Supporting Statement

Bureau of Primary Health Care Patient Survey

B. Collection of Information Employing Statistical Methods

1. Respondent Universe and Sampling Methods

The respondents for the survey are patients who receive services from section 330-funded health center grantees. These respondents are clustered within health center sites within each grantee. The grantee, site, and patient universes are described in greater detail in the subsections that follow. Please see **Attachments 8 and 10**, the Statistical Design Plan and the Survey Methodology and Selection Specifications for further detail.

a. Grantee Universe

The survey sample members will be selected from eligible grantees. The updated BPHC Uniform Data System (UDS) grantee-level data file will be used to identify eligible grantees. All grantees within the UDS and funded by section 330 will be eligible except the following:

- Grantees located in U.S. territories or possessions (i.e., those in Puerto Rico, the Virgin Islands, and the Pacific Basin);
- Grantees funded by section 330 which have been operating less than 1 year;
- Grantees funded through the CHC funding program that only operated school-based sites;
- Grantees that received Migrant Health Center funding program only and that only served clients through a voucher program; and
- Any grantee that is no longer a section 330-funded grantee.

b. Site Universe

Many grantees operate multiple health center sites. The sites eligible for the survey within selected grantees are required to participate in at least one of the four specific funding programs (CHC, MHC, HCH, and PHPC). All sites within selected grantees are eligible unless:

- The site has been operating under the grantee for less than 1 year;
- The site is a school-based health center;
- The site is a specialized clinic, excepting clinics providing OB/GYN service; and
- The site provides services only through a migrant and seasonal farmworker voucher-screening program.

c. Patient Universe

The patients eligible for the survey must satisfy the following eligibility requirements:

- Patients must have received face-to-face services at the site from a clinical staff member who exercises independent judgment in the provision of service at least once in the 12 months prior to the current visit.

- If the patient is under the age of 18, the patient must be accompanied by an adult.

2. Procedures for the Collection of Information

a. Sample

As noted, the section 330-funded grantees operate one or more sites. The sites are clustered within grantees, and the patients are clustered within the sites within the grantee. A three-stage sample design will be used in which the grantees are selected as the primary sampling units (PSUs), sites are selected within participating grantees, and patients are selected within selected sites. Our target is to recruit 115 grantees and complete 4,526 interviews, specifically 2,210 for CHC, 826 for MHC, 826 for HCH and 660 for PHPC.

b. Grantee Sample

The sampling frame is constructed from all the eligible grantees (the grantee universe) in the BPHC's current UDS data file. 115 grantees will be selected through a stratified probability proportional to size (PPS) for participation from 12 strata with a pre-specified sampling rate for each stratum. Independent site and patient samples will be selected for each funding program if the grantee receives multiple section 330 funds. Three sites will be selected using the PPS sample using PROC SURVEYSELECT in SAS Version 9.1.3. The 12 strata will be formed as shown in **Attachment 9.** They are defined as follows:

1. First Stage Strata
   Four mutually exclusive strata by grouping grantees according to the types of funding they receive (Stratum1, Stratum2, Stratum3 and Stratum4). Those first stage strata are used to ensure that the selected grantees are representative to the four funding programs.
2. Second Stage Strata
   To ensure the grantees with single funding type of MHC or HCH are represented in the grantee sample, we split Stratum3 and Stratum4 into two second-stage strata (Stratum3.1 and Stratum3.2; Stratum4.1 and Stratum4.2).
3. Third Stage Strata
   Furthermore, to ensure the selected sample with six first-stage and second-stage strata are representative of grantees with different patient sizes, we further split six strata into several third-stage strata according to the patient size of a grantee. First, we calculate the 33rd and 66th percentile of patient size using entire grantee sample frame. Then the grantees with patient sizes over the 66th percentile are defined as "Large" grantees, grantees with patient sizes below the 33rd percentile are defined as "Small" grantees, and grantees with patient sizes between the 33rd and 66th percentiles are defined as "Medium" grantees. In order to have the minimum sample size be larger than 10 in each final stratum, some first-, second-, and third-stage strata are collapsed due to small sample size.

c. Site Sample

Once the grantees are recruited, our recruiters will work with the grantee's administration staff to identify eligible sites using the eligibility criteria discussed in Health Center Site Universe. Specifically, the following information will be collected from each participating grantee on their sites (using the Grantee Recruitment Guidelines):

- Number of sites serving each patient population (i.e., migrant/seasonal farmworkers, homeless, public housing, and general community);
- Address and contact information for each eligible site; and
- Number of patients served in each eligible site overall and by type of patient population.

If there are three or fewer sites serving a patient population type (i.e., migrant/seasonal farmworkers, homeless, public housing, and general community), all of the sites will be included in the sample unless the distance between sites is too great for one interviewer to cover all of them. For grantees with more than three sites for a specific funding program, we will use a PPS sampling method to select three sites out of all the sites that are within a reasonable distance for one interviewer to cover. The number of patients for the sites of a specific funding program will serve as the size measure in the PPS sampling. The PPS selection is independent for each funding program in the grantees with multiple funded programs. We will select three sites using the PPS sample using PROC SURVEYSELECT in SAS.

d. Patient Sample

Because of the mobile nature of some of the target populations for this study, a random sample of patients will be chosen for interviews as they enter the site and register with the receptionist for services. The survey patients will be selected using onsite recruitment procedures. Project staff will not be allowed to approach any of the health center's patients nor obtain any identifying information about a patient unless the selected patient initiates such contact with field interviewer.

We will evenly allocate the target number of completed interviews for each funding program to all the grantees serving a special population. For example, if we recruit 31 grantees that serve farmworkers (MHC), then 27 (826/31 is rounded to 27) interviews will be completed for each grantee. If more than one site is selected for a grantee, then the number of completed interviews will be distributed evenly to each site.

The procedures for patient selection and interviewing are:

1. **Patient Registration:** As each patient enters the site during the sample selection period, the receptionist will register him or her to receive health services and record a tally mark on the Patient Arrival and Selection Tracking Form (as shown in **Attachment 4**). The receptionist will determine whether a patient is eligible for the survey (i.e., had received services at least once in the past 12 months from one of the four funding programs; patients under 18 must be accompanied by parent or guardian).
2. **Patient Selection:** The receptionist will select patients as they enter and register according to the detailed sample selection protocols to ensure the selection of a

random sample of patients. Specifically, the receptionist will select the first eligible patient registered after the field interviewer informs the receptionist that he or she is ready for the next interview. If the patient is eligible, the receptionist will read a brief recruitment script to the patient (or to his or her parent or guardian, for selected children) and give him or her a packet of information on the Patient Survey. The receptionist will record the number of patients selected in the Patient Arrival and Selection Tracking Form as shown in **Attachment 4**. The Patient Arrival and Selection Tracking Form will be used in the survey for the non-response adjustment in calculating analysis weights.

3. **Patient/Interviewer Contact:** If the selected patient is interested in participating or has questions, he or she will approach the staffer, who will be waiting in a designated area in the site. The staffer will take the participant to a designated, private location at the site to begin the screening, informed consent, and interview process. Plans for handling Spanish-speaking individuals are included in Section B3f.
4. **Disposition of Patient Logs:** At the end of each day, the staffer will collect the Patient Arrival and Selection Tracking Form from the receptionist. Collected forms will be brought back at the end of data collection. The number of completed patient interviews for each funding program will be monitored to ensure that the sample size targets are being met for each site.

If a participating grantee in the study has more than one funding program, independent patient samples will be selected for each funding program. If a site is chosen for multiple funding programs, the receptionist at the site will be asked to track and select patients on the interviewing visiting dates for all funding programs. The interviewer will screen participating patients to determine patient population types (i.e., homeless, migrant/seasonal farmworker, public housing, or general community) and will select respondents based on a predetermined quota. Patients will be instructed to speak with one of the interviewers waiting in the lobby. After the interviewer explains the study, interested patients will be taken to a private location at the health center and administered the survey.

3. Methods to Maximize Response Rates and Deal with Nonresponse

Response rates for the study will be a function of success in two basic activities: (1) identifying eligible patients and (2) obtaining those patients' cooperation and time to complete the interview. We will train site staff in using a patient recruiting script, train all field interviewers on critical cooperation-gaining techniques, regularly debrief with data collection staff, conduct in-person interviews, allow interviewers to schedule interviews at a later time if necessary, make multiple attempts to reach and reschedule respondents who miss appointments, and offer a $25-value remuneration to all participants. Given those plans (which are discussed further below) an 80% cooperation rate is anticipated.

a. Training Site Staff

Site staff will determine whether patients are new or have had services previously, therefore deeming them potentially eligible for selection. Prior to speaking with potential

respondents and using the patient tracking and selection form, site staff will have adequate training to assist in obtaining high levels of patient cooperation.

The contractor is responsible for arranging and conducting site staff trainings. These trainings will last approximately 1.5 hours and will be conducted via telephone with key health center site staff and administrative staff at each site immediately before data collection begins. It is anticipated that on average two project staff per site will attend.

Prior to the training self-study materials will be distributed for the site staff to review which will describe the study and instruct staff how to create and modify an anonymous roster of patients. In addition, the self-study materials will serve as a reference guide during data collection with mock scenarios which demonstrate how to handle various situations.

Training will be provided on the study purposes and procedures. Particular attention will be paid to the role of the site staff in patient recruitment for the patient survey and as recipients of referrals for mandatory reporting issues. In addition emphasis will be put on the appropriate use of project-provided recruitment materials and the importance of privacy. During data collection contract staff will stay in close contact with site staff to ensure that project protocols are followed and assist with any data collection concerns that may arise.

b. Training Field Interviewing Staff - A comprehensive multi-day training will be provided to the field interviewing staff. They will be trained on the study purpose and procedures, interview administration, and the protection of human subjects. Part of the interviewer training will address in detail specific techniques for gaining cooperation and averting and converting a respondent refusal. Reasons for refusals and barriers to participation will be continually evaluated in light of the experience gained during the data collection process.

c. Regular Debriefings with Data Collection Staff

The project staff will regularly meet with data collection staff to discuss issues related to data collection operations. Methods to enhance response rates will be a standard agenda item at these meetings.

d. On-site Data Collection

When surveying a hard-to-reach population, such as health center patients, interviewer-administered modes yield higher response rates than self-administered modes. Additionally, allowing the option to interview respondents in person at the site right after selection will assist in maximizing cooperation and in turn response rates. Interviews will therefore be conducted in-person via CAPI.

If a respondent is interested in participating but unable to complete the interview at the site at that time the interviewer will have the option of scheduling an appointment at a later time. Future appointments will take place either back at the site, in a conveniently located library with a private room, or at the respondent's home (if applicable). Multiple attempts to reach respondents who do not appear for scheduled interviews will be a standard protocol.

e. Offering Remuneration

Providing respondent remuneration during the interviewing phase of data collection increases the likelihood that sample members will participate, particularly for the low-income populations. Respondents will be provided with remuneration valued at $25 for their participation.

In addition, a non-monetary benefit in the form of data analysis and summarization will be provided to participating grantees with grantee-specific data on patient satisfaction, behavior, and other characteristics in table format. Comparisons to results from all participating grantees may also be provided. These data will provide the organization's management and board with useful information on patient characteristics, barriers to care, and grantee-performance.

f. Bilingual Approach

The questionnaire and other respondent materials have been translated into Spanish, which is likely to be the most commonly encountered second language in the communities of interest. The bilingual approach, which involves Spanish translation and interviewing, allows respondents with limited English skills to fully understand the nature of their participation. Further, it makes it more likely that those respondents will complete interviews because they will be given the choice of using the language with which they feel more comfortable. As noted in Section A, for grantees that have a substantial Hispanic population, an interviewer who is certified as bilingual will be available. Bilingual interviewers will be available to complete interviews in Spanish or English depending on respondent preference.

4. Tests of Procedures and Methods to be Undertaken

The procedures and methods to be undertaken have been tested in various ways. Cognitive interviewing was utilized to test and finalized the ease of use of the survey instrument. In addition, all procedures and methods utilized are based on those successfully implemented during the previously executed user surveys. Additional details are supplied below.

Cognitive Interviewing

During the survey questionnaire development phase, two rounds of cognitive interviews were conducted to finalize a questionnaire that was comprehensible, could be administered within approximately 66 minutes and generated accurate data.

Methods from Past Studies

As mentioned in Section A, the data collection procedures and materials of this survey were built upon the Health Care for the Homeless User/Visit Survey (HCH) conducted in 2003, the 1995 Community Health Center User/Visit Survey, and the 2002 Community Health Center (2002 CHC) and National Health Service Corps Site User/Visit Survey. All of these surveys achieved high response rates and were found to be easily administered correctly by site and field staff.

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

Names of individuals consulted on statistical aspects of study design along with their affiliation and telephone numbers are provided below.

Name	Title	Telephone
Mr. Patrick Chen	Sampling Task Leader	919-541-6309
Ms. Cynthia Augustine	Analysis Task Leader	919-541-6154
Dr. Karol Krotki	Senior Advisor	202-729-2485
Ms. Jody Green	Project Director	919-485-2710
Ms. Kristine Fahrney	Project Director	919-485-5531

In addition to these statisticians and survey design experts, HRSA staff have also reviewed and approved the statistical aspect of the study.

Other Contractors' Staff Responsible for Conducting the Study

BPHC is being assisted through subcontracted activities to RTI International. Principal professional staffs from RTI assigned to the study (but not list above) follow:

Name	Title	Telephone
Mr. Tim Flanigan	Data Collection Task Leader	919-485-7743
Ms. Ann Burke	Data Collection Task Leader	312-456-5244
Mr. Joe Nofziger	Programmer	919-541-6650
Ms. Carrie Borst	Project Manager	919-541-6988

C. Overview of Analysis Topics and Survey Items

The survey data elements cover general topics such as demographics, current health, access to care and services, substance use and mental health, and income and insurance. Most items apply to all sample members. However, some sections are only applicable to a subset of sample members (i.e., questions on pregnancy are only asked of women of child-bearing age).

Some analysis topics for the survey instrument were outlined in the research and issues section presented earlier in Section A2. **Attachment 3** displays the proposed data elements for the survey instrument. The data elements are presented as a list of items arranged by topics.