

# No “Magic Bullet”: Exploring Community Mobilization Strategies Used in a Multi-site Community Based Randomized Controlled Trial: Project Accept (HPTN 043)

Virginia A. Tedrow · Carla E. Zelaya · Caitlin E. Kennedy ·  
Stephen F. Morin · Gertrude Khumalo-Sakutukwa ·  
Michael D. Sweat · David D. Celentano

© Springer Science+Business Media, LLC 2011

**Abstract** As community-level interventions become more common in HIV prevention, processes such as community mobilization (CM) are increasingly utilized in public health programs and research. Project Accept, a multi-site community randomized controlled trial, is testing the hypothesis that CM coupled with community-based mobile voluntary counseling and testing and post-test support services will alter community norms and reduce the incidence of HIV. By using a multiple-case study approach, this qualitative study identifies seven major community mobilization strategies used in Project Accept, including stakeholder buy-in, formation of community

coalitions, community engagement, community participation, raising community awareness, involvement of leaders, and partnership building, and describes three key elements of mobilization success.

**Keywords** Community mobilization · HIV/AIDS · Voluntary Counseling and Testing (VCT) · Case study

**Resumen** Debido a que las intervenciones a nivel de la comunidad llegan a ser más comunes en la prevención de VIH, los procesos como la Movilización Comunitaria (MC) están cada vez siendo más utilizados en programas en salud pública e investigaciones. Project Accept, un ensayo multi-sitio, aleatorio controlado, está probando la hipótesis de que MC junto con el asesoramiento y análisis voluntario ambulante de base comunitaria y los servicios de apoyo después del análisis, modificarán las normas comunitarias y reducirán la incidencia de VIH. Usando el enfoque de múltiples casos, este estudio cualitativo identifica siete estrategias importantes para movilizar la comunidad utilizadas en Project Accept, incluyendo la aceptación de parte de los actores claves, la formación de coaliciones comunitarias, integración de la comunidad, participación comunitaria, incremento de la conciencia comunitaria, involucramiento de los líderes, fortalecimiento de las asociaciones, y describiendo los tres elementos claves del éxito de dicha movilización.

V. A. Tedrow (✉)  
Department of International Health, Johns Hopkins Bloomberg  
School of Public Health, 615N. Wolfe Street/Room E5037,  
Baltimore, MD 21205, USA  
e-mail: vtetrow@jhsph.edu

C. E. Zelaya  
Department of Epidemiology, Johns Hopkins Bloomberg School  
of Public Health, 615 N Wolfe Street/Room E6535, Baltimore,  
MD 21205, USA

C. E. Kennedy  
Department of International Health, Johns Hopkins Bloomberg  
School of Public Health, 615N. Wolfe Street/Room E5037,  
Baltimore, MD 21205, USA

S. F. Morin · G. Khumalo-Sakutukwa  
Center for AIDS Prevention Studies, University of California,  
San Francisco, CA, USA

M. D. Sweat  
Department of Psychiatry and Behavioral Sciences, Medical  
University of South Carolina, Charleston, SC, USA

D. D. Celentano  
Department of Epidemiology, Johns Hopkins Bloomberg School  
of Public Health, Baltimore, MD, USA

## Introduction

Community mobilization (CM) is a term widely used in public health programs and research studies; however, there is no standard definition and no consensus strategy for its utilization. Although CM shares many characteristics with

related concepts such as community development, empowerment, and participation, its emphasis on collective advocacy and organization warrants a unique classification. As an intervention tool in public health, CM seeks to create social change by building awareness and empowering community members to take charge of their own health through engaging in a collective, interactive process [1]. Although defining the theoretical concept of CM is beyond the scope of this discussion, we seek to illustrate a pragmatic application of community mobilization employed for an HIV prevention intervention in active research settings.

Despite the lack of a consensus definition, CM has been used to foster HIV awareness and prevention in high-income countries for decades [2–6]. In low- and middle-income countries, community mobilization has been used to reduce HIV-related stigma [7], implement a community-based peer education and free condom distribution program [8], and influence condom use among vulnerable populations [9–12].

Project Accept is the first multi-site community randomized controlled Phase III trial to test the efficacy of a behavioral intervention on reducing HIV incidence. The primary trial hypothesis is that community mobilization, in conjunction with mobile community-based voluntary counseling and testing (VCT) and post-test support services (PTSS), will increase uptake of VCT, stimulate discussions about HIV, reduce stigma, and ultimately decrease HIV incidence [13]. In low- and middle-income countries, VCT is a moderately effective means of HIV prevention [14]. With respect to VCT, community mobilization can raise awareness and foster community engagement regarding HIV testing [15]. Project Accept uses the diffusion of innovations theory as a theoretical basis for community mobilization, which states that four main elements influence the spread of new ideas: innovation, time, communication channels, and a social system [16]. Community mobilization may influence norms regarding HIV prevention by opening communication channels within the social system and by using innovators (e.g. community mobilizers and opinion leaders) to foster support among social networks, eventually leading to widespread adoption of new behaviors and ideas, including VCT acceptance.

The intervention phase of Project Accept lasted for 3 years and consisted of three components: mobilization, VCT, and post-test support services. Project Accept was implemented in five site locations: Chiang Mai, Thailand; Kisarawe, Tanzania; Mutoko, Zimbabwe; Vulindlela, South Africa; and Soweto, South Africa. The overall project objectives and methods have been previously described elsewhere [13].

As support for using environmental and structural-level interventions for HIV prevention grows, investigators have emphasized the need to better understand how such

interventions occur and how they are sustained [17, 18]. However, few studies discuss the complexities of intervention components in detail, and there are few operational examples of intervention strategies such as community mobilization. Furthermore, given that community mobilization is an inherently community-driven process, the role of an external research team in implementing a mobilization intervention remains unclear. This paper seeks to understand how community mobilization was utilized in Project Accept from the research team's perspective, specifically in regards to the formation and adaptation of mobilization strategies.

## Methods

We utilized a qualitative, multiple-case design [19], with each study site comprising one case, yielding a total of five cases. We chose this design because all five project sites used the same protocol to implement the same intervention, thus allowing for direct comparison and contrast between cases [19]. Because each site encompassed one case, multiple sources of information were gathered to better understand the context surrounding each case. The primary information source was semi-structured interviews with multiple key informants (KIs). Informants were purposefully sampled by asking the Project Director of each site to select several potential key informants based on their involvement in the CM effort, their knowledge about the mobilization implementation, and their current position as a Project Accept staff member. Project Directors from Thailand, Tanzania, and Zimbabwe identified three potential key informants, while Soweto and Vulindlela each identified two informants. After being contacted, all thirteen key informants agreed to participate; no informant refused to contribute. Informants included Project Directors, Deputy Project Directors, Community Mobilization Coordinators, and Community Mobilization Team Leaders. We developed a semi-structured interview field guide and conducted in-depth telephone interviews with informants during February and March 2010. Interviews lasted between 35 and 75 min, and all key informants provided oral consent; interviews were digitally recorded with the participant's permission. Information collected through interviews was supplemented by reviewing quarterly progress reports written by field staff in each site and through informal conversations with central project staff.

Data were analyzed using a cross-case synthesis approach to assess similar and contrasting themes and topic areas across cases [19]. To perform this analysis, interviews were transcribed verbatim and divided by case (i.e. the informants from one site were grouped together). All interviews were conducted in English with the exception of

two from Thailand, which were conducted through an interpreter and only the English interpretation was transcribed. For analysis, all transcriptions were read through twice and then coded using both predetermined codes based on questions asked in the interview guide as well as newly identified codes that arose during analysis. In general, themes and topic areas identified within a case were consistent between all informants from each site, regardless of the informant's position within Project Accept.

After comparing data within cases, tables were constructed to examine overarching themes across cases. In the cross-case analysis, categorical aggregation and direct interpretation were used, which are two standard means of analyzing case study data [20]. In total, fifteen individual topic areas and eight themes were identified. After completing the analysis, we wrote summary statements and identified representative quotes for significant themes, including seven major mobilization strategies and three key elements for successful mobilization. In an effort to maintain impartiality, the interviewer/data analyst had no involvement in Project Accept prior to conducting this investigation.

To validate the analysis, the chain of evidence was audited by an external reviewer to ensure results were obtained in a logical manner and were supported by the evidence [21]. In addition, member checking was performed by sharing results with the Principal Investigators at each site to ensure the findings accurately conveyed information from the cases.

This project was granted an exemption from the Johns Hopkins Bloomberg School of Public Health Institutional Review Board as it was not considered human subjects research. Therefore, no personal identifying information was collected, and because the unit of analysis was the study site itself, no demographic information was obtained from key informants. We have identified participants only by site location and key informant number to protect anonymity and have not included information on age, gender, or position within Project Accept.

## Results

### Community Mobilization Strategies

Our analysis identified seven major community mobilization strategies; however, these strategies were used in combination—no single strategy stood alone, which was a common theme. As stated by the second informant from Vulindlela, “we didn’t have a single strategy but used different kinds of strategies...what was informing us were the responses from the people.” The following strategies were mentioned across all five project site locations;

Table 1 contains representative quotes pertaining to each strategy.

### *Stakeholder Buy-In*

All project sites secured buy-in from various stakeholders, enabling research staff to gain support for the project at national, provincial, and district levels before approaching individual communities. Informants reported that obtaining support was relatively unproblematic as long as proper administrative procedures were followed. At the community level, most key informants reported no difficulty gaining community leaders’ cooperation because leaders understood the program’s potential benefits and were eager to introduce the project in their communities. Only one community leader refused consent due to the presence of an existing organization conducting similar activities in the area; therefore, the project selected another location in which to implement the intervention.

### *Forming Community Coalitions*

Forming Community Coalitions, including Community Working Groups (CWGs) and Community-Based Outreach Volunteers (CBOVs), was a major mobilization strategy utilized in Project Accept. Key informants across all five sites cited CBOVs as extremely valuable assets to the mobilization. Community volunteers helped staff gain trust and acceptance in communities, disseminated information regarding Project Accept and HIV prevention, and served as early adopters for HIV testing in their communities. Motivating factors for CBOVs varied. Many CBOVs were active in their communities prior to the introduction of Project Accept and had previously served as leaders and role models. CBOVs received training, and in most areas, CBOVs received a small stipend consisting of household items, such as cooking oil, or money for transportation as compensation.

Four of the five sites (all except Soweto) reported experiencing minor difficulties with CBOVs, including a lack of defined roles and responsibilities for the volunteers. The concept of a “volunteer” varied greatly between cultures and communities. For example, staff in Vulindlela had to change the name “community volunteer” to “community mobilizer” because the local understanding of “volunteer” demanded the payment of a high wage. Additionally, not all CBOVs could be paid regularly, especially in Tanzania where budgetary constraints limited funding for CBOVs and miscommunications occurred regarding how and when CBOVs would be compensated. A key informant from Tanzania commented as follows:

I would like to have seen a more structured role for the community-based outreach workers. I think that

**Table 1** Community mobilization strategies used in Project Accept

Strategies	Representative quotes
Stakeholder buy-in	“[Gatekeepers] are those that are highly regarded in the communities—the chiefs, the sub-chiefs, and any other persons in the position of leadership—those are the ones that we have to talk to first and then they sort of open the gates for you to go down to the village level and then be able to interact with the village people, and one other thing is that they accompany you to the people, introducing you to the people and then they help you in selling your idea to the people...” —Zimbabwe, KI #3
Forming community coalitions <sup>a</sup>	<p><i>Positive</i></p> <p>“These people [CBOVs] have been playing a huge role in supporting us, and providing us information from their respective communities.” —Tanzania, KI #3</p> <p>“What they [the CBOVs] do is encourage people to talk more openly about HIV and to make this issue more common around them and to provide knowledge about HIV.” —Thailand, KI #2</p> <p><i>Negative</i></p> <p>“You find that the community working groups failed to understand their role because we expect them to be the go-betweeners, but what you find at the end of the day they will end up taking sides—maybe taking the community’s side or taking our side...” —Vulindlela, KI #1</p>
Direct community engagement	“So when we are having an open dialogue we just discuss issues related to HIV—condom use, what people think can be done to decrease the spread of HIV—it is really nice because during the open dialogues as much as we are teaching them and educating them about HIV/AIDS we are also learning, so we are also getting knowledge from them.” —Soweto, KI #1
Community participation	“Often times people who come [to the community meetings] never think about VCT, but when they come to hear about HIV/AIDS and learn, that also motivates them to get VCT because the education makes them able to assess their risky behaviors...” —Thailand, KI #1
Raising community awareness	“So the brochures have full information about what we are doing on that time or what Project [Accept] is doing now so we need to maybe bring some brochures and spread them to community so that people can access the information...” —Tanzania, KI #3
Community leader involvement	<p><i>Positive</i></p> <p>“Because when you talk to the leaders first and then go to the community member afterwards, then obviously the community members are going to follow because the leaders are good [okay] with everything.” —Soweto, KI #1</p> <p><i>Negative</i></p> <p>“And the people who should make decisions are the community members instead of the leaders. Because the leaders, sometimes you might find that what is important to them is just the position.” —Vulindlela, KI #1</p>
Creating partnerships with organizations <sup>b</sup>	<p>“Right now we are in the process of consulting with other organizations because what we have noticed is that we cannot do this alone.” —Vulindlela, KI #1</p> <p>“But when we got to the community, they said, ‘Yes we have the information you have given us but there is something missing from your package. That is the issue of life.’ So we then said, well, let us look around, who is in this district, who else is working in this ward and what are they doing so that we could partner with them. So it was us going to seek partners and then coming back to the community and then trying to address those issues, those concerns that had been raised by the community.” —Zimbabwe, KI #3</p>

<sup>a</sup> Soweto did not report negative aspects of forming community coalitions

<sup>b</sup> Forming partnerships was emphasized more in Vulindlela, Soweto, and Zimbabwe and less in Thailand and Tanzania

many of them had a great potential to contribute a lot to our project but because it was this volunteer position that wasn’t really compensated in any clear, official, contractual way, I think that a lot of that potential was not utilized.

—Key Informant #1, Tanzania

Community Working Groups (CWGs) provided another avenue for community participation in the mobilization. These groups consisted of local leaders, representatives from community organizations, churches, schools, health clinics, and traditional leaders. CWGs served as a link between

communities and program staff. Staff sought their advice and feedback on the mobilization and CWGs informed staff about the communities in which they were working. Like CBOVs, issues arose regarding the specific roles and responsibilities of CWGs. These groups often reflected existing power dynamics within communities prior to the arrival of Project Accept. For example, issues of jealousy arose in Zimbabwe when certain community members were not chosen to be a part of the CWG. Despite these concerns, the success of the mobilization hinged on CWGs and CBOVs; they were integral partners in the mobilization.

### *Direct Community Engagement*

A third CM strategy involved direct engagement of community members through door-to-door canvassing, community meetings, and informal group discussions. In this strategy CM teams and CBOVs engaged community members in conversations about HIV/AIDS and VCT, which informants said was an excellent way to understand the community, thereby allowing CBOVs to tailor their messages to address local opinions. Several informants reported door-to-door canvassing was ineffective due to its time-consuming nature and logistical complexity; however, it was also cited as a practical way to engage people who otherwise would not be reached. In contrast, informants reported that having small, informal discussions with people was an effective way to generate discussions about HIV among community members, because people felt uninhibited and were able to raise issues and express concerns regarding sensitive topics. CBOVs also engaged in similar conversations within their social networks, which helped disseminate key messages into the community. Lastly CM teams and CBOVs held community meetings and focus groups to raise awareness about the project, foster discussion, and gain community insights.

### *Community Participation*

CM teams and CBOVs developed outreach strategies and events to increase community participation in project-related activities. According to key informants, even if community members never directly engaged in conversation during these events, they often talked about what occurred with their friends, family, and other social network members following the event. CM teams arranged sporting events, community dramas, dancing competitions, and even movie showings in some sites. Additionally, the South African sites held “road shows” and “motorcades” during which all project vehicles would tour the communities together, broadcasting music and creating an almost festival-like atmosphere. Sometimes local celebrities and community leaders would attend these events, dramatically increasing participation.

“Edutainment” was a unique community participation strategy developed in Thailand. Following the organization of a World AIDS Day concert early in the project, the CM team members realized the value of entertainment and decided to incorporate it into their activities. The CM team arranged events such as karaoke contests and HIV educational booths where people could win a small prize for participating. The Thailand site deemed these activities “Edutainment,” and found they encouraged participation in project activities.

### *Raising Community Awareness*

CM teams and CBOVs engaged in various methods of communication and marketing to raise awareness about the project in the community. For example, Tanzania, Soweto, and other sites distributed incentives, such as ball caps and T-shirts, to spread awareness. Soweto painted their mobile caravans bright green to attract attention. Soweto and Vulindlela began using a megaphone to announce the time and location of upcoming activities and VCT services. Although both sites were initially skeptical about this approach, they found the technique useful for communicating to people who might not hear of project activities through other means. CBOVs across the sites also distributed flyers to community members and hung posters at local shops and schools. Project Accept teams in all sites developed marketing strategies to help raise awareness and generate discussions.

### *Involvement of Community Leaders*

Involving community leaders was an important mobilization strategy in Project Accept, especially as a means to increase VCT uptake. In Zimbabwe, the CM team noticed that one particular community had very low VCT participation. After consulting with community members, they discovered the Paramount Chief residing in the village did not support the project. The CM team and CWG members approached the Chief to discuss this matter and eventually received his full support. When VCT vans returned to the village, the Chief insisted they park at his compound and that he be the first to test. Uptake of VCT throughout this community increased immediately. A key informant from Tanzania also cited examples of how VCT uptake quickly increased as soon as certain traditional or religious leaders endorsed the project.

However, informants across all sites also reported challenges arising from community leader involvement. For example, as the first informant from Thailand stated, “Sometimes the leaders can be biased...they can only give you something that is good and cover up things that are not good.” To reconcile these disparities, staff said it was imperative to speak with a wide array of community members as well as leaders to obtain an accurate portrayal of the community.

### *Creating Partnerships with Organizations*

As an additional mobilization strategy, staff established partnerships with community organizations. This strategy was emphasized by the Zimbabwe, Soweto, and Vulindlela sites. By forming partnerships, project teams utilized pre-existing forums to disseminate their information. For

example, mobilization teams attended immunization campaigns in partnership with government health clinics, facilitated sessions during community meetings called by other organizations, gave presentations in churches, and used schools as a forum to mobilize youth. Sites also developed partnerships to address needs and issues raised by communities. For example, many communities in Zimbabwe faced widespread hunger and unemployment. Therefore, the Zimbabwe CM Team addressed these needs by partnering with local non-governmental organizations to distribute food supplements, hold workshops on new agricultural techniques, and find partners to donate garden supplies and agricultural support to the community. Similarly in Soweto, community members expressed concern over high unemployment rates, and in response staff organized several skills building workshops as a mobilization strategy.

We have had events for skills development because we realized that people would ignore you if you had a burning, pressing issue to deal with...if there is unemployment in the community, lack of education in the community and if you come out and talk about HIV—that is not a burning issue... You find in South Africa, at least here in Soweto, that you cannot have HIV as a stand-alone [program] because it is affected by various other issues that people have to deal with and circumstances that people live in.

—Key Informant #1, Soweto

Lastly, partnerships were created to help enhance the sustainability of the mobilization. Key informants from Zimbabwe and Vulindlela reported that CBOVs are currently being linked with local non-governmental organizations to help them become independent community-based organizations and to potentially provide ongoing support following the completion of Project Accept.

## Key Elements of Success

### *The Evolution of Community Mobilization Strategies in Project Accept*

Across all sites, mobilization strategies evolved over time as CM teams received feedback from community members and assessed reactions from participants. Specifically, these adaptations arose from consulting with community members, tailoring strategies to fit community needs, and developing creative solutions to overcome challenges.

Many key informants reported that being able to listen (Zimbabwe KI #3, #1; Tanzania KI #3) and learning from community members (Vulindlela KI #1, Thailand KI #3, Soweto KI #2) were helpful qualities in effective mobilizers. When strategies were ineffective, staff members

consulted with community members to identify improvements. As the second key informant from Zimbabwe stated, “We do not go to the community with preconceived ideas of how we want to do things, so when you get to the community, consult with the community, and then see what works for that particular community.” In each site staff and community coalition members developed unique outreach ideas to mobilize communities.

### *Process of Acceptance*

It took significant time and effort to gain acceptance into the communities where Project Accept worked, but informants said this process established trust and built relationships crucial for the mobilization’s success. When the intervention began, most informants reported facing considerable problems with stigma, misconceptions, and rumors in the communities. In Zimbabwe, the Project Accept team was nicknamed “The Blood People” due to the misconception that they were solely interested in taking peoples’ blood. In Tanzania and Soweto people wanted to avoid being seen entering the VCT tent due to fear of being stigmatized. Informants cited lack of information and awareness as potential sources for these problems. However, as Project Accept spent more time in communities and gained trust, a noticeable shift began occurring. People started coming to the VCT caravans even if they were parked in public areas and community members began participating more during discussions and meetings. All key informants reported a reduction in stigma following mobilization.

And then over time as we got the trust of the community and we really established a relationship and we talked and answered questions, there began to be more dialogue and people began to want to engage more in discussions about HIV, discussions about testing, discussions about myths they had heard, and in turn our testing has been able to be moved into much more public places where at first our tents had to be in places where people couldn’t really be seen coming and going for fear of being stigmatized.

—Key Informant #1, Tanzania

As communities became accustomed to Project Accept, staff in turn began embracing communities. In their responses, informants cited that wanting to be a part of the community was a key attribute of effective mobilizers (Zimbabwe KI #1, Thailand KI #2, and Vulindlela KI #1). Project staff and communities developed relationships as time progressed. As the first informant from Soweto reported, “People in the communities—they now know me—I have made friends.”

### *Each Village is Unique: The Importance of Creating a Tailored, Yet Flexible, Mobilization*

The individuality of each community was clearly a repeated theme in this analysis. Stark differences existed between groups of people within each community, and therefore different strategies were utilized. For example, going to schools and arranging sporting activities were commonly seen as mobilization strategies for young people. In Tanzania, CM teams went to water wells to mobilize groups of women who were otherwise difficult to reach. One strategy did not work for everyone; strategies were tailored depending on the target population being mobilized.

Because I have seen all of these strategies working but what I have noticed is that one strategy cannot be a magic bullet. You need a combination of different strategies in order to get your message to be heard by different populations out there. We have older people; we have young people, and those people they are being mobilized differently. You can't use a blanket strategy to mobilize them.

—Key Informant #2, Vulindlela

Differences also existed between the communities themselves. Communities in the same general area would often have differing levels of VCT uptake. Sometimes reasons for this difference surfaced as the mobilization progressed. For example, one intervention community in Soweto had been politically and geographically divided during apartheid, and this division still visibly affected the uptake of VCT. However, other differences in VCT uptake remained inexplicable to staff. Similarly, informants stated that some communities were more easily mobilized than others due to obvious factors, such as leadership challenges and difficulty reaching certain populations, in addition to more imperceptible factors with no discernable cause. As the first informant from Thailand reported, “In some villages, they [Project Accept staff] feel that people are interested in the [project] activity and learn more about HIV and AIDS. And in some communities they feel that people don't pay attention...”

Additionally, key factors for success involved recognizing the unique needs and wants of each community and incorporating these into the mobilization. We previously discussed how Zimbabwe and Soweto partnered with organizations to address community needs such as hunger and unemployment. In addition to addressing basic needs, sites like Thailand incorporated community wants, such as entertainment, into mobilization activities to keep people engaged in the project. Additional quotes from informants relating to the key elements of success are presented in Table 2.

## Discussion

### Balance Between Maintaining a Research Protocol and a ‘Community led’ Mobilization

Project Accept is the first randomized trial to use community mobilization as a main intervention component for HIV prevention in a multi-site study in low- and middle-income countries. Across sites, CM teams amended strategies in response to and with help from community members. In contrast, most randomized trials use strict, inflexible protocols to ensure intervention components are applied uniformly across sites. Because CM is inherently a community-driven process, this analysis demonstrated that having a rigid protocol for implementation is impractical. In Project Accept, research staff partnered with community coalitions to generate mobilization strategies applicable to local community norms. The project staff in each community used pre-determined approaches to forge these relationships, but such collaborations cannot be strictly standardized across communities.

The research teams, partnering organizations and community members all played essential roles in the mobilization. Research team members involved in community-level projects take on different roles oriented around activities done *to* the community, *for* the community, and *with* the community [22]. In Project Accept, CM teams actively engaged with communities, which in turn shaped the mobilization. The importance of such relations was acknowledged in the Sonagachi Project in India and referred to as “*the necessary contradictions of ‘community-led’ health promotion,*” which concluded the project could not have succeeded without the relationships built between the community, research staff, non-governmental organizations, and other institutions [23]. These partnerships can enhance the capacity of communities and provide ongoing support for programs.

Staff reported that community-based volunteers were crucial in disseminating information, spreading ideas among their social networks, and providing feedback on CM strategies; however, confusion regarding their responsibilities and compensation potentially reduced their impact. To be maximally effective, their roles must be made explicit at the outset or be pre-existing roles already functioning within the community, such as utilizing local community health workers. Creating coalitions such as CBOVs and CWGs requires project protocols to clearly define roles, responsibilities, and compensations of such entities while still allowing for flexibility. This contradiction presents a difficult challenge for future projects to balance and deserves further investigation.

Additionally, researchers should strive to understand existing community dynamics and power structures before new coalitions are introduced, which could be achieved

**Table 2** Key elements of success for community mobilization in Project Accept

Element of success	Representative quotes
The evolution of community mobilization strategies in Project Accept	<p>“Basically we just look at the make-up of the communities and the activities that happen in the communities and just developed [mobilization strategies] as we go.” —Soweto, KI #2</p> <p>“And from the first round we learned to conduct the community mobilization and then later on we adapt and we gather information and we change the strategy over time.” —Thailand, KI #1</p>
Process of acceptance	<p>“So at the beginning when they [community members] don’t really understand about the study, they didn’t cooperate with us very well...But afterward when we go to the communities often they start to understand and the community leaders cooperate with us very well.” —Thailand, KI #3</p> <p>“And then over time as we got the trust of the community and we really established a relationship and we talked and answered questions there began to be more of a dialogue and people began to want to engage more in discussions about HIV, discussions about testing, discussions about myths they had heard...” —Tanzania, KI #1</p>
Each village is unique: the importance of creating a tailored, yet flexible, mobilization	<p>“It would be incorrect for me to say that we had one strategy of mobilizing all the communities... what works in one community might not work in the other community. So we tended to look at it on a community by community basis...” —Zimbabwe, KI #3</p> <p>“And one thing that we realized is that there is no recipe to community mobilization. You cannot say you will do one and two and then I will get three... We learned many things. We learned new things every day.” —Vulindlela, KI #1</p>

through conducting more formative research about existing social structures prior to program implementation [24, 25]. There is a need for programs to identify pre-existing barriers to mobilization and take advantage of existing social assets prior to mobilization [25].

### Measuring Community Mobilization

This study used qualitative means to explore CM strategies used in Project Accept; however, it would also be beneficial to understand what characteristics make a community ready to mobilize and form indicators to quantitatively measure the mobilization process. The data demonstrate that the ease of conducting community mobilization differed between sites, both for understandable reasons, such as difficulties involving community leaders, and for more inexplicable reasons, such as “people don’t pay attention” (KI #1, Thailand). Understanding a community’s willingness to mobilize around an issue makes it possible to develop appropriate interventions and mobilization tools to match community readiness [26]. For example, facilitating social capital, i.e. building relationships between community members, is one goal of community mobilization [27] and a precursor to taking collective action at the community level [28]. Therefore, measuring social capital constructs, such as perceived community trust and reciprocity, may lead to important insights regarding a community’s readiness to mobilize, but the application of such measures merits further study.

Without means to measure mobilization, the “dose” of mobilization received by communities cannot readily be determined. Certain aspects of mobilization are more quantifiable than others. For example, project staff can track process outcomes, such as the number of community volunteers present and the number of community meetings held, more easily than they can measure intangible outcome variables, such as the extent to which communities accepted the intervention and the level of diffusion of project ideas. A comprehensive measurement tool for CM should consider discrete process outcomes as well as the more complex nuances of the mobilization. Draper and colleagues developed a framework for measuring community participation indicators using five areas of assessment: leadership, planning and managing, women’s involvement, external support for program development, and monitoring and evaluating involvement of intended program recipients [29]. Research calls for more empirical evidence of the effectiveness of interventions involving community engagement [30]; however, until tools for measurement are created, effectiveness of such interventions can only be indirectly evaluated.

### Sustainability

In CM, capacity building is essential to sustainability. However, in Project Accept, the communities’ ability to sustain the project upon completion of the funded study remains unknown. Once the formal research team

disperses, it will be difficult to ascertain if mobilization effects remain. Conducting periodic assessments after project completion would be valuable for measuring sustainability; however, current funding mechanisms do not allow for long-term study follow-up beyond the scope of the initial intervention.

Additionally, building partnerships with local organizations and teaching community volunteers how to secure continued support are important considerations in mobilization projects. If community members are empowered by the CM process, they are more likely to utilize it to address future community health concerns. Research studies using CM should have a clear idea of how the mobilization will impact communities following study completion.

### Limitations

This descriptive study is based primarily on information gathered from thirteen key informants who were interviewed after the mobilization phase of the project was complete. Therefore, the small sample size and potential for recall bias are limitations. Additionally, data were collected and analyzed by one investigator, which ensures analytic consistency, but raises potential issues with the reproducibility of study conclusions. This potential limitation was minimized by having an external investigator review the analysis to ensure the conclusions were soundly based.

Furthermore, we focused solely on staff members' perspectives of community mobilization. In further research it would be valuable to obtain opinions of community members and leaders who guided and helped define the mobilization. Because informants were interviewed as current Project Accept staff with invitation from the Project Director, participants may have felt inclined to present the project more favorably than if their participation had been completely anonymous. However, during all interviews, informants were asked to give impressions of the mobilization from the perspective of the mobilization team; no questions were asked about their personal opinions in an effort to minimize bias and protect confidentiality.

### Summary

This study identified seven major community mobilization strategies utilized in Project Accept and three key factors that contributed to its relative success. Results from Project Accept conclusively demonstrate that community mobilization, coupled with the provision of mobile VCT and post-test support services, greatly increased the uptake of VCT in intervention communities as compared to control communities [31]. This multiple case study provides further evidence that community mobilization can be a powerful

tool for increasing participation, engagement, and discussion in communities regarding HIV prevention and VCT.

Involving lay community members in public health action is a key component of community mobilization [32]. By partnering with community members, incorporating community ideas, and allowing for flexibility, Project Accept created an extensive inventory of strategies to increase community involvement, which lead to mobilization; however there was no "magic bullet" CM strategy. In fact, lacking a magic bullet was precisely what helped the mobilizations gain momentum. Each community worked with project staff to develop mobilization strategies tailored to fit their own needs. This documentation adds to the growing number of case studies examining community-related processes in research settings [27, 33–35]. As interest in community-level interventions for HIV prevention increases, researchers and program implementers can use these examples to further theorize and define processes such as community mobilization to understand its implications and utilize its power to address future public health needs.

**Acknowledgments** Project Accept was sponsored by the US National Institute of Mental Health as a cooperative agreement through contracts U01MH066687 and U01MH066688 (Johns Hopkins University), U01MH066701 (University of California) and U01MH066702 (University of California, San Francisco). In addition, this work was sponsored by the HIV Prevention Trials Network (HPTN Protocol 043) of the Division of AIDS of the US National Institute of Allergy and Infectious Diseases and by the Office of AIDS Research of the US National Institute of Health. Views expressed are those of the authors and not necessarily those of the sponsoring agencies. We thank the communities that partnered with us in conducting this research and all study participants for their contributions. We also thank the study staff and volunteers for their work and dedication.

### References

1. Parker RG. Empowerment, community mobilization and social change in the face of HIV/AIDS. *AIDS* (London, England). 1996;10(Suppl 3):S27–31.
2. Darrow WW, Montanea JE, Fernandez PB, Zucker UF, Stephens DP, Gladwin H. Eliminating disparities in HIV disease: community mobilization to prevent HIV transmission among Black and Hispanic young adults in Broward County, Florida. *Ethn Dis*. 2004;14(3 Suppl 1):S108–16.
3. King W, Nu'Man J, Fuller TR, Brown M, Smith S, Howell AV, et al. The diffusion of a community-level HIV intervention for women: lessons learned and best practices. *JWomens Health(Larchmt)*. 2008;17(7):1055–66.
4. Person B, Cotton D. A model of community mobilization for the prevention of HIV in women and infants. *Prevention of HIV in Women and Infants Demonstration Projects*. *Public Health Rep*. 1996;111(Suppl 1):89–98.
5. Ramos RL, Hernandez A, Ferreira-Pinto JB, Ortiz M, Somerville GG. Promovision: designing a capacity-building program to strengthen and expand the role of promotores in HIV prevention. *Health Promot Pract*. 2006;7(4):444–9.

6. Ziff MA, Harper GW, Chutuape KS, Deeds BG, Futterman D, Francisco VT, et al. Laying the foundation for Connect to Protect: a multi-site community mobilization intervention to reduce HIV/AIDS incidence and prevalence among urban youth. *J Urban Health*. 2006;83(3):506–22.
7. Apinundecha C, Laohasiriwong W, Cameron MP, Lim S. A community participation intervention to reduce HIV/AIDS stigma, Nakhon Ratchasima province, northeast Thailand. *AIDS Care*. 2007;19(9):1157–65.
8. Williams B, Campbell C. Community mobilization as an HIV prevention strategy: challenges and obstacles (South Africa). *Sex Health Exch*. 1999;2:4–6.
9. Jana S, Basu I, Rotheram-Borus MJ, Newman PA. The Sonagachi Project: a sustainable community intervention program. *AIDS Educ Prev*. 2004;16(5):405–14.
10. Kerrigan D, Telles P, Torres H, Overs C, Castle C. Community development and HIV/STI-related vulnerability among female sex workers in Rio de Janeiro, Brazil. *Health Educ Res*. 2008;23(1):137–45.
11. Ramesh BM, Beattie TSH, Shajy I, Washington R, Jagannathan L, Reza-Paul S, et al. Changes in risk behaviours and prevalence of sexually transmitted infections following HIV preventive interventions among female sex workers in five districts in Karnataka state, south India. *Sex Transm Infect*. 2010;86(Suppl 1):i17–24.
12. Reza-Paul S, Beattie T, Syed HUR, Venukumar KT, Venugopal MS, Fathima MP, et al. Declines in risk behaviour and sexually transmitted infection prevalence following a community-led HIV preventive intervention among female sex workers in Mysore, India. *AIDS*. 2008;22(Suppl 5):S91–100.
13. Khumalo-Sakutukwa G, Morin SF, Fritz K, Charlebois ED, van Rooyen H, Chingono A, et al. Project Accept (HPTN 043): a community-based intervention to reduce HIV incidence in populations at risk for HIV in sub-Saharan Africa and Thailand. *J Acquir Immune Defic Syndr*. 2008;49(4):422–31.
14. Denison JA, O'Reilly KR, Schmid GP, Kennedy CE, Sweat MD. HIV voluntary counseling and testing and behavioral risk reduction in developing countries: a meta-analysis, 1990–2005. *AIDS Behav*. 2008;12(3):363–73.
15. World Health Organization. Community Mobilization and HIV Counseling and Testing. World Health Organization; 2010. <http://www.who.int/hiv/topics/vct/toolkit/components/community/en/index.html>. Accessed 22 Feb 2010.
16. Rogers EM. Diffusion of innovations. New York: Free Press; 1995.
17. Coates TJ, Richter L, Caceres C. Behavioural strategies to reduce HIV transmission: how to make them work better. *Lancet*. 2008;372(9639):669–84.
18. Sweat MD, Denison JA. Reducing HIV incidence in developing countries with structural and environmental interventions. *AIDS*. 1995;9(Suppl A):S251–7.
19. Yin RK. Case study research: design and methods. 4th ed. Los Angeles: Sage Publications; 2009.
20. Stake RE. The art of case study research. Thousand Oaks: Sage Publications; 1995.
21. Lincoln YS, Guba EG. Naturalistic inquiry. Thousand Oaks: Sage Publications; 1985.
22. Altman DG. Sustaining interventions in community systems: on the relationship between researchers and communities. *Health Psychol*. 1995;14(6):526–36.
23. Cornish F, Ghosh R. The necessary contradictions of 'community-led' health promotion: a case study of HIV prevention in an Indian red light district. *Soc Sci Med*. 2007;64(2):496–507.
24. McHunu GG. The levels of community involvement in health (CIH): a case of rural and urban communities in Kwazulu-Natal. *Curationis*. 2009;32(1):4–13.
25. Nhamo M, Campbell C, Gregson S. Obstacles to local-level AIDS competence in rural Zimbabwe: putting HIV prevention in context. *AIDS Care*. 2010;22(Suppl 2):1662–9.
26. Beeker C, Guenther-Grey C, Raj A. Community empowerment paradigm drift and the primary prevention of HIV/AIDS. *Soc Sci Med*. 1998;46(7):831–42.
27. Campbell C, Cornish F. Towards a "fourth generation" of approaches to HIV/AIDS management: creating contexts for effective community mobilisation. *AIDS Care*. 2010;22(Suppl 2):1569–79.
28. Narayan D, Cassidy MF. A dimensional approach to measuring social capital: development and validation of a social capital inventory. *Curr Sociol*. 2001;49(2):59–102.
29. Draper AK, Hewitt G, Rifkin S. Chasing the dragon: developing indicators for the assessment of community participation in health programmes. *Soc Sci Med*. 2010;71(6):1102–9.
30. Newman PA. Towards a science of community engagement. *Lancet*. 2006;367(9507):302.
31. Sweat M, Morin S, Celentano D, Mulawa M, Singh B, Mbwambo J, et al. Community-based intervention to increase HIV testing and case detection in people aged 16–32 years in Tanzania, Zimbabwe, and Thailand (NIMH Project Accept, HPTN 043): a randomised study. *Lancet Infect Dis*. 2011;11(7):525–32.
32. Spire B, de Zoysa I, Himmich H. HIV prevention: what have we learned from community experiences in concentrated epidemics? *J Int AIDS Soc*. 2008;11(1):5.
33. Nakibinge S, Maher D, Katende J, Kamali A, Grosskurth H, Seeley J. Community engagement in health research: two decades of experience from a research project on HIV in rural Uganda. *Tropical Medicine & International Health: TM & IH*. 2009;14(2):190–5.
34. Tindana PO, Singh JA, Tracy CS, Upshur RE, Daar AS, Singer PA, et al. Grand challenges in global health: community engagement in research in developing countries. *PLoS Med*. 2007;4(9):e273.
35. Campbell C, Foulis CA, Maimane S, Sibiya Z. The impact of social environments on the effectiveness of youth HIV prevention: a South African case study. *AIDS Care*. 2005;17(4):471–8.