishbein and Cappella’s model posits that *attitudes* and *beliefs* regarding a health behavior (e.g., unfavorable attitudes toward the vaccine) influence an individual’s decision about whether to carry out the behavior, but that even if someone has decided to take on the behavior, *environmental factors*, or other barriers (e.g., lack of proper identification at a vaccination site) may prevent or delay action (p. S2).

These two pathways that lead away from getting vaccinated—one primarily influenced by unfavorable attitudes toward the vaccine and one primarily influenced by environmental barriers that make vaccination difficult—have received uneven attention in both the media and in Covid-19 research to date. Current research provides abundant evidence that the first of these pathways, in particular, beliefs about vaccine safety and efficacy, beliefs about vulnerability, and attitudes toward health and government institutions, is indeed a valid explanation for why some remain unvaccinated (Bass et al., 2021; Latkin et al., 2021; Rane et al., 2022). Less research has been devoted to the second pathway, although some studies have briefly mentioned the need for more convenient vaccination locations and timings (Forman et al., 2021; Peters, 2022; Rutten et al., 2021). Our project seeks to elucidate how these pathways have played out in the North Philadelphia context.

**Method**

The vaccination effort described here began with investigators from the School of Medicine who are researchers and healthcare professionals. These researchers conducted vaccination clinics at the locations of several community-based organizations (CBOs) that work with populations observed to be under-vaccinated at the start of the project. These CBOs included churches, advocacy organizations, and schools.

Although the program, which started in February 2021, had an early period of success vaccinating hundreds of residents per week, by weeks 10 and 11 (June 2021) vaccinations had declined to fewer than 30 per week. At this time, faculty researchers from the College of Media and Communication were asked to assist in the effort to improve outreach to the communities that the organizations served. Figure 1 displays the vaccination trend across these locations over the course of this study.

Between June 2021 and January 2022, [Communication School] researchers conducted in-depth key informant interviews with 15 of the CBOs brought onto the project. All interviewees except two were members of African American, Caribbean, or Latinx communities. Demographic data, such as gender and age of the interviewees, were not collected. Interviewees were leaders within the CBOs, worked directly with
community members, and were experts in their community’s needs. Thus, these individuals were able to serve as primary sources of information about the community’s beliefs and barriers to vaccination. All the organizations serve populations within the targeted low vaccination zip codes (see Table 1).

The goal of these interviews was to understand why these communities continued to have exceedingly low vaccination rates. We made no assumptions about what was causing low vaccination rates and approached the interviews under the belief that no two communities were exactly alike. The main purpose of the interviews was to understand what the interviewees thought were the reasons for low vaccination rates within their community and what strategies they thought may be effective in their community to promote vaccinations. The interviews with the community partner interviewees lasted between 30 and 60 minutes and were conducted via Zoom.

**Data Analysis**

A qualitative thematic analysis (Braun & Clarke, 2006; Joffe, 2012) of the interview transcripts was conducted. Interviews were transcribed and coded for themes using ATLAS.ti. Since we did not enter the project with a priori expectations about attitudes toward vaccination, the transcripts were coded inductively; in other words, we coded comments related to vaccinations as they emerged rather than comparing transcripts against a preexisting hypothesis or coding scheme. The interviews were also coded iteratively: They were revised and recoded until a consistent set of themes regarding reasons for not getting vaccinated and pathways toward vaccination emerged (Bradley et al., 2007).

**Figure 1.** Weekly vaccination rates across community-based organizations in Philadelphia.
Qualitative and inductive coding processes are useful for phenomena in which the researchers seek to understand how or why complex phenomena are occurring without a priori assumption about what is driving human behavior (Braun & Clarke, 2006). This type of data analysis has been shown to be useful in the social sciences, in general, and in the field of health in particular, for understanding complex health-related behaviors (e.g., Joffe and Haarhoff’s 2002 examination of audience understanding regarding Ebola in the 1990s).

**Results**

Themes that emerged from the analysis fall within two broad categories: (1) reasons for delaying vaccination and (2) recommendations for encouraging vaccination. Together, the findings suggest that attitudes toward the vaccine, the government, and the healthcare system, combined with a host of more urgent matters, including environmental barriers, result in what might be better described as vaccine postponement rather than vaccine refusal or hesitancy. According to the representatives we interviewed, many people across the communities are delaying getting vaccinated because they are wary of the vaccine, vaccination is simply not a priority, or both (see Table 2).

**Themes of Postponement**

One of the aims of this analysis was to shed light on competing media narratives regarding whether the main impediment to vaccinations is distrust (attitudes) or inconvenience.
(environmental factors). Our analysis suggests that both barriers were present, but there were not nearly as many vaccine refusers as media narratives suggest. Instead, many people across the communities were delaying getting vaccinated because it was one of several competing life obstacles that ranked low on the list of priorities. Compared to community safety, personal health, work, and family commitments, low urgency was applied to being vaccinated. Interviewees mostly described this population of “postponers” as being in their 20s, 30s, and 40s, and as relatively healthy people who believed that should they contract the virus, they would probably not have severe illness.

**Theme 1: Vaccination is Not a Priority.** Two examples of commentary on low priority follow:

CBO7: People are really consumed by this constant daily struggle. And you see a lot of things past Covid where we had to deal with it every day. Covid is just an added layer, but it’s nothing different than what our communities are used to seeing. . . There’s already a lot of death in our communities. Philadelphia’s homicide rate is extremely high. When you think about things like that, the last thing on that list will be Covid. Because especially at our age, we think, “Okay, we can fight it. I can’t fight a bullet.” So that’s [the types of] conversations I’m having when I talk to people my age.

CBO6: [The last time we went door-to-door] I had one person who was shut down, not getting it, but everyone else who I spoke to who hadn’t gotten it was not opposed, they just hadn’t found a time yet to either take themselves or to take someone else. . . I think

| Table 2. Themes and Sub-Themes From Interviews. |
|------------------------------------------------|
| Themes and sub-themes | # of interviews supporting theme |
| **Themes related to delaying vaccination** | |
| Theme 1: Vaccination is not a priority | 10 |
| Theme 2: Distrust, anger, and resentment | 13 |
| Distrust due to fear and lack of relevant health information | 10 |
| **Themes related to promoting vaccinations** | |
| Theme 3: Build trust | 15 |
| Treat people as intelligent and rational | 12 |
| Make clinics warm, welcoming, and family friendly | 8 |
| Theme 4: Make vaccinations more convenient | 13 |
| Provide convenient times and locations | 12 |
| Reduce language barriers | 6 |
| Theme 5: Hyper-local communication outreach with trusted sources | 11 |
| Theme 6: Provide appropriate incentives | 13 |
the actual going and getting it, the scheduling of it, when you have a really busy lifestyle, and you’re working . . . you’re picking up your kid from childcare, you’re a mother making dinner then, and it’s just difficult to then go out of the way and get one. . . You could potentially be sick for 24 hours. And I think for some people, it’s just a deterrent. . .

The theme of low priority was expressed in nine interviews. Employment and childcare responsibilities were the most common priorities cited by residents as reasons being vaccinated was postponed. The risk of side effects, or having to take time off from work, were presented as major factors to avoid vaccination.

Many residents also believed they had to pay for the vaccination or show proof of insurance. Showing identification at the clinics was also interpreted as a risk or potential cost to some residents, particularly those who were undocumented.

**Theme 2: Distrust, Anger, and Resentment.** Distrust, anger, and resentment toward a variety of U.S. institutions were frequently expressed views in a large portion of the interviews. Some of this distrust seemed to dissolve into extreme skepticism of the government’s intentions, fear, and a desire for reassurance of safety of the vaccine. Our interviewees convincingly emphasized the legitimacy of feelings of distrust and anger, given the well documented historical governmental mistreatment of minority citizens.

CBO6: The presentation of the vaccine as this thing that’s going to help communities come out of this really challenging year isn’t always [going to be trusted]. Because I think for many, they already felt they were in this on their own and handling it. . . Because the community has been there for them in ways that I think they don’t necessarily see the Philadelphia government being there for them.

CBO12: You got to understand when you come to an underserved community. . . There’s trust issues because they have been slighted on a lot of different things. Literally bamboozled. They do not trust.

CBO13: [There’s a] skeptical mindset about vaccinations and government. Most of the parents I’ve spoken to about vaccines. . . they’re just really wary about the fact that it’s being pushed so heavily in our community.

While historical injustices such as the Tuskegee Experiment and birth control testing on Puerto Rican women came up frequently, there was also a sense that the attitude of elite institutions toward marginalized populations—that they are expendable—still exists. Residents do not feel the government has their best interests at heart. This skepticism about the government’s intentions came up in seven of the interviews. In many cases this distrust led to outright fear of government institutions, to be discussed below.

**Distrust is due to fear and lack of relevant health information.** Ten CBOs cited misinformation as a problem. Many are considering getting the vaccine, but due to distrust and pervasive misinformation they do not know who to believe and are genuinely scared:
CBO7: They have a healthy distrust, first of all, of government, of Western medicine. And they have their reasons, and that creates a good sense of fear. . . A lot of individuals I talk to aren’t totally opposed, they’re more just scared that we’re going to hurt them than anything else. And I’ve had people say, like, “Well, will my children be okay?” Because she wants to be sure that she can live to raise them, and she’s heard that the vaccine might hurt her. And those conversations usually happen from people. . . who are often victimized by Western medicine, and the abuses of the Western world. And that coming into your ear is very scary.

CBO1: I’ve had to go to the clinic with them to get the vaccination and hold their hands. . . . This young lady just called me yesterday because she had to go for her second shot. And she’s like, “Well, can you meet me there? I’m really still afraid.” It’s not that personable when you go to the pharmacies. Most people want somebody that they know is going to be there for them if they get sick, that they can call and say, “Hey, I’m having this reaction. Is this normal?” You know?. . . Because people have a hard time. . . trusting the people that are administering it.

Many of the residents in these communities genuinely want to understand better and educate themselves. But this is difficult given the complex (and often conflicting) information coming from the government. Three CBOs also mentioned language barriers as a reason residents found it difficult to access the vaccine information they wanted.

Recommendations for Encouraging Vaccination

The findings from interviews suggest that, although efforts to address misinformation are important, they should not be the primary aim of vaccination campaigns. Providing data on the safety of vaccines and on the risks of Covid-19 may be helpful, but this approach misses some key reasons people are not getting vaccinated.

Theme 3: Build Trust. As noted in the previous section, distrust is pervasive within the communities we targeted. This section addresses ways CBOs felt levels of trust, therefore willingness to get vaccinated, could be promoted.

Treat people like intelligent human beings capable of making their own health decisions. This theme arose in 12 of the interviews. Residents in these communities were resentful of “we-know-better-than-you” attitudes. They care about their health and often need someone who can provide information without judgment. Communication should focus on answering people’s questions honestly so that they can make informed decisions for themselves, not on trying to convince them to get vaccinated. This was best summed up in the following interview excerpt:

CBO13: There needs to be education, but not from a condescending place. . . . They’ll listen as long as you’re respectful. Treat them as the humans they are: intelligent beings capable of making sound choices. That’s been the pushback really. . . [We] don’t like it when people talk down to us.
Along the same lines, interviewees felt more of a focus ought to be placed on helping individuals in underserved communities with their health needs no matter what they are, not only vaccinating them against Covid. For many marginalized communities Covid is one among a variety of everyday hurdles, and not always the top priority.

**Make clinics warm, welcoming, and family friendly.** Eight of the representatives we spoke with mentioned that vaccination clinics needed to be fun, warm, and welcoming to build comfort and trust levels. They suggested offering vaccination clinics at family-oriented community events, including music, balloons, child-friendly activities or treats, science demonstrations, and magic shows.

Vaccination clinics can be seen as an opportunity to have questions answered about the vaccine (even if they do not choose to get it that day), and the potential to dispel distrust in a healthcare system they don’t believe cares about them.

**Theme 4: Make Vaccinations More Convenient**

**Provide convenient times and locations.** For people who are not prioritizing vaccination, one persuasion strategy is to make getting vaccinated as easy as possible by bringing the vaccines to them when it is most convenient. People are more likely to get vaccinated when the clinic is within a few blocks of their home or when they are already somewhere for another reason and can be persuaded to get the vaccine while they are there.

As noted in the previous section, many remained unvaccinated because they did not want to miss work. It is therefore also important to have clinics at various times to accommodate work schedules. Saturdays seem to be particularly useful in that (1) clinics can be attached to family-friendly events that are already happening and (2) they give residents (who work traditional 9–5 schedules) an extra weekend day to recover from potential side effects, thus minimizing the possibility of missing work.

Additionally, CBOs who serve large English as a Second Language populations stated that an ideal clinic would have (1) vaccine information available in multiple languages; (2) bilingual vaccinators (ideally from the same region of origin as patients), and (3) translators who are not vaccinating and can devote their time to helping residents communicate with staff and helping residents feel comfortable and welcome.

Finally, outreach should make clear that vaccines are free, require no identification, and require no insurance.

**Tag onto other events where people already are.** These were straightforward and easy-to-implement suggestions from CBOs. These “events” may include mobile clinics in residential neighborhoods; organized community events such as fairs or festivals; or more regular weekend activities such as Saturday morning trips to the grocery store. As one representative stated:

CBO10: I think, like, having other resources at this event [is helpful.] People come in, they get warm, they feel the energy and then they might go over, ask questions, go back
to the [other tables] and think about it. So I think [if it’s] just a Covid vaccine [clinic], if they’re not vaccinated, they don’t want to come. . . But they could go to the event, get something to eat, think about it, call somebody, come back, ask more questions. . . It’s more of a back and forth as they’re making their mind up.

The overall sentiment was that clinics needed to be arranged in such a way that people could attend without the explicit purpose of getting vaccinated, could think about it, ask questions, and could decide on the spot whether to receive the vaccine. Interviewees felt that this would allow someone on the fence to feel that vaccination would likely never be more convenient than at that moment, and so this was the time to do it.

**Theme 5: Hyper-Local Communication Outreach with Trusted Sources.** For marginalized and under-vaccinated communities, clinics ought to be hyperlocal so that residents do not need to travel outside their community. This recommendation means communication outreach needs to be hyperlocal as well. For the CBOs we spoke with, this approach includes phone calls, word of mouth, posters and flyers around the community, and door-to-door knocking—sometimes during an event and sometimes prior. CBOs strongly feel that this type of direct outreach is what is needed.

CBO5: [And even when we did it locally] we realized that people didn’t know. No matter how many times we posted on social media, no matter how many times radio and TV mentioned it, they didn’t know that the clinic was so close to their homes. And here. . . there’s a huge internet disparity. . . and we decided the only way they’re going to know that we’re actually here, the only way they’re going to be able to take advantage, is if we actually go to their doorstep, and knock, and talk to them, and do flyers.

**Theme 6: Provide Appropriate Incentives.** There were mixed feelings among the interviewees regarding the value of, and ethics behind, providing cash incentives for vaccinations. Overall, the findings indicate that incentives can be beneficial if they do not feel like bribes. Large incentives, particularly cash, make residents trust the vaccine less, feel that they are being used, or insulted (if the implication is that they will go against their beliefs just for a prize).

CBO10: I think right now people are like, “If I get it, I get it,” not. . . “if you offer me $25 for a shot I’m going to get the shot.” . . . I don’t think it will draw people to get it, but it’s like, “We appreciate you for coming to this event.” So it shows some type of appreciation, but I don’t think it makes somebody’s mind up.

But respondents were generally supportive of small incentives that felt more like a celebration (e.g., food, snacks, and balloons for kids) or that addressed local needs (e.g., a grocery store gift card) or giveaways that draw people to an event (and which attendees would receive whether they were vaccinated).
CBO6: It can feel a little like. . . “Really? You think that just for a popsicle I would come out and get vaccinated?” So, I think if it’s more just part of our celebration of you getting vaccinated. . . like, it’s something nice. . . in exchange for whatever terror you went through leading up to it, to memorialize the fact that you did something courageous and scary. . . I think it was nice to have. . . to make the experience really positive, which I do think is important, because. . . that means that we have more people then who are more likely to talk to their family members and other people and say, “I had a positive experience, it was fine. You should also get vaxxed.”

In sum, our interviews suggest that by focusing on building trust; making vaccinations more convenient; engaging in hyperlocal, direct communication outreach; and providing appropriate incentives, those who are on the fence or postponing their vaccination might be more likely to “get the jab.”

Discussion

As discussed above, Fishbein and Cappella’s (2006) integrative model of behavior posits that attitudes are an important influence on behavior decisions, but environmental factors ought not to be ignored. Indeed, we found that unfavorable attitudes toward vaccination, particularly with respect to distrust, anger, and resentment toward medical institutions, with respect to lack of information about vaccine safety, influenced decisions to refuse or postpone Covid-19 vaccinations. This conclusion is in line with current research (e.g., Bass et al., 2021; Latkin et al., 2021; Rane et al., 2022) and with the dominant media discourse surrounding vaccine hesitancy.

However, this explanation is insufficient to fully understand vaccination postponement. Interviews revealed that daily challenges such as community violence, employment and childcare demands, and concerns around cost and identification requirements, are among some of the environmental factors that may influence individuals to postpone vaccination, especially for those who are already concerned about vaccine safety or do not believe they are at high risk for Covid complications. In other words, for many individuals, vaccination is simply not high enough of a priority to overcome either unfavorable beliefs or environmental barriers.

Limitations and Directions for Future Research

The rapidly developing case of the pandemic did not allow us to speak to a large number of unvaccinated community members to ask them their reasons for delay. Future research should ask community members themselves of what environmental barriers, if any, result in vaccination delay. This research is crucial to be prepared for the next pandemic.

It is also the case that, although many barriers presented here (e.g., time, childcare, and cost constraints) seem applicable to residents living in other low-income communities, future research should seek to confirm these findings. Likewise, some of the reasons we found (e.g., distrust and resentment toward government) may not be as salient for other underserved groups.
Conclusion

Our findings suggest vaccination campaigns must do more to address both unfavorable attitudes and environmental barriers that make vaccinations a low priority for some. Public health entities must acknowledge competing needs people from marginalized neighborhoods experience during a pandemic. Even as trusted healthcare providers establish easily accessible and compassionate venues for vaccinations to be administered, issues of violence, food and housing insecurity, and economic burdens prevail. These are important pieces of a complex puzzle that may constitute more of a threat to one’s well-being than a pandemic. These interviews often express elements of sustained trauma, exclusion, and community neglect in which residents, by necessity, must be attentive to immediate priorities of survival. Vaccination strategies must therefore recognize this communal attitude and work with residents to build community and personal safety.

Often, in situations of vaccination (and general health care) postponement, healthcare organizations explore ways to enhance persuasion toward immediate acceptance. Yet these anecdotes point to deeply held priorities and convictions that one could argue and reflect on basic societal injustices. Thus, vaccination delay could be characterized as symptomatic of these injustices. If we want to increase vaccination acceptance, a close examination of societal inequity is required.

Lee and Kotler (2008) have argued that, when it comes to persuading people to take on public health behaviors, early and late adopters of innovations (Rogers, 1983) may be better described as the “show me,” “help me,” and “make me” groups. Those in the “show me” group are, with minimal direction, willing take on requested public health behaviors for the public. Those in the “help me” group are willing to comply but need help, such as extra assistance, instruction, or incentives. Those in the “make me” group will only comply when the law requires it.

Our study reflects this perspective and provides evidence that more resources must focus on helping this group, where there is room for movement. People who feel overwhelmed and overburdened by daily circumstances may need help to incorporate vaccination into their lives. Theories of persuasion for altering healthcare behaviors, coupled with a recognition of, and sensitivity toward the factors that create community marginalization, need to successfully address the challenges posed by Covid-19 and other vaccination campaigns.

Acknowledgments

The authors would like to sincerely thank the people at the community-based organizations that spoke with us as part of this project. Without their generosity and honesty, this research would have not been possible.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.
Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from the City of Philadelphia’s Department of Public Health (PDPH) with Federal Emergency Management Agency (FEMA) funds from the U.S. government.

Notes
1. As of August 2021: 19131, 19139, 19141, 19142, 19151
2. This research was approved as exempt from Human Subjects Research review by the Institutional Review Board at Temple University.

References
Aslan, M., & Wanamaker, M. (2016). Tuskegee and the health of Black men. The Quarterly Journal of Economics, 133(1), 407–455. https://doi.org/10.1093/qje/qjx029
Bass, S. B., Wilson-Genderson, M., Garcia, D. T., Akinkugbe, A. A., & Mosavel, M. (2021). SARS-CoV-2 vaccine hesitancy in a sample of US adults: Role of perceived satisfaction with health, access to healthcare, and attention to COVID-19 news. Frontiers in Public Health, 9(665724), 1–5. https://doi.org/10.3389/fpubh.2021.665724
BBC News (2022). Covid map: Coronavirus cases, deaths, vaccinations by county. BBC [Internet]. https://www.bbc.com/news/world-51235105
Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: Developing taxonomy, themes, and theory. Health Services Research, 42(4), 1758–1772. https://doi.org/10.1111/j.1475-6773.2006.00684.x
Braun, V., & Clarke, V. (2006). Using thematic coding in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/147808706qp063oa
Centers for Disease Control and Prevention (2021, August 26). Delta variant: What we know about the science. Retrieved February 14, 2022, from https://www.cdc.gov/coronavirus/2019-ncov/variants/delta-variant.html?s_cid=11608:which%20vaccine%20is%20better%20for%20delta%20variant:sem.ga:p:RG:GM:gen:PTN.Grants:FY22
Centers for Disease Control and Prevention (2022). Covid data tracker weekly review. Retrieved July 6, 2022, from https://www.cdc.gov/coronavirus/2019-ncov/Covid-data/Covidview/index.html
City of Philadelphia (2022). Covid-19 vaccine data. Retrieved February 14, 2022, from https://www.phila.gov/programs/coronavirus-disease-2019-covid-19/vaccines/vaccine-data/
Feldman, N. (2021, April 6). Why Black and Latino people still lag on Covid vaccines – and how to fix it. NPR. https://www.npr.org/sections/health-shots/2021/04/26/989962041/why-black-and-latino-people-still-lag-on-covid-vaccines-and-how-to-fix-it
Fishbein, M., & Capella, J. N. (2006). The role of theory in developing effective health communications. Journal of Communication, 56(1), S1–S17. https://doi.org/10.1111/j.1460-2466.2006.00280.x
Forman, R., Shah, S., Jeurissen, P., Jit, M., & Mossialos, E. (2021). COVID-19 vaccine challenges: What have we learned so far and what remains to be done? Health Policy, 125(5), 553–567. https://doi.org/10.1016/j.healthpol.2021.03.013
Frieden, T. (2021, May 10). Dr. Tom Frieden addresses vaccine hesitancy, and role of politics. YouTube: American Medical Association. https://www.youtube.com/watch?v=zjSv33vlqOM
Iuliano, A. D., Brunkard, J. M., Boehmer, T. K., Peterson, E., Adjei, S., Binder, A. M., Cobb, S., Graff, P., Hidalgo, P., Panaggio, M. J., Rainey, J. J., Rao, P., Soetebier, K., Wacaster, S., Ai, C., Gupta, V., Molinari, N. M., & Ritchey, M. D. (2022). Trends in disease severity and health care utilization during the early Omicron variant period compared with previous SARS-COV-2 high transmission periods—United States, December 2020–January 2022. Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, 71(4), 146–152. http://dx.doi.org/10.15585/mmwr.mm7104e4

Joffe, H. (2012). Thematic analysis. In D. Harper & A.R. Thompson (Eds.), Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners (pp. 209–223). John Wiley & Sons.

Joffe, H., & Haarhoff, G. (2002). Representations of far-flung illnesses: The case of Ebola in Britain. Social Science & Medicine, 54(6), 955–969. https://doi.org/10.1016/s0277-9536(01)00068-5

Karni, A., & Kanno-Youngs, Z. (2021, March 15). As Biden confronts vaccine hesitancy, Republicans are a particular challenge. The New York Times. https://www.nytimes.com/2021/03/15/us/politics/joe-biden-vaccine-republicans.html

Latkin, C., Dayton, L., Yi, G., Jaleel, A., Nwosu, C., & Limaye, R. (2021). COVID-19 vaccine delay: An examination of United States residents’ intention to delay vaccine uptake. Human vaccines and immunotherapeutics, 17(9), 2903–2913. https://doi.org/10.1080/21645515.2021.1917234

Laughlin, J., & Lai, J. (2021, August 10). In Philly’s least-vaccinated zip codes, fighting the Delta variant is a game of catch-up. The Philadelphia Inquirer. https://www.inquirer.com/health/coronavirus/vaccine-zip-code-philadelphia-rates-20210810.html

Lee, N., & Kotler, P. (2008). Social marketing: Influencing behaviors for good. Sage.

Lerer, L. (2021, July 17). How Republican vaccine opposition got to this point. The New York Times. https://www.nytimes.com/2021/07/17/us/politics/coronavirus-vaccines-republicans.html

Lozano, A. V. (2020). Racial disparities create obstacles for Covid-19 vaccine rollout. NBC News Online. https://www.nbcnews.com/news/us-news/racial-disparities-create-obstacles-Covid-19-vaccine-rollout-n1249627

Peters, M. D. J. (2022). Addressing vaccine hesitancy and resistance for COVID-19 vaccines. International Journal of Nursing Studies, 131, 1–8. https://doi.org/10.1016/j.ijnurstu.2022.104241

Rane, M. S., Kochhar, S., Poehlein, E., You, W., Robertson, M. M., Zimba, R., Westmoreland, D. A., Romo, M. L., Kulkarni, S. G., Chang, M., Berry, A., Parcesepe, A. M., Maroko, A. R., Grov, C., & Nash, D. (2022). Determinants and trends of COVID-19 vaccine hesitancy and vaccine uptake in a national cohort of US adults: A longitudinal study. American Journal of Epidemiology, 191(4), 570–583. https://doi.org/10.1093/aje/kwab293

Rogers, E. M. (1983). Diffusion of innovations. Free Press.

Rutten, L. J. F., Zhu, X., Leppin, A. L., Ridgeway, J. L., Swift, M. D., Griffin, J. M., St Sauver, J. L., Virk, A., & Jacobson, R. M. (2021). Evidence-based strategies for clinical organizations to address Covid-19 vaccine hesitancy. Mayo Clinic Proceedings, 96(3), 699–707. https://doi.org/10.1016/j.mayocp.2020.12.024

U.S. Census Bureau (2019). American Community Survey 5-year estimates. Retrieved December 3, 2021, from https://censusreporter.org/profiles/16000US4260000-philadelphia-pa/
Author Biographies

Lauren Kogen is an Assistant Professor in the Department of Media Studies and Production at the Klein College of Media and Communication at Temple University. Her research focuses on communication for social change (how media and communication can promote positive social change for marginalized or underserved communities) and communication about social change (how information about social change work is communicated to policy makers and the public).

Deboraih A. Cai is professor and senior associate dean in the Klein College of Media and Communication at Temple University, and a faculty member in the Media and Communication doctoral program. Deborah is an international researcher with expertise in intercultural communication, persuasion, negotiation and conflict management. Deborah is a Fellow in the International Academy of Intercultural Research and a Fellow in the International Association for Conflict Management.

Cornelius Pitts is Director of the COVID-19 Vaccination Project at the Temple University, Lewis Katz School of Medicine and a founding director of Miriam Medical Clinics. He is an Assistant Professor at the Katz School has taught Global Health at the Philadelphia College of Pharmacy. His research centers on methods for increasing healthcare access for underserved populations.

Patricia Imms is the Nursing Director at Miriam Medical Clinics in Philadelphia, and coordinated the Covid-19 Vaccination Project at the Lewis Katz School of Medicine at Temple University. She is a psychiatric nurse and has served as Clinical Research Coordinator at the University of Pennsylvania Center for the Treatment and Study of Anxiety. Her research has centered on traumatic stress.

Mitch Perkins is a doctoral student at Temple University. Their primary research focuses on alternative media for grassroots political communication and social movements. Their research also critically examines United States journalism’s relationship to grassroots politics and social movements.

Kathleen Reeves is the Chair of the Department of Urban Health and Population Sciences. A faculty leader since 2003, Dr. Reeves is also Professor of Clinical Pediatrics and founding Director of the Center for Urban Bioethics. Her research centers on trauma informed approaches to k-12 education, violence prevention, substance use disorder, and food insecurity.