

**Section B: Statistical Methods**

**OMB control # 0920 -0775**

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Formative Research to Develop Social Marketing Campaigns- Routine HIV Testing For Emergency Medicine Physicians, Prevention Is Care, and Partner Services

## **B. STATISTICAL METHODS**

### **1. Respondent Universe and Sampling Methods**

The purpose of this study to continue formative research through semi structured one-on-one interviews<sup>1</sup> to support CDC's efforts in further developing three social marketing campaigns:

- Routine HIV Testing,
- PIC, and
- Partner Services.

Qualitative methods provide flexible in-depth exploration of the participants' perceptions and experience; and the interviews yield descriptions in the participants' own words.

It also allows the interviewer flexibility to pursue relevant and important issues as they arise during the discussion.

Furthermore, a qualitative approach will allow us to capture subtle nuances in participants' attitudes, beliefs, and feelings related to the campaign materials. Our interview discussion guides include probes to ensure that we obtain input on specific items of interest, while open-ended questions ensure that participants' responses and perceptions are fully addressed and captured.

We plan to supplement the qualitative data collected during the interviews with a brief paper and pencil questionnaire that

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<sup>1</sup> We may use a combination of individual interviews and small group discussions (such as dyads or triads). However, our total estimated number of participants will be the same thus the burden hours we included in Section A will also be the same.

will be administered to participants either immediately before (while they are waiting to begin their interview) or at the end of the interview while the moderator is checking with observers about whether there are additional questions. The brief questionnaire will collect basic background information about the participants and some general characteristics of their patient populations to enable us to more fully describe the participants. These questions could be asked as warm-up questions during the interview, but we feel that using the brief questionnaire provides the opportunity to ask these items consistently across all participants and will not take time away from the interview discussions. The paper and pencil questionnaires are included in **Attachment 7**.

Our sample will be one of convenience as opposed to probability based. Therefore, the results are not generalizable to the general population. To date, we have conducted a total of 162 interviews and the remaining interviews will be conducted to finish creating materials for the three campaigns. The remaining number of interviews for the three campaigns are as follows:

- Routine HIV Testing: 8 participants
- *PIC* : 48 participants
- Partner Services: 26 participants

Statistical power is not applicable because this is a qualitative study.

## ***Study Population***

**Routine HIV Testing.** The target audience for the campaign is practicing emergency medicine physicians. Therefore, if a physician is not post-residency, he/she will be excluded from the study. Additionally, participants must be currently working full-time in an emergency department and order at least two HIV tests per month.

**PIC.** The *PIC* campaign is aimed at providers who treat a significant number of patients who are living with HIV. Therefore, IDS' who currently treat fewer than 50 patients who are living with HIV and PCPs who treat fewer than 20 patients who are living with HIV will be excluded from the study. PCPs who see their largest patient loads in private practice settings are the main target audience of the campaign. Therefore, PCPs who see less than 50% of their patients in a private practice setting will be excluded from the study.

**Partner Services.** The Partner Services campaign is aimed at IDS providers who treat a significant number of patients who are living with HIV. Therefore, IDS who currently treat fewer than 50 patients who are living with HIV will be excluded from the study. PCPs who see their largest patient loads in private practice settings are the main target audience of the campaign. Therefore, PCPs who see less than 50% of their patients in a private practice setting will be excluded from the study.

## **2. Procedures for the Collection of Information**

RTI will select and reserve focus group facilities (with CDC's approval) in each city for each of the three campaigns. RTI will oversee the local focus group facilities' recruitment of participants. RTI staff may also recruit participants for the research. The professional focus group facilities as well as RTI will use the screeners (**Attachment 6**) to identify eligible participants.

As participants are recruited, recruitment grids will be prepared to keep track of recruitment. The recruitment grids will list the participants' first name and some demographic information obtained from the screener. The grids will not contain any identifying information. The recruitment grids will be stored in a locked file cabinet or on a password protected project share drive at RTI and at each focus group facility. The focus group facilities will destroy their copies of the recruitment grids after data collection is completed in that city. RTI and CDC will have copies of the recruitment grids in order to describe the study sample. These copies of the recruitment grids will be kept in locked file cabinets or on a password protected project share drive at RTI and CDC for the duration of the study.

Recruitment will begin at least four weeks before the interviews are scheduled. RTI will closely communicate with each

focus group facility to monitor the recruitment and troubleshoot any problems. RTI will keep CDC apprised of the recruitment progress and will make any necessary adjustments during the recruitment process. Identification of recruitment facilities and recruitment will begin once IRB and OMB clearance is received. Typically, recruitment takes about 1 month and we will begin recruitment for the first 2 cities within a week of receiving clearance. Recruitment for the first city in phase 2 (third city overall) will occur while conducting research in the last city of phase 1 (second city overall). This overlapping process will continue until all phases have been completed. Dates will be assigned to each activity on the timeline for tracking and monitoring purposes after receiving IRB and OMB clearance.

Personal information from the potential participants will be maintained and protected to the extent allowable by law. At each facility, recruitment staff will sign a privacy agreement (see **Attachment 8**). At each facility and at RTI, the screeners will be kept in locked file cabinets. All identifying information (name, address, telephone number) will be recorded on the last page of the screener, which will enable the facility and/or RTI to send reminder letters/e-mails and make reminder phone calls. The last page of the screener will be torn off and destroyed after the interviews are conducted. Local focus group facilities will send the screeners (without the last page) to RTI. The

screeners will be stored in a locked file cabinet at RTI throughout the duration of the project. Once the project ends, the screeners will be transferred into a locked RTI storage facility for three years. The screeners will be kept for three years in the event additional data verification is needed at a later date. RTI staff will destroy the screeners after three years. No identifying information about participants will be kept at the focus group facilities after the interviews are completed and the focus group facilities will not send any identifying information to RTI or CDC.

Reminder letters/e-mails will be sent to potential participants prior to the interview giving them directions to the facility. Confirmation calls will also be made 1-2 days prior to the interview to assure that all recruits are confirmed.

Once the potential participant comes to the study site and checks in, he/she will be given a consent form (see **Attachment 5**). The individual will be given time to read the consent form on his/her own and a trained RTI staff member will be available to answer any questions. If the participant agrees to be in the study, he/she will sign the consent form. The participant will be given a copy of the consent form to keep for his/her records. Participants will be reminded that they can refuse to answer any question and they can stop being in the study at any time, without penalty. RTI staff will FedEx or personally take these

forms back to RTI after the interviews are completed in a particular city. The consent forms will be stored in a locked file cabinet at RTI for the duration of the project. Once the project ends, the forms will be transferred to a locked RTI storage facility for three years. After three years, RTI staff will destroy the forms.

All interviews for each of the campaigns will be conducted over the course of three years. The interviews for all campaigns will be conducted in-person at focus group facilities by a professionally trained moderator. Each interview will last for one hour. In addition to the interviewer, an additional RTI staff member will attend the interviews to take notes on a laptop computer from behind a one-way mirror and to coordinate logistics of checking in participants and obtaining informed consent. CDC staff member(s) may also attend and observe the interviews from behind a one-way mirror. All interviews will be audio taped.

### **3. Methods to Maximize Response Rates and Deal with Nonresponse**

The following procedures will be used to maximize cooperation and to achieve the desired participation rates:

- Recruitment through professional focus group facility recruitment firms. Participants will be contacted at their practices and screened for eligibility via telephone. Reminder letters/e-mails will be sent with directions to the research site and reminder phone calls



placed 1-2 days prior to the scheduled interview.

Participants will not be contacted again after the interview is over.

- Provision of tokens of appreciation to thank participants for their time and effort in the study (please see Section A-9 for more information about the tokens of appreciation).

#### **4. Test of Procedures or Methods to Be Undertaken**

To estimate the burden for administering the screening questionnaire, two different project team members were consulted. The project team members conducted mock screening interviews and provided affirmative responses to most or all questions that branched to further follow-up questions. In this way, the burden estimate most closely resembles a maximum average burden, since almost all screening questions were presented in the interview. In addition, the project team members deliberately read each item at a slow rate of speed. The project team members estimated the maximum average burden to be 10 minutes for the screening instrument. The screening instrument is shown in **Attachment 6**.

#### **5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data**

Jennifer D. Uhrig

RTI Task Leader

RTI International

3040 Cornwallis Rd.  
Research Triangle Park, NC 27709  
[uhrig@rti.org](mailto:uhrig@rti.org)  
919-316-3311

Julia Kish Doto  
RTI Deputy Task Leader  
701 13th Street, NW, Suite 750  
Washington, DC 20005-3967  
[jkdoto@rti.org](mailto:jkdoto@rti.org)  
(202) 974-7850

## References

Abreu, D.A., & Winters, F. (1999). Using monetary incentives to reduce attrition in the survey of income and program participation. *Proceedings of the Survey Research Methods Section of the American Statistical Association*.

Alpert PL, Shuter J, De Shaw MG, et al. Factors associated with unrecognized HIV-1 infection in an inner-city emergency department. *Annals of Emergency Medicine*. 1996;28:159-164.

Centers for Disease Control and Prevention (CDC). 2008. *HIV prevalence estimates - United States, 2006*. *MMWR* 2008;57(39): 1073-1076  
[http://www.cdc.gov/hiv/resources/reports/hiv\\_prev\\_us.htm](http://www.cdc.gov/hiv/resources/reports/hiv_prev_us.htm). As obtained on February 21. 2011.

Greenbaum, T. L. (2000). *Moderating focus groups: A practical guide for group facilitation*. Thousand Oaks, CA: Sage Publications, Inc.

Hall, H. I., Song, R., Rhodes, P., Prejean, J., An, Q., Lee, L. M., Karon, J., Brookmeyer, R., Kaplan, E. H., McKenna, M. T., & Janssen, R. S. for the HIV Incidence Surveillance Group. (2008). Estimation of HIV incidence in the United States. *Journal of the American Medical Association*, 300(5), 520.

- Shettle, C., & Mooney, G. (1999). Monetary incentives in U.S. government surveys. *Journal of Official Statistics*, 15, 231-250.
- Slater, M.D. Choosing audience segmentation strategies and methods for health communication. In: Maibach, E., & Parrott, R.L., eds., *Designing Health Messages: Approaches from Communication Theory and Public Health Practice*. Thousand Oaks, CA: Sage Publications; 1995:186-198.
- Slaughter, P., P. Pinfold, V. Flintoft, E. Gort, E. Thiel, P. Blackstien-Hirsch, T. Axcell, M. Paterson, C. Cameron, C. Estabrooks, S. Mercer, V. Goel, and J. I. Williams. (May 1999). Focus groups in health services research at the Institute for Clinical Evaluative Sciences. Pub. No. 99-02-TR. Ontario, Canada: Institute for Clinical Evaluative Sciences.