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## Increasing Minority Research Participation Through Community Organization Outreach

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### Abstract

Recruitment is one of the most significant challenges in conducting research with ethnic minority populations. Establishing relationships with organizations that serve ethnic minority communities can facilitate recruitment. To create a successful recruitment process, a strategic plan of action is necessary prior to implementing community outreach efforts. For this study population of women who were HIV+ and recovering from substance abuse disorder, the authors found that establishing trust with community organizations that serve these women allows for a productive referral relationship. Although the majority of women in this study are African American, the authors were particularly challenged in recruiting Hispanic women. This article presents a recruitment process model that has facilitated our recruitment efforts and has helped the authors to organize, document, and evaluate their community outreach strategies. This model can be adopted and adapted by nurses and other health researchers to enhance engagement of minority populations.

### Keywords

recruitment; minorities; community; engagement; outreach

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Despite recent efforts by the National Institutes of Health (NIH) to promote research that includes women and minorities (U.S. Department of Health and Human Services [USDHHS], 2003), there is a risk of continued underrepresentation of minority group members and women in health research because of barriers to research participation. Although special recruitment efforts are clearly needed to overcome these barriers (Atkinson & Flint, 2001; Brown, Fouad, Basen-Engquist, & Tortolero-Luna, 2000; Escobar-Chaves, Tortolero, Mâsse, Watson, & Fulton, 2002; Gilliss et al., 2001; Marquez, Muhs, Tosomeen, Riggs, & Melton, 2003), few reports have proposed working with community organizations and leaders explicitly for this purpose. Many of those who suggest working with such contacts have not described the process of establishing relationships between researchers and the community. We have used our experiences in attempting to recruit a culturally representative sample of women who were HIV+ for a behavioral study on HIV medication adherence and substance abuse recovery to

develop a recruitment process model to plan, document, and evaluate community-based recruitment.

## HIV/AIDS and Substance Abuse Disparities

Ethnic minority groups have been found to be at an increased risk for sexually transmitted diseases and substance abuse. Specifically, HIV/AIDS with co-occurring substance abuse disorders are devastating health problems that disproportionately affect minority populations (Centers for Disease Control and Prevention [CDC], 2005a, 2005c; Hessol et al., 2001). The CDC (2005a) reported that in 2003 African Americans were diagnosed with AIDS 10 times more often than Whites. Although African Americans constituted 12.3% of the U.S. population in 2000, they accounted for 40% of the total estimated AIDS cases that had been reported since the beginning of the epidemic. A somewhat smaller health disparity is found among Hispanics. According to the CDC (2005b) the HIV/AIDS rate for Hispanics is 4 times the rate among Whites. Women are becoming a larger proportion of the population infected with HIV/AIDS. In 1992, women constituted 14% of the adults and adolescents diagnosed with HIV/AIDS; however, by 2003 this increased to 22% (CDC, 2004). The CDC identified minority women as having high risk for infection with HIV (CDC, 2004). In 2001, HIV/AIDS was the number one cause of death among African American women between the ages of 25 and 34 years (CDC, 2005b). Hispanic women had 6 times the AIDS diagnosis rate when compared to non-Hispanic White women in 2003, and African American women had 25 times the rate of infection as compared to non-Hispanic White women.

The U.S. government has recognized that research on HIV/AIDS and substance abuse should include minority populations and women to ensure that research outcomes address the needs of and are generalizable to those populations. Congress and the NIH have mandated inclusion of women and minorities in clinical research as a requirement for federally funded clinical research (USDHHS, 2003). Despite these recent efforts by the NIH, there is a risk of continued underrepresentation of women and minority group members in clinical research because of the many challenges in recruiting women and minority populations (Bailey, Bieniasz, Kmak, Brenner, & Ruffin, 2004; Mann, Hoke, & Williams, 2005; Shavers-Hornaday & Lynch, 1997; Warren-Findlow, Prohaska, & Freedman, 2003).

## Difficulties in Engaging Minority Women

Recruiting ethnic minorities to participate in clinical research is more challenging and costly than recruiting participants from the ethnic majority (Escobar-Chaves et al., 2002; Levkoff & Sanchez, 2003; Marquez et al., 2003; Shavers-Hornaday & Lynch, 1997). African Americans are often distrustful of medical researchers for many reasons, including the history of forced immigration from Africa, subsequent enslavement, and the history of abuses by medical researchers themselves (Shavers-Hornaday & Lynch, 1997). An infamous case of unethical research conduct involving minority participants, the Tuskegee Study of untreated syphilis in African Americans continues to affect African Americans' distrust of the medical and scientific community (Shavers-Hornaday & Lynch, 1997).

Hispanics, and Hispanic women in particular, are difficult to engage in clinical research for many socioeconomic reasons that also affect African Americans, including poor access to care, lack of transportation, need for child care, costs of participation related to lost time at work, and competing family responsibilities. In addition, researchers seeking to include Hispanic participants face the challenges of creating language-appropriate recruitment and informed consent processes and overcoming participants' anxiety regarding discussing and revealing personal information about negatively perceived health topics, especially in relation to sexual health issues such as sexually transmitted infections (STIs) and condom use (Larkey et al., 2002).

In addition to culturally related barriers mentioned above, recruiting persons with certain debilitating health conditions is particularly challenging. For example, conditions such as HIV/AIDS and substance abuse disorders that impair cognitive functioning may affect the ability of individuals to understand what is entailed in the research and thus may also affect the ability to give informed consent. Impaired functioning may also make it difficult for individuals to have the energy or motivation to volunteer for research. Other factors that make recruiting minority women who are HIV+ with a substance abuse disorder a major challenge include health status, relapse, homelessness, and perceptions of and beliefs regarding the intervention offered.

The social stigma associated with certain conditions adds an additional layer of barriers to recruitment. Minority women with HIV/AIDS and a substance abuse disorder are a sensitive population and, as such, are hard to engage for additional complex reasons. Benoit, Jansson, Millar, & Phillip (2005) explained and cited research supporting that sensitive, underresearched, and hard-to-reach or hidden populations share three main characteristics. First, the size of the group being studied is unknown because no sampling frames exist; second, acknowledgment of belonging to the group is dangerous because members are often afraid of stigma and prosecution; and third, members are distrustful of nonmembers, avoid revealing their identities, and are likely to provide unreliable information to researchers (Benoit et al., 2005).

The National Institute on Drug Abuse (NIDA)-funded study for which we created our recruitment process model proposed a family-ecosystemic intervention for HIV medical adherence in women who are recently sober (Mitrani, Szapocznik, & Robinson, 2000). *Recently sober* is defined in the current project as *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV*; American Psychiatric Association, 1994) drug dependence or abuse within the last year but not in the past 60 days. The 4-month intervention targets women, their families, and their social networks as the building blocks for the infrastructure to support HIV medical adherence, reduction in HIV transmission risk behaviors, and drug abuse relapse prevention. The current study sought to enroll 176 women, with approximately 33% of these being Hispanic. Given the well-known difficulties in recruiting minority women and the immediately apparent difficulty of identifying Hispanic women with HIV/AIDS and a co-occurring drug abuse disorder, we needed a strategic plan of action to attain our recruitment goals.

## Approaches for Recruiting Minority Women

Researchers have proposed methods to reach special populations such as minorities, individuals with a substance abuse disorder, and those with a stigmatized health condition (e.g., HIV/AIDS; Atkinson & Flint, 2001; Calsyn, Klinkenberg, Morse, Miller, & Cruthis, 2004; Gilliss et al., 2001; Levkoff & Sanchez, 2003; Muhib et al., 2001). Strategies to overcome previously mentioned barriers include snowball sampling, providing free transportation to and from the research center, conducting research in the community that is convenient for the participants, reminding participants of appointments, and working with community leaders and/or bilingual and bicultural staff to help support recruitment and retention efforts (Escobar-Chaves et al., 2002). In an attempt to recruit postmenopausal women self-identified as American Indian, Asian, African American, Hispanic, and White, Gavalier, Bonham-Leyba, Castro, and Harman (1999) experienced a slow start to their enrollment. They introduced new recruitment strategies that involved the use of culturally matched research staff, networking in community groups, and direct recruitment. These techniques yielded a significant increase in interested participants between Years 1 and 2 of the project.

Many of the strategies mentioned above have possible benefits and were incorporated in our protocol, such as compensating for participation and transportation, and hiring bilingual and culturally matched research staff. Other challenges that we describe in this article, such as addressing the privacy needs of our potential participants during the recruitment process, remained unaddressed by these strategies.

Another strategy for identifying and accessing hard-to-reach populations involves reaching out to community organizations (Benoit et al., 2005). Community organizations, and in particular community health care and substance abuse treatment providers, have experience and expertise working with hard-to-reach populations, as well as increased access to them. In our experience in our community it is also common to find that such community organizations are run by and hire staff that are ethnically matched and have similar life experiences to the target population. The HIV/AIDS treatment community in South Florida, for example, often hires staff that are African American and Hispanic, as well as staff that are HIV+ and gender matched to their patients. This connection between community organizations and the population they serve helps to ameliorate language barriers and perceived power differentials between staff and participants. Because the potential participants who utilize these community resources are already discussing issues of HIV/AIDS and substance use, privacy and stigma-related concerns are also reduced. The experience and cultural competence (Sue, 1998) of the staff at community organizations also lends itself to enhancing the cultural competence of the recruitment process. Because of these perceived benefits we decided to utilize this community organization-based approach to recruitment.

Community-academic partnerships have taken many forms, and to this date there is no single preferred model (Benoit et al., 2005). These arrangements fall into three general categories: (a) the community helping researchers gain access to hidden populations, (b) a reciprocal relationship in which community and researcher have knowledge and learn from the other, and (c) community-initiated research projects that seek academic partnerships and use the outcomes to direct courses of action and policy change that will benefit the community being studied (Benoit et al., 2005). As we describe in more detail in the Method section, the current study uses a combination of (a) and (b).

Engaging community organizations for purposes of recruitment can be challenging for multiple reasons including fear and mistrust, perceived power differentials, cultural barriers, and difficulties in effectively communicating the benefits of participation (Dancy, Wilbur, Talashek, Bonner, & Barnes-Boyd, 2004). The literature suggests that community organizations may be wary of university-based researchers if historically they have been pathologized or patronized (Benoit et al., 2005). Community organization members may also be skeptical about how the research outcomes might be used and whether they would lead policy makers to make beneficial changes in the community (Benoit et al., 2005).

To effectively engage community organizations, health researchers must gain a political and historical understanding of community perceptions regarding research and their university. Levkoff, Levy, and Weitzman (2000) pointed out that investigators should not assume that successful methods for recruitment for one community will work in all other, similar communities. By failing to understand the specific culture of the target population, the investigators inadvertently distance themselves from community organizations. Researchers need to respond by effectively communicating their research objectives to community organization members and building trusting relationships. Important elements of building those relationships include discussing research procedures, hypotheses, pilot data, and plans to bring results of the data back to the community for future utilization (Benoit et al., 2005; Reback & Simon, 2004).

Based on the relative strengths and weaknesses of various proposed recruitment methods, our team decided to concentrate on working through community organizations to reach and recruit our target population. We felt that this was the most effective way of dealing with several of the barriers to recruitment, including the difficulty in identifying potential participants, approaching them to invite them to participate in the current study, maintaining privacy, ensuring a culturally competent recruitment process, and maximizing staff time and resources. The next step was to design a plan to implement community organization–based recruitment.

## Purpose

We began with the assumption that strategic planning would be critical for implementing our community organization–based research approach. This led to the development of our recruitment process model that assisted our team in visualizing the process specific to our particular community, plan and systematically organize recruitment efforts, log these efforts, and identify successful areas, as well as areas in need of further development. In this article, we share our experiences utilizing the model as it developed, as well as the process of using the model as a feedback mechanism to suggest changes in recruitment strategies that we found to be unproductive.

## Design

This article presents qualitative and basic quantitative measures of efficacy of our recruitment process. Our qualitative data were recorded in a detailed Contact Log and our quantitative measurements were recorded in a Recruitment Process Log (Figure 1).

Quantitative measures included logging each time a contact was made with an organization and categorizing the type of contact, for example, a phone call, personal visit, or other contact. Qualitative data recorded in the Contact Log included who was spoken to, what was discussed, what suggestions were made by the contact, and what plans were made for future contact.

## Sample

The current sample consists of community organizations in the south Florida area, including drug treatment facilities, hospitals, community clinics, social service offices, community education providers, and independent medical providers. We include the data from other sources such as walk-ins, flyers, and other research studies for completeness. The target study sample was adult women who were HIV+ with a recent history of substance abuse. We researched 25 community organizations, contacted 14, established relationships with 9, and recruited participants from 9. At the date of submission of this article, 46 women were enrolled in the study. Of the 46 enrolled, 38 were African American, 3 were Hispanic, and 1 was White.

## Method

### The Recruitment Process Model

Initially we created the recruitment process model as a plan of action. We started by creating a visual aid of the recruitment outreach process. We created a log form to track efforts and determine which were successful. Using the log, we determined that the model as originally envisioned did not afford sufficient flexibility in the process, and we modified the model several times to capture more information. The model presented in Figure 2 is the latest iteration of those efforts. Throughout the duration of the recruitment period, we logged our outreach and recruitment efforts in the logs featured in Figure 1 as well as in a contact log. Periodically, we used information from the Recruitment Process Log Form (Figure 1) to modify our efforts where change was deemed necessary, such as where efforts were not yielding participants or

where certain resources were not being utilized sufficiently. We performed qualitative and quantitative analyses of the log and enrollment data looking for significant trends. Figure 2 illustrates the recruitment process model and the multiple pathways we utilized.

Although the ultimate goal of this model was to increase study enrollment, the more proximal goal was to foster relationships with community organizations that would help both sides to achieve goals. In our case, we were attempting to meet our recruitment goals, including not only a sufficient number of participants to achieve statistical power but also sufficient ethnic diversity to ensure that results of the current study could be generalized to the ethnic populations in our community, including African American and Hispanic women. In the case of our community contacts, their goals included offering educational opportunities to their clients and opportunities for participation in interventions that might improve the clients' health outcomes. As community leaders, they also had long-term goals of helping to ensure the success of research taking place in their community whose results could benefit the community in the future. Some of our community contacts were also interested in designing their own research projects in the future and believed that building relationships with researchers who might be prospective future collaborators would be beneficial. Others were interested in making additional community contacts and saw our work as facilitating that network building.

We identified three levels of outreach within the community organizations: (a) supervisors and/or administrators, (b) service providers, and (3) receivers of community services. All three were possible targets for outreach efforts when we began our recruitment period; however, we required a way of deciding which route would be the most effective. The model we created helped us to visualize all three levels, how those three levels interacted with one another, and finally, how we as a research team could fit into that system in the most strategic manner. We decided, initially, to utilize a top-down approach and target the supervisors and/or administrators of those service providers, as they would be in the best position to effect change throughout the other levels.

### **Identifying Community Organizations**

The first step in implementing the model was to identify community organizations that might be able to provide either direct access to or referrals of eligible women. Our main targets were providers of drug treatment services, providers of HIV/AIDS health and/or social services, and primary care providers in minority neighborhoods. When an organization had been identified, our staff performed an initial inquiry to discern whether the organization was likely to work with our target population. We utilized the resource's print and online information as an initial source to determine the likelihood of contact with potential participants. When that inquiry was inconclusive, a follow-up phone call was made to determine what services they provided to whom. When the staff found that it was unlikely that the organization served our target population, we recorded that information and did not contact the organization any further.

### **Meeting With Administration**

If we determined that the organization was likely to work with our target population, then we made an initial contact with a leader, such as a CEO or supervisor. Depending on the organization, that contact varied in degrees of authority; however, we began with persons as high on that hierarchy as possible while still being directly involved with the population. For example, in the case of a community health clinic with various services, an initial contact might have been with the head of special populations, special immunology, or possibly community outreach—it was generally not with the CEO of the clinic. At that stage, we sent a detailed letter describing the current program with all of its inclusion criteria and risks and benefits. This step was crucial because most organization leaders would not continue without detailed knowledge of the project including possible risks and benefits of participation. We noted that

a general history of the research team and their previous experience working with clients such as theirs was also helpful to the organization leader. Contacts with organization directors sometimes involved study investigators who could discuss scientific and policy issues, negotiate the working relationship, and discuss common interests and goals as they pertained to the community and population in particular.

### Meeting With Staff or Potential Participants

If the meeting with community organization supervisors and/or administrators garnered interest, with permission we followed up with a presentation to the remainder of the staff or directly to the clients, depending on the particulars of that facility. If there was a suitable vehicle for a direct presentation, such as a “lunch-and-learn” session or an educational meeting, then we sought to present in that arena. In facilities without such mediums, we instead chose to meet with caseworkers, counselors, or other staff. We found that offering to bring food was an important element in planning these meetings. Staff and participants enjoyed sitting down to eat while we presented the study, and they were less likely to find our presentation disruptive if it provided something useful to them. At each visit to an organization, we left postcards describing the study with contact information and, with permission, we posted flyers.

### Referral Modes

When contacted by potential participants we recorded how each woman learned of the current study. We classified these referral modes as (a) provider referral, (b) self-referral from a presentation, (c) flyer referral, and (d) participant-participant referral (i.e., learned about the current study from another study participant). For categories (a) to (c) above, we also noted the organization that had been the source of information. By this means, we were able to ascertain which contacts and strategies were yielding referrals, which outreach efforts were not productive in spite of our efforts, and areas in need of further outreach. We used this feedback mechanism to continually modify our outreach efforts. This information was recorded on the Recruitment Process Log (Figure 1).

## Analysis of Data

### Quantitative Analysis

Our recruitment success varied across community organizations. To quantify recruitment yield in relation to outreach efforts we created a recruitment success factor (RSF) score.

### Operational Definitions

*RSF*. Ratio of participants yielded plus 1 to contact efforts made plus 1.  $RSF = (P + 1)/(C + 1)$ .

RSF is an adjusted ratio of eligible participants yielded to contacts made and is always greater than zero. By performing this calculation, we were able to rank our recruitment success across different community resources. Table 1 presents our results. We classified the organizations as health and rehabilitation centers, health care centers, HIV care providers, HIV case management, mental health services, substance abuse rehabilitation centers, support groups, and other research studies. Where no specific organization was identified, we classified the source as participant-participant referrals, flyers (without identified organization), and walk-ins.

In addition to understanding which organizations were yielding the most participants, we also wanted to understand the mode of referral that was most effective within a given organization and type of organization. Thus, we analyzed the relationship between referral mode and RSF by first categorizing each organization based on the referral mode most often made (e.g.,

primary referral mode for health care center 1 was self-referral). Next, we grouped together organizations by major referral mode and calculated a mean RSF score for each referral mode group and compared the mean values.

### Qualitative Analysis—Improving Our Recruitment Process

Qualitative analyses entailed noticing and logging trends in content and using those trends to inform our recruitment process. The recruitment team would periodically review the logs, and recruitment staff would inform supervisors and each other of significant developments. Examples of content included suggestions by community organization personnel of where and how to recruit women who were recently sober who were HIV+ and notes by recruiters on their interactions with community organizations and potential participants. Many of the community organizations we later reached out to were brought to our attention by contacts at other organizations. We also learned through our qualitative data what elements of our research appealed to women recovering from substance abuse and people who work with women who are HIV+. For example, the fact that we were testing a family intervention aimed to improve medical adherence and risky behavior was very appealing to our participants and the organizations that served them. Utilizing information like this, recorded in our logs, helped us to improve our recruitment process.

## Findings

### RSF

We analyzed the quantitative data recorded using the recruitment process model and log and found that based on the RSF score, HIV case management 3, with an RSF of 1.50, had the highest value of those organizations to whom we made outreach efforts. Although we recruited 50% of our participants from HIV case management 3, we only expended 20% of our logged efforts there. Health care center 6 was our lowest scoring relationship with an RSF of .08. Although we expended 14.67% of our efforts with health care center 6, we recruited zero participants in response to our efforts. HIV case management 1 (RSF = .29) also yielded a relatively small number of participants despite considerable outreach efforts.

### Referral Mode and RSF

By logging how each participant learned of the current study (referral mode), we noted that most of the participants from a given site found out about the current study in the same way as other participants from that site. After grouping sites by their main referral mode, we noted that some referral mode groups scored a higher RSF than others, on average. Sites whose most common referral mode was provider referral scored higher on average ( $\mu_1 = 1.57$ ) than those whose most common referral mode was self-referral ( $\mu_2 = .49$ ). A two-sample *t* test for independent samples indicated a significantly greater RSF for provider referral ( $M = 1.57$ ,  $SD = .61$ ) over self-referral,  $M = .49$ ,  $SD = .27$ ,  $t(10) = 4.16$ ,  $p = .002$ . There was no statistically significant relationship between organization type and RSF.

### Participant Ethnicity, RSF, and Referral Mode

Although the majority of the population served at HIV case management 1 (RSF = .29; most common referral mode: self-referral) was Hispanic, the majority of the people recruited and screened (71%) from that organization were African American. This apparent difficulty in recruiting Hispanic participants was also present at other predominantly Hispanic community organizations such as health care center 1 (RSF = .17; most common referral mode: self-referral). The majority of clients at HIV case management 3 (RSF = 1.50, most common referral mode: provider referrals) were African American, yet 15% of the eligible referrals they



provided were Hispanic. They provided a greater portion of Hispanic referrals than HIV case management 1 and health care center 1 who provide services to mostly Hispanic clients.

Although we were only able to formally log potential participants when they had consented to be screened, we observed, qualitatively, that Hispanic women were more likely to be reluctant to approach the research team after a presentation, even in groups specifically formed for the purposes of discussing HIV and substance abuse. When they did contact us to ask questions about participation in the current study, they often phrased the questions as if they were inquiring on behalf of a friend or partner, even though they were themselves present at the sessions for people who were HIV+.

### **Community Organization Engagement**

The qualitative log input revealed useful strategies for engaging community organizations. In one of our early efforts with a local health care center, the program manager pointed out to us that even though the current study ultimately offered services to their clients, a center's administration and staff could unfavorably perceive our research team asking for participants and establishing a referral system as more "taking" than giving. He recommended that we establish personal relationships with supervisors and staff of the organization to keep the lines of communication open so that organizations consider us as more than "takers." Such communication included thorough explanation of the purpose of the current study, how we planned to use research outcomes, and establishing a plan of how we might help them achieve some of their goals for their organization and clients. The manager also recommended that sustained effort is required to become a presence and familiar face at organizations with which we wanted to establish recruitment relationships. We heeded his advice and attended regularly scheduled organization meetings and presentations and were continually friendly and cordial with all staff and clients. Information we gathered such as this program manager's suggestion became elements of our regular qualitative log input.

In another example of utilizing the qualitative log input to enhance community-organization engagement, we learned that one organization was having trouble finding speakers for its weekly lunch-and-learn session. After discussing this problem with them, we offered to help. One of the current study team members volunteered to sponsor the lunch, and another worked with the staff to create a topic of discussion and presentation that all parties felt would be beneficial to the organizations' clients. Study team members also volunteered at the organization's World AIDS Day activities and helped with their Health Van that provides free STI screening to those in low-income neighborhoods. Crucial elements such as this could have been easily missed or dismissed if we were focusing solely on quantitative data; however, qualitative data from the logs helped us to build more trust between community contacts in research and recruitment.

### **Discussion**

Reaching out to community organizations is a potentially useful vehicle for enhancing minority participation in nursing and health research. These efforts, however, require an organized plan of action and a feedback mechanism whereby strategies can be adapted to obtain optimal results. We presented a recruitment process model that has helped us to visualize, document, and analyze the results of our action plan.

Data collected via the model allowed the team to respond and make appropriate changes to the recruitment approach such as reducing direct recruitment efforts (e.g., speaking directly with participants) in favor of working toward establishing better relations with case management staff to generate provider referrals. We made this determination because we found that

relationships in which the community organization refers participants to us yield more participants per unit of effort.

In our south Florida community, we had particular difficulty in identifying and recruiting Hispanic women who were HIV+ and were in drug recovery. We speculate that this difficulty may be caused by a combination of factors including a smaller pool of eligible women and higher levels of stigmatization and isolation among eligible Hispanic women. The mode that seemed to work best for recruiting Hispanic women was to depend on provider referrals rather than direct outreach to organizations' clients. Hispanic women that we were targeting appeared more likely to heed a suggestion from a trusted health care professional or social worker than a faceless flyer or a presentation from a stranger. We found that some prospective participants became very uncomfortable when discussing their health issues in group settings; even in groups already established for that purpose such as HIV-related lunch-and-learns. We will continue to investigate how to stimulate provider referrals of Hispanic women, including the possibility of further investigating what provider characteristics increase the likelihood that they will refer participants.

Although maintaining a sustained presence at the organization was essential, we also observed that the quantity of visits did not consistently correlate with high recruitment yield, as demonstrated by our situation with health care center 6. Ensuring an accurate initial inquiry as to the organization's contact with eligible women and maintaining connections with staff that worked directly with potential participants and made actual referrals were also helpful strategies. Sustained contact with the provider staff and determining a good population fit was nonetheless not reliably sufficient to stimulate referrals from organizations as was demonstrated by our experience with HIV case management 1. We speculate that a reason for this may have been that in our fear of coming across as merely researchers, we shifted our efforts away from communicating information about the current study and toward participating in the organization's activities. Although they trusted us sufficiently as a result of those efforts to allow us to interact with their clients, we had not informed the staff adequately of the current study for them to recommend participation. This lack of communication perhaps led to poor provider referral numbers. In the successful cases of community organization-based recruitment outreach, the most important task for our research staff was to instill understanding of and belief in the project and trust in our research team.

Although the current research focused on the process of engaging support from community organizations and leaders, one limitation is that our analysis logged content at a rather aggregated level and therefore lacked the detail and power to distinguish how differences in content of the contacts might have affected our goals. Future research should further examine what content is necessary to instill belief in the benefits of the research to the community provider and its clients. In our experience, and confirmed in the literature previously discussed, it was ownership of the study and fostering direct connections with staff that made the difference in engagement and recruitment success. The model and log allowed us to measure the effect (in terms of actual participants recruited) of this qualitatively perceived "buy-in," although it did not necessarily enable us to determine precisely what content enabled organization members to realize that buy-in. In one particular case, the model offers some insight. Some members of the staff at HIV case management 3 were past participants in the current study. By virtue of their direct experience, they held trust and belief in the project and in our research team that other community providers may not have held, which may have contributed to their extraordinary RSF score. We believe that the ability to associate qualitative knowledge such as this to quantitative measures of recruitment outreach efficiency may lead to improved representation of hard-to-reach populations in health research.

The purpose of our analysis using an RSF score is to illustrate an example of the types of quantitative analyses of community outreach procedures that are possible utilizing our recruitment process model. The conclusions regarding preferred referral modes are not meant to be generalizable to all other communities or populations. In fact, given the literature and the differences in culture across various regions, we expect that preferred referral modes and community-engagement models will vary. Our hope is that our model and log will assist the nursing researcher in making determinations of what referral modes and community-engagement models work best in his or her community. For it to do so, however, nurse researchers and health research staff must be willing to modify recruitment strategies that are unsuccessful and learn from the contacts and populations they are working with.

Although our contact with the various service organizations has been expressly for the purposes of enhancing study recruitment, there is value in moving beyond this relatively one-sided relationship to establishing true community-research partnerships. Our experience has been that organization personnel know their populations well and understand the barriers and needs of their clients. This knowledge is valuable for planning, implementing, and translating research at the community level. We need to move beyond establishing trust for purposes of recruitment to collaborative relationships to enhance the ecological validity of health services research.

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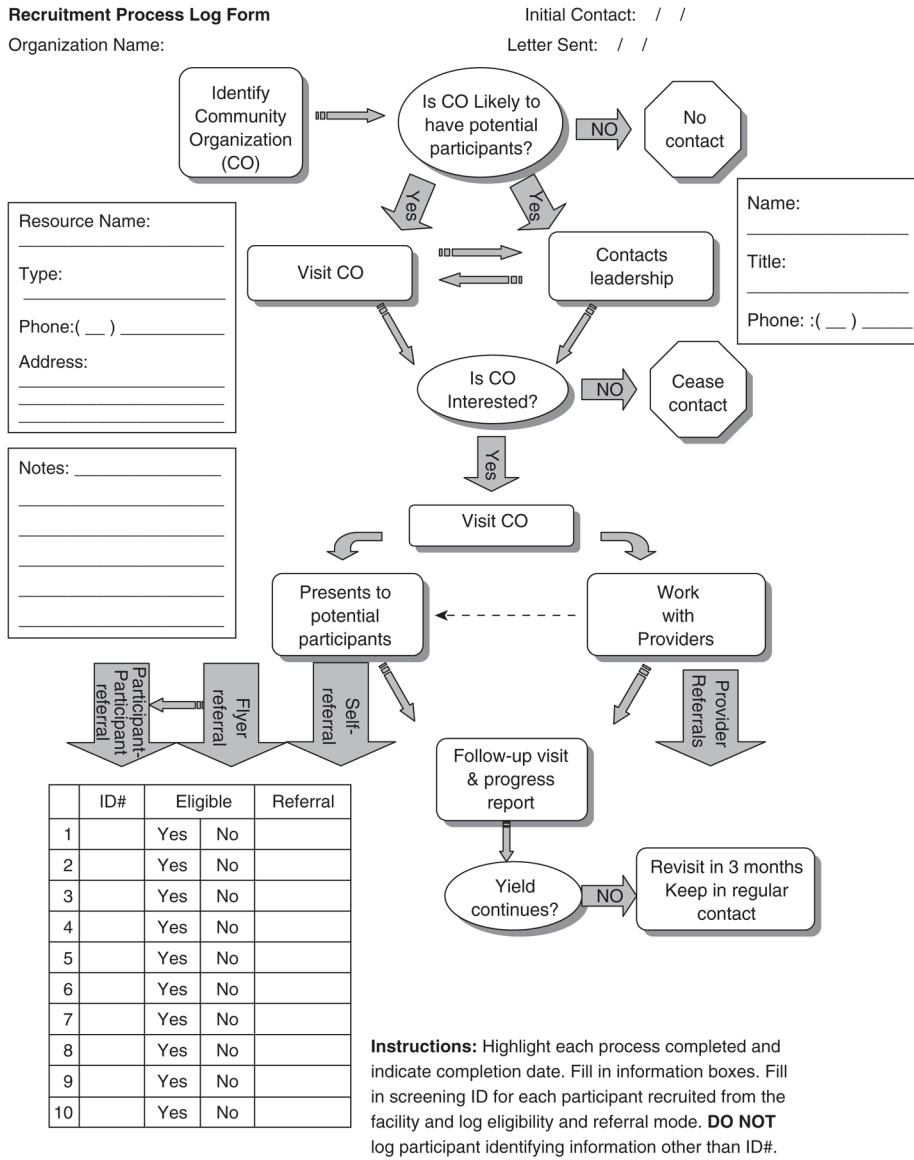
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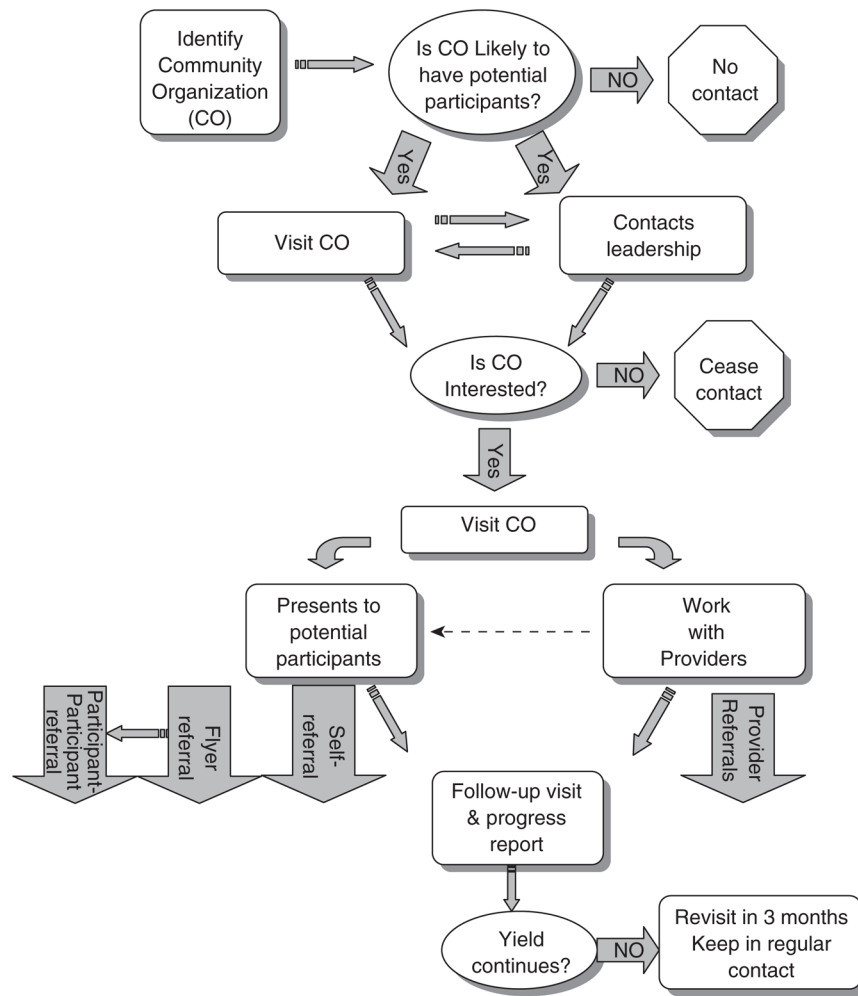
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**Figure 1.**  
 Recruitment Process Log Form



**Figure 2.**  
Recruitment Process Model

Table 1

## Recruitment Results per Community Organization

Community Organization	Participants Enrolled	% of Total	Contacts	% of Efforts	RSF	Major Referral Mode
Health care center 1	0	0	5	6.67	.17	SR
Health care center 2	0	0	0	0	1.00	NA
Health care center 3	0	0	1	1.33	.50	SR
Health care center 4	0	0	1	1.33	.50	NA
Health care center 5	0	0	3	4.00	.25	NA
Health care center 6	0	0	11	14.67	.08	NA
HIV care provider 1	0	0	1	1.33	.50	PR
HIV care provider 2	0	0	2	2.67	.33	NA
HIV care provider 3	1	2.17	2	2.67	.67	SR
HIV case management 1	4	8.70	16	21.33	.29	SR
HIV case management 2	0	0	4	5.33	.20	NA
HIV case management 3	23	50.00	15	20.00	1.50	PR
HIV case management 4	1	2.17	0	0	2.00	PR
HIV case management 5	0	0	0	0	1.00	NA
Mental health services 1	0	0	0	0	1.00	NA
Mental health services 2	0	0	7	9.33	.13	NA
Mental health services 3	0	0	0	0	1.00	NA
Researcher study 1	0	0	0	0	1.00	PR
Researcher study 2	1	2.17	0	0	2.00	PR
Researcher study 3	0	0	2	2.67	.33	NA
Substance abuse rehabilitation center 1	0	0	0	0	1.00	NA
Substance abuse rehabilitation center 2	4	8.70	5	6.67	.83	SR
Support group 1	1	2.17	0	0	2.00	PR
Support group 2	1	2.17	0	0	2.00	PR
Support group 3	1	2.17	0	0	2.00	FR
Participant-participant referral	7	15.22	0	0	NA	TR
Flyers	2	4.35	0	0	NA	FR
Walk-in	0	0	0	0	NA	FR
Total	46	100	75	100	.62	SR

Note: RSF = recruitment success factor; FR = flyer referral; PR = provider referral; SR = self-referral; TR = participant-participant referral.