Recruiting Ethnically Diverse General Internal Medicine Patients for a Telephone Survey on Physician-Patient Communication

Anna M. Nápoles-Springer, PhD,1 Jasmine Santoyo, MSc,2 Anita L. Stewart, PhD2

1Center for Aging in Diverse Communities, Medical Effectiveness Research Center for Diverse Populations, Division of General Internal Medicine, University of California, San Francisco, CA, USA; 2Center for Aging in Diverse Communities, Medical Effectiveness Research Center for Diverse Populations, Institute for Health and Aging, University of California, San Francisco, CA, USA.

BACKGROUND: Limited evidence exists on the effectiveness of recruitment methods among diverse populations.

OBJECTIVE: Describe response rates by recruitment stage, ethnic-language group, and type of initial contact letter (for African-American and Latino patients).

DESIGN: Tracking of response status by recruitment stage and ethnic-language group and a randomized trial of ethnically tailored initial letters nested within a cross-sectional telephone survey on physician-patient communication.

PARTICIPANTS: Adult general medicine patients with ≥1 visit during the preceding year, stratified by 4 categories: African-American (N = 1,400), English-speaking Latino (N = 894), Spanish-speaking Latino (N = 965), and non-Latino white (N = 1,400).

MEASUREMENTS AND RESULTS: Ethnically tailored initial letters referred to shortages of African-American (or Latino) physicians and the need to learn about the experiences of African-American (or Latino) patients communicating with physicians. Of 2,482 patients contacted, eligible, and able to participate (identified eligibles), 69.9% completed the survey. Thirty-nine percent of the sampling frame was unable to be contacted, with losses higher among non-Latino whites (46.5%) and African Americans (44.2%) than among English-speaking (32.3%) and Spanish-speaking Latinos (25.1%). For identified eligibles, response rates were highest among Spanish-speaking Latinos (75.2%), lowest for non-Latino whites (66.4%), and intermediate for African Americans (69.7%) and English-speaking Latinos (68.1%). There were no differences in overall response rates between patients receiving ethnically tailored letters (72.2%) and those receiving general letters (70.0%).

CONCLUSIONS: Household contact and individual response rates differed by ethnic-language group, highlighting the importance of tracking losses by stage and subpopulation. Careful attention to recruitment yielded acceptable response rates among all groups.

KEY WORDS: recruitment; telephone survey; African Americans; Latinos; physician-patient communication.

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Address correspondence and requests for reprints to Dr. Nápoles-Springer: University of California San Francisco, 3333 California Street, Suite 335, San Francisco, CA 94118-1944 (e-mail ans@medicine.ucsf.edu). See editorial by Chiu, p. 448.

METHODS

Based on previous models7,8 and research3,9–12 on recruitment and retention of ethnic minorities, we developed a framework of factors (e.g., sampling frame, family and community context, recruitment and study methods, personnel) that can affect response at various stages of the recruitment and retention processes (see Appendix available online, and Figure 1). The ability to identify factors leading to differential response and strategies for addressing these, or descriptive accounts of recruitment results,3 rare.4 Empirical evidence is needed to guide selection of recruitment and retention strategies among diverse populations. Estimates from our previous studies among diverse populations indicated a loss of 40% to 50% of our sampling frames due to the inability to locate respondents, either due to incorrect contact information or lack of a response to a letter or telephone call, which appears to be consistent with other population- or clinic-based studies.4,5 Thus, we devoted additional resources to designing, implementing, and tracking recruitment in a cross-sectional telephone survey of inter-personal processes of care among ethnically diverse adult general medicine patients. We utilized 5 strategies to enhance response rates. First, we designed and pretested initial contact letters to maximize their appeal and readability among potential participants identified through a medical records database. Second, we used a bilingual format with Latinos. Third, we developed ethnically tailored letters for African Americans and Latinos. Fourth, we enhanced the recruitment protocol for Latinos given their smaller numbers in the sampling frame. Finally, we monitored response rates at various stages of the recruitment process by ethnic and language group to identify points at which potential respondents were lost.

Within the survey study, we nested a randomized trial to examine the effects of ethnically tailored initial contact letters on response rates. We selected the first mailing as the intervention point because mailings may offer a low-cost, low-intensity method for recruiting ethnic minorities.9 Also, many Institutional Review Boards (IRB) require that initial contact with patients occur through the mail rather than by telephone or in person. Little empirical data exist on whether the content of an initial letter influences the rate of subsequent telephone contact. We hypothesized that raising awareness through the letter about the specific concerns of an ethnic group with respect to their interactions with physicians would increase their response rates to the telephone survey compared to a more general letter. Thus, the purpose of this study was to: 1) describe response rates by stage and ethnic-language group and 2) assess the effectiveness of an ethnically tailored initial contact letter on response rates to a telephone survey on physician-patient communication.
rates by stage and ethnicity can facilitate the adjustment of recruitment strategies to improve their effectiveness. In this study, we apply the framework to examine differential loss in the sampling frame by stage and ethnic-language group.

Study Design

A randomized trial of the ethnically tailored letter was nested within the cross-sectional telephone survey that aimed to assess the quality of interpersonal processes of care occurring during the medical encounters of ethnically diverse patients. Efforts to contact patients who received an initial invitation letter to participate in the telephone survey were monitored and a final disposition was ascertained in all cases.

Sample

The sampling frame consisted of adults who had made at least 1 visit between April 30, 2000 and April 30, 2001 to the University of California San Francisco-Mt. Zion adult primary care clinics. The ethnic composition of these adult outpatient practices during 2001 was 10% African-American, 15% Latino, and 60% non-Latino white; the payer mix was approximately 40% full-capitation managed care, 30% Medicare, 25% Medicaid, and 5% uninsured. The sampling frame was derived from the medical records database and contained information on patients’ ethnicity, language, gender, age, and health insurance. We stratified the sampling frame into 4 ethnic-language categories: African-American (N = 2,369), English-speaking Latino (N = 894), Spanish-speaking Latino (N = 965), and non-Latino white (N = 10,822). We selected a random sample of 1,400 African Americans and 1,400 non-Latino whites and all Latinos (as there were fewer in the sampling frame). Our goal was to recruit approximately 400 patients in each ethnic-language group. Thus, a total of 4,660 initial contact letters was mailed to patients.

Procedures

As required by the IRB, patients were sent an initial contact letter explaining the purpose of the study, and how their name was obtained. The general initial contact letter requested participation in a telephone survey of the interpersonal processes occurring during medical visits. Letters contained the following elements: emphasized the need for information on patients’ opinions on communication occurring during medical encounters; used concise and clear language; stressed that the study was being conducted by researchers and not their health care provider; provided reassurance that the responses of individuals would not be shared with their doctors; mentioned a $20 payment; used the logo of the academic institution; and were written at a seventh grade reading level.

Alternative designs of initial contact letters and envelopes were pretested among 36 African Americans and Latinos recruited from community settings and not included in the main study. Respondents were asked to compare an envelope with the university logo only, to one that also included a picture of patient and physician with a caption that read, “Your opinions matter. Help us improve communication between doctors and patients. Please consider taking part in this study.” Pretesting revealed that 78% of respondents indicated they would be more likely to open and read a letter enclosed in the envelope with the drawing and caption, so this was the final general envelope used. For the general letter, a postage stamp with a picture of fruit was used.

The ethnically tailored letter was the same as the general letter except that it included two additional sentences and a modified sentence. In the opening paragraph, these sentences read, “As we all know there is a shortage of African-American (Latino) doctors. We are trying to learn from African-American (Latino) patients about their personal experiences in communicating with their doctors. If you take part in this study, you may help us develop better ways to train non-African-American (non-Latino) doctors so that patients are more satisfied with their care.” In the pretest, 81% of the African-American and Latino participants indicated they would be more likely to participate in the survey in response to the ethnically tailored letter than the general letter. We also created an ethnically tailored envelope by replacing “patients” on the general envelope with “African-American (or Latino) patients.” For Latino participants, the caption on the envelope was printed in both English and Spanish. For the ethnically tailored envelopes, we used a postage stamp of Roy Wilkins for African Americans, and Frida Kahlo for Latinos.

Patients identified in the sampling frame as Latino or African American were randomly assigned within each ethnic-language group to receive either a generic or ethnically tailored initial letter. Random assignment occurred using a SAS program (SAS Institute, Cary, NC). White patients were not included in the randomized trial and received the general envelope and letter in English.

The computer-assisted telephone interview (CATI) survey was conducted by a professional health survey company between October 1, 2001 and January 31, 2002. A total of 17 trained and experienced interviewers conducted the surveys, including 7 who were bilingual in English and Spanish. Bilingual staff conducted all telephone calls to potential respondents identified as Latino.

Eligibility was confirmed and verbal informed consent obtained as approved by the IRB. The survey lasted 31 minutes on average (range 21 to 42 minutes), and contained questions on the quality of communication (general clarity, elicitation of and responsiveness to patient concerns, explanations), decision making (responsiveness to patient preferences, consideration of ability and desire to comply), and interpersonal style (friendliness, respectfulness, discrimination, cultural sensitivity, emotional support, empowerment) of their physicians. The protocol specified at least 15 telephone attempts to each patient, approximately 2 weeks after mailing of the initial letter. Calls were made to each person at varying times (including evenings) and days of the week (including weekends).

The enhanced recruitment protocol for Latinos specified additional follow-up efforts in cases where telephone numbers or addresses were incorrect or nonresponse continued after 15 telephone attempts. This protocol specified a review of the electronic medical record for updated contact information, a search of online telephone directories, review of telephone call logs, follow-up of telephone calls received, subsequent mailings to forwarding addresses for returned mail, one repeat mailing, and up to 30 telephone attempts.

Analysis

A computer database was used to track the disposition of all patients in the sampling frame and all telephone calls made