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FINAL REPORT

THE BUREAU OF PRIMARY HEALTH CARE EVALUATION STRATEGY: DESIGN OF USER AND VISIT SURVEYS

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BUREAU OF PRIMARY HEALTH CARE EVALUATION STRATEGY: DESIGN OF USER AND VISIT SURVEYS

1. BACKGROUND, INTRODUCTION

The Bureau of Primary Health Care (BPHC) in the Health Resources and Services Administration has the responsibility for providing health services to medically underserved populations and to persons with special health care needs. The Community Health Center (CHC) program, in BPHC, has been providing services to low income, underserved populations for more than 25 years. These populations include the homeless, people with HIV or AIDS, residents of public housing, at risk women, and non-English speaking populations. Eight grant mechanisms fund primary care delivery programs serving about 7 million people across the United States. The grantees include non-profit community based corporations, non-profit coalitions, hospitals and local health departments. Currently, there are over 600 grantees providing health and medical services at more than 2000 delivery sites. Health and social services are provided through direct on-site care, extensive outreach and referral services, and mobile units.

Administration, evaluation and planning of the CHC program require collection and analysis of data concerning the nature and frequency of services offered and provided by CHCs, the characteristics of the CHC users and providers of services, and the utilization patterns of care recipients. These data serve three basic needs. First, the CHC grantees need data to evaluate their services in order to set priorities, allocate resources, and improve operations. In addition, the BPHC's operational Divisions must be able to assess and monitor the programs to assure compliance with statutory program requirements and to formulate policy. Finally, the BPHC must be able to document achievement of program objectives for outside interest groups as well as the DHHS and the Congress.

Of specific interest is information describing how CHC services are being used, why some community residents do or do not utilize the local CHC, and how well CHCs meet the needs of their users. Information is needed on the characteristics of the CHC users and on the content of their visits to the CHC to better understand the current role that CHCs play within the community health care system. Data are needed to understand the health care needs of the CHC user population, to assess how well the CHC program is able to meet those needs, and to guide planning and policy decisions so that the CHC program might better meet future needs. These types of data have not been routinely collected by BPHC from CHCs in the past, and are not routinely available from the Bureau Common Reporting Requirements (BCRR) or any other source.

To meet these data needs, the BPHC contracted with the Center for Health Policy Studies (CHPS) to refine and pretest surveys of CHC users and visits. The CHC User and Visit Surveys are to be designed to provide data comparable to existing national data. This is accomplished by patterning the CHC User Survey after the National Health Interview Survey (NIBS), and the CHC Visit Survey after the National Hospital Ambulatory Medical Care Survey (NHAMCS).

The National Center for Health Statistics has conducted the National Health Interview Survey (NHIS) since 1957, contracting with the Bureau of the Census for field data collection. NHIS is a household interview survey, representative of the civilian non-institutionalized US population. Supplements to the NHIS are used from time to time to provide additional details on individuals with specific characteristics (e.g., those with certain disabilities), certain types of care received (e.g., the medical device implant supplement), personal health habits, knowledge, etc. The core questions in the NHIS represent socio-economic and demographic data, customary source of care, recent care utilization and diagnoses, limitations of activity, chronic and acute conditions, and perceived health status information.' The NHIS core questions and selected supplements have been adapted to obtain information regarding the user population of CHCs.

The National Hospital Ambulatory Medical Care Survey (NHAMCS), also conducted by the National Center for Health Statistics, is a survey of visits to hospital outpatient departments and emergency rooms. This is a relatively new survey, but the basic instruments and methods are based on the National Ambulatory Medical Care Survey that has been operational since 1974. Data are collected in this survey through a patient visit form completed for a sample of patient visits to the hospital clinics. Information collected includes patient demographic data, reason for visit, diagnosis, treatment and disposition decisions. The NHAMCS outpatient department patient visit form has been adapted for use at CHCs as part of the presently reported study.

Using the NHIS questionnaire for the CHC User Survey and the NHAMCS patient visit form for the CHC Visit Survey has a number of advantages:

- Comparable interview data for the US population and for ambulatory visits to "competing" health care delivery facilities will be available for reference comparisons with those collected at CHCs.

- Questions for inclusion in the user interviews have been validated and refined over a 35 year period, and over a 20 year period for the visit abstraction form.

- Classification and coding systems for both NHIS and NHAMCS data elements are developed, documented, and have been incorporated into multiple choice items on the forms, or into coder training materials.

- There is, within NCHS and the user community, a wealth of practical knowledge regarding the implementation of these survey instruments and the analysis of the data.

The current project to refine and pretest CHC User and Visit Surveys is described in the following five sections and the Attachments. Section 2 summarizes the project objectives. The methods used to develop and pretest the CHC User and Visit Surveys are described in section 3. The results of the study, including the sample design and data collection procedures developed for the surveys, are presented in section 4. Conclusions and recommendations are provided in section 5.

2. OBJECTIVES

The general objective of this project was to evaluate the feasibility of conducting Community Health Center User and Visit Surveys based on the NHIS and NHAMCS methods and instruments, and to develop and test a basic design for these surveys. More specifically, the objectives were to adapt the NHIS and NHAMCS instruments and procedures for use in surveys of CHC users and visits, and to pilot test the resulting instruments and procedures in a variety of CHCs. Sampling issues were to be explored and tested, including development of sample frames, sampling designs, and sampling methods for samples of CHC users and CHC visits. The design for sampling CHCs was the responsibility of the National Center for Health Statistics. It was intended that the instruments, procedures, sample design and pilot test results would provide the framework for national CHC surveys, and would support the submission of an OMB approval request for the full scale surveys at CHCs. Preparation of a complete and defensible OMB approval request was an integral aspect of the project. All work was to be performed with the informed concurrence and advice of an Advisory Croup convened specifically for the present study.

The scope of the investigations was to be fairly broad, including CHC and CHC user response issues, sampling methods, adaptation of the data collection instruments, and details of the data collection methodologies. Investigations of these issues were to include site visits to a variety of CHCs and discussions with the CHC staff, documentation of sampling frames and methods for selecting CHCs, sampling frames and methods for selecting CHC users, and sampling frames and methods for selecting CHC visits. Data collection methods were also to be investigated by administering interviews to selected users of CHCs, and by completing patient visit forms for selected visits.

3. METHODS

The methods used to develop the CHC Visit and User Surveys involved the following basic steps.

- Assemble an advisory panel to provide overall guidance and recommendations.
- Assess the feasibility of collecting NHIS and NHAMCS type data concerning CHC users and visits.
- Determine the availability and accessibility of the user and visit data through site visits to CHCs.
- Modify the survey instruments for use in the CHC setting.

- Develop data collection methods that would be compatible with the national survey methods and would be suitable and acceptable to the CHC.

- Develop sampling methods that would be efficient, sufficient, and applicable to CHC users and CHC visits.

- Evaluate and refine the instruments, methods, and survey design through field testing in CHCs.

Because the data collection procedures and instruments for the CHC User and Visit Surveys are to be patterned after the procedures and instruments used in the NHIS and NHAMCS, the basic designs of those studies served as the starting point to develop the designs for the User and Visit Surveys. The survey design issues, therefore, focused on the feasibility of applying the NHIS and NHAMCS instruments in the CHC setting, adapting the instruments for the CHC Survey application, and developing the survey designs and methods to be compatible with the national surveys' designs and methods.

Advisory Panel

An advisory panel was convened early in the project to provide general guidance and to review preliminary survey plans. The Advisory Panel members are shown in Attachment 1. A background document listing issues for consideration by the Technical Advisory Panel (TAP) was circulated prior to the meeting (Attachment 2). The Panel endorsed the general concept of adapting the NHIS and NHAMCS instruments for the CHC surveys, and made specific suggestions regarding data collection procedures, data analysis, and methods for gaining CHC support. Some of these suggestions were:

- The Panel members recommended that the CHC Executive Directors be the initial contacts for requesting survey participation. They believed that most CHCs will view participation favorably unless the tasks presented for them to do are formidable. Objections, if any, will stem from lack of staff or other resources to do additional work involved. The survey, therefore, must not impose much of a burden on the CHC, particularly the smaller ones.

- The CHCs must be presented with a detailed explanation of the survey and its intended purpose, including a description of how the data will and will not be used. It must be made clear that the results will not be used to evaluate the CHC, or to compare the performance of one CHC against the other. If it is feasible, it will be desirable to provide feedback of data for individual CHCs, but such information must be clearly useful to the CHC and relevant to CHC internal policy decisions.

- The Panel believed that nearly every CHC has a computer list of users that may be suitable for selecting a user sample. The content and format of the computer files will vary, as will the level of sophistication of the computer systems and. computer staffs. Many CHCs will

also have computer lists of visits suitable for selecting a visit sample. The CHCs' ability to select samples of users and visits will vary, but most CHC staff probably will need help. A representative of the data collection contractor should be available for that purpose.

- The Panel agreed that the user survey should include current users, but no agreement was reached on the definition of "current". Users for the past one or two years were the most often mentioned definitions. It was noted that the longer the reference period, the more ineligible persons there will be in the sample.

- The inclusion of non-English speaking users in the survey was discussed. These users constitute a significant portion of CHC users, and must be included in the survey. In most CHCs, these users will not be identifiable in advance of sample selection. It is preferable to use an interviewer who is bi-lingual rather than to have clinic personnel, a family member or other translator accompanying the respondent, but it may be necessary in CHCs with large or diverse ethnic populations to utilize all of these alternatives. For the rarer language and the hearing impaired, it will be necessary to make whatever arrangements are possible with the assistance of the CHC.

- The panel suggested that the initial contact with the sample CHC user should be by letter from the CHC Executive Director, followed by a telephone call from a CHC representative to set up an appointment. For difficult to contact users, at least 3 telephone calls should be attempted, followed by a telegram or a registered letter. Personal visits to the users' homes are likely to be too expensive for routine use, but should be explored as an alternative in certain situations. Those users with no telephone will need different treatment and may need a personal visit.

- Some users will have transportation problems getting to a clinic at the appointed time or at all. The need for child care is another major problem to overcome. This problem would be alleviated if in-home interviews were available.

- Most Panel members felt there must be an on-site coordinator from the data collection contractor to do much of the work and to oversee anything that the CHC staff does in arranging or conducting survey activities.

- The CHC Users must be paid for their participation to cover transportation and other expenses. The CHC should also be reimbursed for the expenses it incurred because of participation.

- Space in the CHC for the user interview may be a problem in some CHCs. It would be helpful if interviews could be scheduled on evenings and weekends, but that will only be possible if the CHC is open during those times. The use of other possible sites was discussed, such as a nearby church, hospital, library, or school.

- Confidentiality issues were discussed. It was agreed that this should not be a problem if the visit data set does not include identifying information (which it will not), User data will be collected directly from the user, and all identifying information will be deleted from the data before leaving the CHC.

- Although there would be advantages in having "same sex" interviewers and interviewees, it was agreed that female interviewers would be acceptable to most male and female respondents.

Site Visits

The initial proposed design of the CHC User and Visit Surveys was based on the designs of the NHIS and NHAMCS. The final design resulted from a series of visits to CHCs to develop, evaluate and revise the survey instruments and procedures. At each site visit, a specific protocol (Attachment 3) was followed to assure coverage of the major design issues. At the final two site visits, a pretest of proposed survey methods and instruments was conducted. Detailed descriptions of all site visits and their outcomes are provided in Attachment 4.

Developmental site visits were conducted at the following Community Health Centers:

• Caroline Health Services, Inc.	Denton, Maryland
• Central Virginia Community Health Center*	New Canton, Virginia
• Community Health Centers, Inc.	Colorado Springs, Colorado
• Crusaders Central Clinic Association	Rockford, Illinois
• Hamilton Health Center, Inc.	Harrisburg, Pennsylvania
• Metropolitan Denver Provider Network	Aurora, Colorado
• Sunset Park Family Health Center*	Brooklyn, New York

Pretests of proposed methods and instruments were conducted at the following Community Health Centers:

• York Health Center*	York, Pennsylvania
• Henrietta Johnson Medical Center*	Wilmington, Delaware

* Interviews were conducted with selected users at these four CHCs.

A variety of types of CHCs were chosen to assure that the specific conditions of different CHCs would be taken into consideration during the planning of the project. These sites include urban and rural sites, sites of various sizes, and sites from several regions of the country. The majority of CHCs visited were in the Middle Atlantic region. However, two sites in Colorado and one each in Illinois and New York were visited. Three of the sites serve large urban populations, four sites serve medium-sized urban populations, and two sites are located in rural areas. The CHCs ranged from having a single service site to having more than three service sites,

Discussions were generally held with the Executive Director, Medical Director, and the persons responsible for the CHC's information (computer) systems and medical records administration. In addition to gathering information on the applicability of the planned survey design and instruments, recommendations were solicited from the CHC regarding all aspects of the planned surveys. The site visits focused on:

- Methods for obtaining the CHCs' cooperation
- Methods for sampling CHC users and visits, including the availability of user and visit sample frames
- Availability of the visit data in both the information and the medical records systems
- Methods for enlistment of users
- Evaluation of the user and visit questionnaires
- Methods for remunerating users and CHCs for survey participation
- Availability of space within the CHC, or nearby, for conducting the interviews
- Confidentiality issues and concerns
- Willingness of the CHC to perform various survey related activities

Each potential site selected for a visit was first contacted either by telephone or by mail. CHPS gained the agreement of either the executive director or the operations manager to conduct site visits. CHPS arranged to interview the CHC directors, directors of information systems, and directors of medical records or their representatives at each of the sites visited. In the smaller CHCs, separate staff for information systems and medical records were not available, and all questions were directed to the Executive Director. The visits took an average of about two hours at CHCs where no user interviews were conducted. At CHCs where the User data collection form was administered to a sample of users, the site visits took a full work day.

The questions asked of the CHC's administrative staff followed a protocol that was prepared in advance (see Attachment 3). Questions were grouped by topic. The topics discussed with the Executive Directors centered around the decision to participate, the general organization of the CHC, the availability and content of user and patient visit files for sampling purposes, confidentiality issues, the CHCs capability and willingness to assist in the project, and other considerations of concern to the CHC. Questions about the CHC decision process in determining whether to participate in surveys included discussions about who should be sent the initial request to participate, factors involved in the decision process, and who would make such a decision, The general organization of the CHC was discussed, including information on the number of service sites, types of services offered, the number of users and visits, the number of providers, medical records systems, and other characteristics of the CHCs. Confidentiality issues were discussed to gauge the sensitivity of the CHC regarding access to medical records, user files, visit logs, and ways to resolve any problems in this area.

There was also a series of questions about the CHC's capability and willingness to cooperate in a survey in which they might be asked to perform many of the survey tasks. The questions were designed to determine whether the CHC had the expertise, resources, and willingness to perform the following:

- Select a random sample of users,
- Select a random sample of visits,
- Send a letter inviting participation to users,
- Arrange appointments for user interviews,
- Identify users requiring special assistance (proxies, translators, transportation, etc.),
- Provide interview space,
- Abstract medical records or assist abstractors.

Finally, the CHC's expectations were assessed regarding compensation for performing these and other tasks in the project.

In most CHCs, staff responsible for operation of their information and medical records systems were interviewed. The questions asked of the information systems staff dealt with the specific information system maintained, the availability of user and visit lists suitable for sample selection, their ability to sample users and visits from the total CHC population, and the type of information that is collected and stored on computer files. Questions addressed to the medical records staff centered on the condition of medical records (i.e., format, legibility, completeness, computerization, etc.), their location and accessibility, and the type of information found in the medical records, (e.g., current problem list, identity of all providers seen during a visit, and reason for the visit).

Development of User Questionnaire

The core household interview questionnaire used in the 1993 NHIS and NHIS supplemental questionnaires were evaluated for their applicability to CHCs. In addition to review by CHPS staff, the forms were reviewed by members of the Advisory Panel, NCHS, and HRSA staff. Major attention was given to the utility of the data items, the format of the questionnaires, and the need for additional CHC specific questions. Suggested revisions and additions were reviewed jointly by all parties.

The NHIS questionnaire is lengthy and complex, and required considerable modification for use in CHCs. It was necessary, for example, to modify the questionnaire format since the NHIS is applied to a "household", which may include multiple persons, rather that to an individual. The survey of CHC users will be applied to specific individual users. Some questions were inappropriate or unnecessary for the CHC survey and were deleted. Because there are numerous HIS Supplements, it was necessary to evaluate and select among them. Although the core questions in the NHIS are comprehensive for national survey data, for BPHC purposes, it was desirable to add questions that relate specifically to CHC users. For example, questions were needed concerning perceived access barriers to medical care (geographic, financial, socio-cultural, language, etc.), satisfaction with CHC services, and determinants of care seeking behavior. It was also desirable to develop questions that address the health-care-seeking behavior of some users who intermittently use other sources of care in addition to the CHC.

An early draft of the user data collection instrument was administered to several users during the Central Virginia Health Center site visit. Revisions were made based on the results of that test, and additional testing was completed at the Sunset Park Family Health Center. The purpose of these tests was to gauge the length, comprehensibility, and facility with which the questionnaire could be administered. A variety of users were purposively selected for the tests to include infants, young children, middle aged and elderly men and women. Users for these tests were enlisted by CHC staff, and were not randomly selected. The questionnaires were administered by CHPS staff trained for that purpose. An observer was present at most of the interviews to assist in identifying problems. All problems with the questionnaire were recorded, such as a user's misunderstanding of questions, ambiguity of responses, inconsistencies in question content or structure, and incorrect skip patterns. Questionnaire modifications were made to resolve such problems after each site visit. Users who participated in the questionnaire test were debriefed to solicit comments regarding the user's impressions of the instrument. Interviewers noted problem described by users, and made recommendations that were incorporated into instrument revisions.

Paper copies of the User Questionnaire were used in all test interviews. Because this form is lengthy, requires numerous skips among the questions, and has many interrelated questions, it appeared to be an ideal candidate for application of computer assisted personal interview (CAPI) technology. This possibility was explored with officials at the NCHS who have developed a CAP1 version of the NHIS. Their tests indicated that the CAP1 version of HIS resulted in a 5-10 percent increase in time necessary for the interview, but that the resulting data were more accurate, consistent and cleaner. Time and effort to process resulting data were also considerably reduced. The NHIS is still being done with paper forms. The NCHS officials, however, recommended that the CHC survey be done using CAP1 if funds and time were adequate.

Development of Patient visit Abstract (PVA)

The NHAMCS is a relatively new survey by NCHS, but the patient visit form used represents an adaptation of the NAMCS form, which has been used for over 20 years. In contrast to the cumbersome and complex NHIS questionnaire, the NHAMCS patient visit form is a relatively simple, single page instrument. A copy of the 1993 NHAMCS abstract appears in Attachment 5.e, and as the final page in Attachment 2. It was reviewed by the Advisory Panel, HRSA personnel, and CHPS staff for applicability to the CHC setting, and only a few modifications were considered. For example, the categories used to describe the expected source of payment and the disposition do not include some categories commonly used in the CHC. Most items, however, are directly applicable to the CHC visits and required no change. The NHAMCS form, therefore, was adopted without change as the Patient Visit Abstract (PVA) for pretesting the CHC Visit Survey. All tests of the PVA were conducted using the NHAMCS form unchanged, but several recommendations for modification of the checkoff lists within questions have been developed.

At all CHC site visits, medical records were reviewed to evaluate the accessibility and availability of the data items required for the PVA. At 4 of the site visits, CHPS personnel completed several PVAs by abstracting data from medical records. CHC staff assisted in this process. The availability of the required data items, compatibility of item definitions with records data, and ease of data retrieval were evaluated. Discussions were held with CHC staff concerning definitions of data items, location of information in the medical records, possible other sources of data not accessible from the medical record, and problems encountered during abstracting.

Pretest of design and instruments

Based on the findings during the first 7 site visits, including field tests of the survey instruments, preliminary data collection methods and instruments were developed for the CHC User and Visit Surveys. These were pretested at the final two site visits, during which an abbreviated version of the proposed survey design was tested. The pretest included replication of methods for contacting and recruiting CHCs, attempting to induce the CHCs to perform survey tasks on a cost reimbursement bases, having the CHC produce the sampling frames and draw the sample, and collection of sample data.

Introductory letters were sent to 3 CHCs from HRSA explaining the CHC's proposed role in the survey, and asking for their cooperation. One week after the letters were mailed, two of the CHCs were telephoned by CHPS to confirm their cooperation and arrange for an induction interview. (It was not necessary to contact the third CHC since the first two contacted agreed to cooperate.) At the induction interview, CHC staff were provided with background information on the surveys, and instructions and materials for completing all survey tasks. Verbal and written instructions were provided for selecting the user and visit samples, for contacting the users to be interviewed, and for completing the PVAs. After the induction visit, the CHC staff prepared lists of users and visits, and then selected the user and visit samples.

To test the User Survey protocol, a draft letter to CHC users was provided to the CHC by CHPS at the induction interview. The CHC finalized the letter, typed and addressed it, and sent it to six users over the signature of the CHC Executive Director. The CHC staff then contacted the users by telephone to obtain their cooperation, and to arrange for an interview appointment. The user interviews were conducted by CHPS staff at the appointed times. The users were selected for the interviews by the CHC staff. Because of the $25 payment offered to users, all users approached about participation agreed at the two developmental CHCs and at the first pretest CHC. At the final site visit, an effort was made to enlist the cooperation of a randomly selected set of 6 users, Only 2 of the 6 agreed to participate in the study. An additional 5 randomly selected users were called by the CHC, and they also would not cooperate. Three volunteer users were then recruited for the test interviews.

Following the Visit Survey protocol, the CHC staff prepared a systematic random sample of 120 visits, then completed the PVAs for five of the sampled visits. Medical records were retrieved for the five patients, and the appropriate visit identified based on the visit date and the provider seen.

A debriefing was held with the CHC staff to review and evaluate the entire process. Estimates of the hours spent and the costs involved to complete all survey activities were provided by the CHC. Materials used in the pretest, except the User Questionnaire, are provided in Attachment 5.

4. RESULTS

4.1 CHC Cooperation and Participation

All of the CHCs visited stated that they would be willing to participate in a national survey. The common sentiment was that the CHCs would participate in this project because they believed the data are needed and would be useful to them as well as the BPHC. Some Executive Directors stated that they would like the sample in their facility to be large enough to provide them with estimates for their CHC. While most sites were positive about cooperating, some sites emphasized the added burden it would place on their already overburdened staff and resources. The consensus among the CHCs was that the executive directors or presidents of the CHCs are the appropriate people to contact with the initial letter describing the survey. The major factor that would be considered in the decision to participate would be the amount of staff time needed to assist in the survey. In addition, the CHCs want to know in detail the purpose and uses of the survey data. Administrators of several CHCs stated that adequate assurances of confidentiality precautions would also be a factor in the decision to participate.

Overall, the CHCs are willing to cooperate in the conduct of the survey to the extent necessary, keeping in mind their limited resources. All sites would be willing to provide staff to prepare and mail the initial letters to users, schedule appointments, and determine special language, transportation, child care, and other needs to facilitate interviews with users. None of the CHCs expected that these would be major problems, but it was clear that steps to prevent these issues from becoming problems must be taken in each CHC prior to data collection. CHC staff did not expect that contacting users would pose any difficulty. Eight of the nine sites preferred that the CHC staff abstract their own medical records. Confidentiality concerns were the main reasons for this preference, though most of the sites indicated that they could accommodate an outside interviewer, if necessary. One center stated that it does not have the staff to do the abstracting, and would prefer that the contractor perform this task. All CHCs stated that if the contractor does perform abstracting, medical records staff would be available to assist in locating, re-filing, and interpreting handwriting and abbreviations in the medical records.

Adequate space at the CHC sites for conduct of the user interviews would be a problem at four of the nine sites. These sites are too small to accommodate private rooms for interviews. However, in all cases, the administrators indicated that finding adequate space nearby would not be a problem. The CHC or the contractor could easily arrange space nearby and in most instances with little or minimal cost. Space and supervision for child care would be a problem in nearly all

of the CHCs. Only one of the sites visited had a staffed child care facility. In all others, special arrangements will be needed for those interviewees who bring small children or infants to the interviews.

4.2 Users Survey

Sampling

All nine CHCs visited stated that they have adequate computer files and sufficient capability to select the user samples. All CHCs were able to provide an unduplicated, complete list of users for a defined time frame, and the staff expressed a willingness to select the sample based on instructions provided. The content and form of the computer files varied considerably among the CHCs. Some CHC have very sophisticated computer systems containing comprehensive user data. These CHCs generally also have the technical expertise to select samples from their systems. Other CHCs have less elaborate systems. Some, for example, maintain a list of the current year's users in a LOTUS file. These sites could not select the samples directly from the computer, but had files that could produce sample frames for manual selection. Both pretest sites were of this type. In both locations, the CHC staff was successful in following the sampling specifications provided, and manually selecting a systematic random sample of users from a computer printed list of all users.

At the two pretest sites, training of the CHC staff for sample selection involved relatively brief verbal instructions and detailed written instructions. The time spent explaining the sampling instructions was constrained by the available CHC staff time. Verbal instructions were provided for about 20 minutes at the first pretest site. This proved to be barely adequate. At the second pretest site, time allowed for only about 5 minutes of instruction with the person ultimately assigned to do the sampling. This was not time to provide sufficient instruction. A brief review of procedures by telephone was sufficient for staff of the first site. A thorough review of the sampling procedures by telephone was necessary at the second site. Delays of several weeks before sample selection at the second site further exacerbated the training problems. At the second site, detailed instructions were provided by telephone during the sampling process. The written instructions were referenced by the staff of the first site, but not by the staff at the second site. Sampling was verified during a follow-up visit, and concluded to have been done successfully at both sites.

Following the sampling instructions, the staff at each pretest site developed a list of users for a previous 12 month period. One site used calendar year 1993, while the other used the 12 months prior to the survey date. (Reference time frame problems are discussed below.) The lists were sorted by age within sex and printed. Both pretest CHCs successfully determined a random start number and a sampling interval that resulted in a systematic random sample of 40 users. Review of the final samples by CHPS indicated that the sampling was done correctly. The printed list of sampled users included the user name, address, date of first visit, and other information sufficient to identify and contact the user.

Determining which users to include in the sample frame involved several considerations.

1. At CHCs with multiple service locations, users at all locations receiving 330 funds were to be included. CHCs had no difficulty identifying such locations. In all but one of the CHCs visited, a central file of users was maintained that included users at all service locations. At one CHC, separate lists were maintained at each service location. These lists were mutually exclusive, and could be sampled independently.

2. Services received by the user was another factor considered for determining inclusion in the sample frame. In the pretest, only users'receiving "medical" services, as defined for the BCRR, were eligible for the study and included in the user sample frame. All CHCs visited were able to identify the type of services received, and could delete from the sampling frame those users who did not receive at least one medical service. HRSA has considered including users who receive other services, and "targeting" users of selected services for over sampling. The CHCs visited all had the capability to identify users by most services, and could accommodate any decision to include or exclude users on that basis.

3. The time frame for the use of services is another consideration for determining inclusion in the sample frame. The pretest included only "current" users, defined-as users receiving services during the 12 months prior to the data collection. The "prior year" definition was selected because the reference periods for some questions on the user questionnaire refer to care received in the past year. This definition was problematic in one of the nine CHCs visited. At the York Health Center (YHC), the user list is maintained in a LOTUS file. A new user file is constructed each calendar year by entering the name and data for users at their first visit during the year. At any point in time, the file includes only those users who have used the YHC since the prior January 1. An annual file of users is available, therefore, only for a complete calendar year. People who may consider the CHC their primary source of care, but who make no visits to the YHC during a particular year, will not be included in the file of users for that year. Construction of a multi-year user file would be extremely difficult since it would require merging of the annual files and eliminating numerous duplicates. Constructing an annual file on other than a calendar year basis would be equally as difficult.

   Most other CHCs had a "running" list of users that included everybody who had ever visited the CHC, or at least had visited during the last several years, along with the dates of all visits. These files could be used for either a calendar or "prior" year user's list. Since the NHAMCS and NHIS are conducted on a calendar year basis, it could be argued that the User and Visit Surveys should also be conducted on a calendar year basis for comparability. Using the prior calendar year as the reference period should not present the CHCs with any problems of sampling or of data collection. It does present a problem of compatibility with the user questions' reference period, and a problem in calculating rates. With a user file constructed like the YHC file, the total user base from which the visits derive is greater than the user sample frame. This is because the user frame does not

include those users who could have used the CHC, but did not during the year. Determining an appropriate user base for rate calculation may be difficult. With a "running" user list, the opposite problem exists. That is, the list may contain people who are no longer "users" and have no intention of returning to the CHC. In either event, however, decisions are necessary to define an appropriate user base for use in calculating user population based rates.

In most CHCs, certain users are considered to be particularly sensitive to release of any information on their use of the CHC. For example, most CHCs will not reveal the identity of users seeking services for AIDS/HIV, STDs, or teen family planning. Most CHCs can identify these users and can include or exclude them from the user sample frame. At the pretest sites, these users remained in the frame. After the sample was selected, the names were screened to identify any who should not be contacted. At one site, two HIV patients appeared in the sample of 40 users. None appeared in the sample at the second site. Dealing with these types of patients will be problematic. Some CHCs will not contact these patients under any circumstances. Others suggested that they would try to devise methods to ask for their cooperation without compromising the confidentiality agreements. Individually tailored arrangements to deal with this issue will be necessary at each CHC.

Materials and Data Collection

The user questionnaire pretested in the CHCs consisted of selected NHIS core questions, selected NHIS supplements, and questions designed specifically for CHC users. Problems with early drafts were largely eliminated during site visit tests, and administration of the questions to users in the pretest went smoothly. Specific problems and changes suggested by the test interviews are contained in the individual site visit reports (Attachment 4). The "average" user interview required about 75 minutes. This varied by about 10 minutes depending on the number of health problems reported. Non-English speaking users present additional problems that must be addressed prior to data collection. Test interviews with 2 such users resulted in incomplete interviews because of excessive time requirements. The quality of the data for these users is also suspect.

User data were collected during thirteen interviews with CHC users at four sites. In the two developmental sites, the users were selected and enlisted informally by the CHC staff from among recent users. CHC staff reported no difficulties finding users willing to cooperate. Users from the two pretest sites were recruited more formally using letters from the CHC followed by telephone calls, as described above. At the first pretest site, 6 users were purposively selected in order to get a variety of ages of both sexes. Identifying willing participants was not difficult, and 4 interviews were scheduled. At the second pretest site, 11 randomly selected users were contacted, 6 by letter and telephone, and 5 by telephone only. Just 2 of those contacted were willing to participate in the study. All enlistment efforts were made by the CHC staff person assigned to this study. She could offer no explanation of the high refusal rate, stating that the only reasons offered by the users were: "too busy", and "not interested".

Definitions of terms and instructions for administering the questionnaire were not prepared because the questions are largely self-explanatory, and definitions are provided with the questions when necessary. Only general instructions may be needed, which can be abstracted from the NHIS materials. Due to the length of the user questionnaire, a copy is not included with this report. The questionnaire has been submitted separately on diskette.

Letters to the users requesting their cooperation were tested in only two CHCs. The first version tested was found to be too complex. A simplified version (shown in Attachment 5) was used in a second test. The recipients of the letter did not participate in the study, and no specific feedback on the effects of the letter was obtained by the CHC staff. The CHC persons who talked with the users expressed confidence that the letter did not dissuade the users from participation, but recommended that the letter be further simplified. Scripts for telephone enlistment of users were tested in two CHCs. CHC staff reported that they used the scripts as guidelines, but did not use the material verbatim. They said that the information was useful, but that they were uncomfortable reading it directly.

Paper copies of the user questionnaire were used in all test interviews. Revisions to the instrument were made between interviews at each site. Two interviewers were involved. One was experienced in personal interviewing, but had not previously used the user questionnaire, and the other was quite familiar with the questionnaire because of her involvement with its development. Neither interviewer had significant difficulties administering the questionnaire.

Users participating in the interviews were generally able and willing to provide all of the information requested. The only questions posing any difficulty were those requiring recall of past events. No user expressed concerns about the sensitivity of any information. All respondents were asked a few "debriefing" questions at the conclusion of the interview. None of the respondents appeared to feel uncomfortable with any of the questions asked,, When asked, none indicated that any questions were inappropriate, and none indicated that they thought the interview was too long. In the final round of testing, no respondent had trouble understanding any of the questions, or believed any question dealt with sensitive or embarrassing issues.

As noted above, users who have difficulty speaking English presented special difficulties in data collection. Two Hispanic users were interviewed in one CHC using translators provided by the CHC. Both of the interviews were terminated after about 90 minutes, though the interviews were not near completion. In addition to the excessive time required for such users, considerable uncertainty results when both questions and answers require translation. Many CHCs, however, serve large numbers of non-English speaking people, particularly Hispanics. CHC staff at several site visits strongly suggested that a Spanish version of the user questionnaire be provided. They note, however, that there are several Spanish dialects to consider. They also agreed that a bilingual interviewer or a translator would be needed, even with a translated questionnaire.

Response

During site visit discussions, it was the general opinion of nearly all CHC personnel that attaining a reasonably high response rate among CHC users would not be difficult. This opinion was based on their knowledge of their users, and their belief that users would be responsive to requests from the CHC. Remuneration of the participants would provide further incentive to cooperate. Most of the CHC administrators thought that $25 would be adequate compensation for interviewees. Several administrators stressed that amounts lower than this would not be adequate for many users who may have to take time off from work, or pay transportation costs. Only one of the CHCs visited indicated that user motivation to participate might pose a problem. In the three sites where the CHC was not required to enlist specific users, they had no problem identifying people who would willingly participate. In one of the two CHCs, where randomly chosen users were to be enlisted in the study, very few were willing to cooperate. The CHC staff as well as the CHPS staff were surprised by this outcome. These results, however, may reflect more of an enlistment problem than a user response problem. This is discussed more in the recommendations section below.

4.3 Visit Survey

Sampling

Most of the discussion in section 3.2 above relating to user sampling also applies to visit sampling. All of the CHCs visited stated that they have adequate computer files and sufficient capability to select a visit sample. All CHCs were able to provide an unduplicated, complete list of visits for a defined time frame, and the CHC staff expressed a willingness to select the sample based on instructions provided. However, several of the CHCs insisted that they would need at least 30-60 days to do the sampling, since MIS staff availability varied unpredictably. As with the user files, the content and form of the computer visit files varied considerably. Some CHC have very sophisticated computer systems containing comprehensive visit data. Some, for example, have large databases that include visit data as part of their user files. These systems have patient registration information, demographic data, and information about each visit for each user. Visit information may include diagnosis, procedure codes and other clinical data for each visit. These CHCs generally also have the technical expertise to select samples from their systems. Other CHCs have less elaborate systems and may, for example, maintain a list of the current year's visits in a LOTUS file. Some sites could not select the samples directly from the computer, but had files that could produce sample frames for manual selection. The two pretest sites were of this latter type, and selected the visit samples from printed lists of visits. In both locations, the CHC staff was successful in following the sampling specifications provided, and manually selecting a systematic random sample of users from a computer printed list of all users. Training the CHC staff in the pretest to select the visit sample was part of the overall sample training discussed in section 3.2 above.

At the pretest sites, the CHC staff produced a list of all visits for the prior 12 months. The first site produced the list in chronological order. The second site produced the list in alphabetical order on patient's last name because of a misunderstanding of the instructions. Both sites determined the proper sampling interval to achieve a sample of about 120 visits. Using a random start, they were successful in selecting a random systematic sample of visits. The sampling materials were reviewed by CHPS, and it was judged that the sampling had been done correctly. The list of sample visits included patient name, medical record number, date of the selected visit, and provider at the visit.

In determining the scope of visits eligible to be included in the sample frame, consideration was given to the same factors as discussed above for the CHC user sample frame. A major objective is to have compatible definitions for eligible visits and users.

1. Visits to all service sites supported with any section 330 funds were included in the frame. In most CHCs with multiple locations, a central list of visits was maintained which included all visits to all locations. In CHCs without a central list, sampling of each service site's list independently would be required.

2. All visits for medical care services were eligible for the survey and were included in the frame. Visits for dental and other non-medical services were excluded from the frame, although visits that included medical care services together with non-medical or dental services during the same day were considered to represent eligible visits for which all services would be abstracted. In all CHCs, the type of service was available for each visit so that an appropriate frame could be constructed for varied definitions for eligible visits.

3. The time period for visits included in the frame should be the same time period used for the user sample frame. Nearly all CHCs had the capability of using a calendar year or the prior 12 months when constructing the visit frame.

4. The scope of patients included in the visit frame should also be the same as those included in the user frame. Most CHCs have the ability to identify selected types of users in their visit data, so they could be included or excluded as desired. For example, the CHC.could identify visits by HIV patients and school health program recipients.

The inclusion of visits by "sensitive" patients is not as much of an issue for the visit data as it is for the user data, because the visit data are collected without identifiers, and it would not be necessary to contact the patient (which might be threatening to certain patients). Some CHCs, however, may not permit anyone who is not on the CHC staff to view the medical records for these users unless the patient agrees to such a review. In these facilities, completing the PVA must be done by CHC staff for all such patients.

Materials and data collection

The PVA used in the CHC Visit Survey pretest was the 1993 NHAMCS Patient Record Form without modification (Attachment 5). In the initial 7 site visits, sources of data to complete the visit form were investigated with particular attention paid to the medical records. In each of the two pretest site visits, CHC personnel completed 5 PVAs. In all CHCs, nearly all of the data items were found in the medical records. The exceptions were the patient's race, ethnicity and expected source of payment. Race and ethnicity are not available in some CHCs, or are not routinely available in the medical record. The value of the information when it is available is also an issue, since many users are of mixed racial and ethnic heritage, and definitions of race and ethnic categories are imprecise. Current expected source of payment is always available in CHC business office records, but frequently not in the medical record. This information must sometimes be obtained from the CHC's user file or from billing records. Source of payment also varies over time as users' income fluctuates and they become eligible and ineligible for the various assistance programs. Since the visit form is completed for a particular visit, the payment source for that visit is needed. Obtaining that information with certainty is often problematic.

The only other PVA item causing problems was the question asking whether the patient had been seen before in the CHC for the same condition. Written PVA instructions were not referenced by the CHC staff during data collection, and verbal explanation of what constituted "the same condition" was not adequate. All other items on the PVA were completed without significant problem by the CHC staff in the pretest. However, it was suggested that several items on the PVA be adapted to facilitate use in CHCs. Specifically, the following changes were suggested:

Item 9. (Was patient referred for this visit by another physician?) could be deleted since it is designed primarily for specialty care and does not normally apply to CHCs.

Item 13a. (Selected services) should include "psychosocial assessment"

Item 14. (Counseling/education) should include "nutrition/diet education", "drug/alcohol education", "contraception education", and "Parenting skills".

Item 16. (Disposition this visit) should include categories for "Referral to WIC", "Referral to dental clinic", and "Referral to social services". The category, "Return to referring physician" could be deleted.

Item 17. (Providers seen this visit) should also list "health educator", "social worker", and "nutritionist".

During further review of the PVA and comparing it with the 1995-96 NAMCS Patient Record, several other opportunities for improvements were noted. First, since many of the CHC visits are related to injuries, it may be useful to collect injury information through an item similar to the NAMCS Item 10 (Is this visit injury related?). Collecting information on the external cause of

injury and place of occurrence would also be useful. In addition, the item concerning diagnostic and therapeutic services could be expanded to include whether certain preventive services were performed or ordered, such as breast examinations, PAP tests, blood lead measures, TB test, visual acuity, and cholesterol level.

In some CHCs, sources other than the medical record are available for some of the visit data items. For example, in most CHCs, an encounter form is routinely completed for each patient visit in order to support the billing function. That form contained nearly all of the information needed for the PVA at one of the pretest sites. To complete the visit form at that site, the CHC staff abstracted data from both the encounter form and the medical record for each visit. This increased the time required to complete the visit form, but the CHC indicated that both sources of information were needed to assure complete information about the visit. Also, in some CHCs, the computer information system includes patient demographic data and clinical data for every patient visit. This information can be printed for each sample patient visit and entered directly on the PVA. In no CHC was it feasible to complete the entire PVA from computer generated data. It will always be necessary, therefore, to abstract some of the information from the medical records. For example, the data item relating to whether the patient had been seen before for the same condition always requires reference to the medical record. Making this determination from computer records will likely depend on the diagnosis, which is often an unreliable indicator of follow-up information.

In CHCs where the PVA is completed from two or more sources, decision rules for handling conflicting information will be needed. The scope and extent of problems caused by this issue were not determined in this project. (In the one CHC where testing was possible, the CHC failed to provide the computer generated data to compare with the medical records' information). Discussions with CHC staff, however, indicated that problems of conflicting data should be minimal. Multiple sources of information should be viewed as complementary, and when directly contradictory information is found, the medical record data takes precedence.

Detailed written instructions and definitions for completing the PVA were provided to the CHC staff participating in the pretest (Attachment 5). Staff at both sites stated that they did not refer to the instructions because they felt that they knew how to complete the form from th.e verbal instructions provided at the CHC induction interview. In addition, they thought that the visit form items were self-explanatory. In discussions about the items during the debriefing visits, however, it was apparent that not all items were clearly understood. It was also apparent that the instructions were not used because the abstractor perceived that studying the instructions would have required too much time, probably because the detailed instructions are lengthy.

Medical Records

The source of most information for the PVA is the medical record. Records were reviewed in all of the CHC site visits, and visit forms were completed from medical records data at 6 sites. All if the CHCs used a variation of the SOAP format, and all reported that their records contain problem lists. However, problem lists were not always well maintained. Further,

the medical records appeared to be easily readable or transcribed and typed in less than half of the CHCs visited. While records seemed complete at all the sites, abstractors may require some assistance in deciphering medical records, even when the abstractor is familiar with the records. In one pretest site, the CHC person abstracting data from records spent considerable time going to a physician for help in interpreting his handwriting. For this reason, it is perhaps preferable to have the CHC medical records staff do the abstracting for the PVAs. Training sessions must be provided, however, to assure that the proper information is abstracted. Because of concerns about confidentiality, most CHCs preferred to perform the abstrating in-house.

In CHCs with multiple service locations, medical records are generally kept separately at each location. Users who go to more than one location for their care usually have their medical record maintained at one location, designated as their principal location. Information about visits to other locations is sent to the medical record at the principal location, or the medical record is sent to the other location for the scheduled visit, then returned to the principal location. The sample of patient visits will include visits to all eligible service locations. To obtain patient visit data, therefore, it will be necessary in some CHCs to have the complete records transmitted to one location, or to visit all locations for purposes of abstracting visit data. The specific arrangements in each CHC will depend on who is abstracting the data and the preferences of the CHC management staff.

The printed list of sample visits used in the pretests included the patient name, date of the visit, and providers seen during the visit. This was sufficient information to identify the appropriate patient medical record and the specific visit within the record.

5. CONCLUSIONS AND RECOMMENDATIONS

Data collection instruments and procedures were developed and tested for Community Health Center Surveys of Users and Visits. Through a series of CHC site visits and field tests, the instruments and procedures of the NHIS and NHAMCS were adapted to meet the needs of the CHC environment, and to provide data comparable to the data from these national studies. CHC administrators and staffs were quite cooperative, and demonstrated a willingness and capability to perform many of the survey activities. Information systems in the CHCs are adequate for establishing sample frames of both users and visits. Sample selection may be accomplished by the CHC staff with instruction and assistance. Patient Visit Abstracts (PVA) may be completed by CHC staff or a contractor's staff using information from the medical records and other records in the CHC. Enlistment of users for the interview is feasible with adequate incentives and flexible scheduling of appointments.

Considering the findings of this study, the following are recommendations for a national CHC User and Visit Survey.

5.1 Enlistment of CHCs

A very high cooperation rate should be attainable from CHCs in a survey of their users and visits if their needs are given consideration. Most CHCs are quite busy and have limited staff. They understand the need for and uses of the proposed survey data, and will cooperate if the burden on their staff can be minimized. A letter from a HRSA official should be sent to the CHC Executive Director requesting the CHC's cooperation. The letter should specify the needs and uses for the data, the specific tasks that may be asked of the CHC staff, and an assurance that all data will be held in confidence. The letter should also assure the CHC administrator that every effort will be made to minimize the resources required of the CHC to participate, and that they will be reimbursed for their costs. Arrangements for an appointment should be made by the contractor by telephone within a week of mailing the letter.

While CHC staff are quite busy most of the time, there are certain times of the year when they are unusually busy. For example, during the month or so before a grant application is due, the CHC administrative staff will be unavailable for any outside projects. Some flexibility is needed in scheduling a CHC's participation in order to avoid such times. In addition, adequate time must be permitted to perform any tasks expected of the CHC. In order to expedite the survey, it may be necessary in some CHCs to have contractor staff do many of the survey tasks.

For maximum efficiency, the letter and telephone call to each CHC should convey a clear understanding of the tasks the CHC staff may be responsible for performing so that all appropriate people will be available at the induction visit. Agreement must be clear as to which survey tasks the CHC will perform, and which staff member will be responsible for each. If several CHC staff members are to be involved, one overall coordinator should be designated so that the contractor representative can deal with a single point of contact. Time must be made available at the induction visit for a thorough discussion of all tasks with the appropriate persons. A tentative time schedule for completion of the tasks should be set, and arrangements made for refresher training if tasks cannot be completed in a reasonable time.

5.2 Instruments

The instruments recommended for the national CHC User and Visit Surveys are shown in Attachments 5 and 6. In addition, the User Interview Questionnaire, transmitted separately, is recommended for the national survey. The letters and telephone scripts were effective in the field tests, and may be "personalized" by the individual CHCs during actual survey operations. Though several modifications to the PVA were briefly considered during the study, none were tested due to time constraints. The unmodified NHAMCS Patient Record, therefore, is included in Attachment 5. Attachment 6 includes a PVA that is a slightly modified version of the NHAMCS form, reflecting the findings of the pretest. It is recommended that the modified PVA be used for collecting the CHC visit data. The instructions used in the pretest of this form were somewhat lengthy for practical use by CHC staff, but should serve to document the detailed definitions and instructions for the PVA. An abbreviated version of the PVA data item instructions is provided in Attachment 6, which may be used during data collection.

The paper version of the User Questionnaire worked reasonably well in the final tests. It has many sections, however, only some of which are applicable during each interview. Thus, it has numerous complicated skip patterns. It is recommended that a CAP1 version of the questionnaire be developed. It is also recommended that each question be prepared in Spanish as well as English because of the numerous Hispanics served by CHCs. A Spanish version could be a developed as a separate CAP1 program, or each question in the CAP1 could be entered in both languages. The latter approach may be most efficient since only one set of answers would be needed. Also, many questions in the User Questionnaire require yes/no answers that need, essentially, no translation.

5.3 Sampling

Every CHC has lists or files of users and visits that will serve as sample frames for the user and visit samples. The nature and content of these lists, however, vary considerably among CHCs. Most will have computer files, though they will vary in the degree of their sophistication. Although it is unlikely, some may have only paper logs of visits or lists of users. At the CHC induction interview, therefore, it will be necessary to determine what files will best serve as the sample frames, and what information is available in those files that may be used in the sampling process. Most CHCs will be willing and capable of selecting the samples, if sampling specifications are not complex. In CHCs with information system contracts, it may only be possible to select samples through the contractor. A recent NACHC survey report provides information on the prevalence of certain software packages among CHCs. If multiple CHCs using the same software are selected for the survey, it may be cost effective to arrange with the vendor to provide a specially designed sampling program. Regardless of who selects the sample, thorough instruction must be provided directly to the person who will select the sample. If sample selection cannot be accomplished within a few days after the instruction, arrangements should be made to review procedures, probably by telephone, when construction of the frames and sample selection are initiated.

Careful specifications must be given for sample frame construction to assure that all of a CHC's eligible service sites, and all appropriate types of users and visits are included. Information is generally available in both the user and visit files on the service site and type of visit. Definitions of users and visits should be compatible to facilitate data analysis. The pretest definition of including all medical care service users and visits has the advantage of making the visit definition compatible with the NHAMCS data. However, since the type of visit can be identified, medical care visits could be tabulated and analyzed separately even if non-medical visits were included in the survey.

The time frame to be covered by the samples must also be determined. It is recommended that both the user sample and the visit sample have reference periods of the prior calendar year. All CHCs will be able to provide a sample frame for the prior year, and that would standardize the reference period for all CHCs. Using a reference period other than a calendar year is problematic for some CHCs, and would result in non-standard reference periods. Using a calendar year

presents a problem for a few questions on the User Questionnaire that refer to events during the previous 12 months. Adjustments could be made for this problem, if necessary. Using the "prior year" data unadjusted, however, should not result in biased data. Because all CHCs report BCRR on a calendar year basis, BCRR data can be used to adjust for non-responding CHCs, to guide sampling instructions, etc., if the calendar year is also used for the sampling frame. During pretesting, the BCRR data were validated in four CHCs. It was determined that the BCRR provides good estimates of the number of medical users and visits. This finding is not surprising since these CHCs use the same information system to prepare the BCRR as they use for the survey sampling frame.

Users with sensitive reasons for using the CHC, such as HIV testing and teen family planning, should be included in the sample frame. Over-sampling should be planned, as needed, to compensate for high non-response among these groups. The user sample should be carefully screened by the CHC staff to identify all users needing special considerations. The contractor should work with the CHC to make special efforts to accommodate their needs so they may participate in the survey.

Suggested specifications for selecting the user and visit samples are shown in Attachment 5. These specifications are for selecting simple systematic random samples of visits and users. The user file is presorted by age within sex to assure proportional selection of age and sex groups. The visit file is presorted chronologically to assure a distribution of visits over the defined time period, A random "start with" number and the appropriate "take every" number are determined, and the samples systematically selected. The CHC staff persons in the pretest were able to understand and perform the sampling with moderate training and supervision. In some CHCs, given the complications of the information systems, it is preferable to have the CHCs generate the lists of users and visits, and select the samples. It will be advisable, however, to have the contractor check the sampling process to assure that complete user and visit lists are generated, and that samples are selected as specified. If more complicated sampling is proposed, the complexity may exceed the capabilities of the personnel or the information systems of some CHCs. Stratification with varied sampling rates among the strata, for example, would be problematic for many CHC's. Such samples could only be obtained with considerable assistance and supervision from the contractor.

5.4 Enlistment of Users

Users should be contacted first by mail to provide an official invitation to participate in the User Survey. The letter should be from the CHC Executive Director. A sample letter is provided in Attachment 5. The letter should be followed by a telephone call to obtain the user's cooperation and to arrange an appointment for an interview. The letter and call should emphasize: a) the need for the information by the local CHC as well as the overall CHC program, b) the benign, non-threatening nature of the information requested, c) the confidentiality guarantees, and d) payment for the interview. A payment of $25 is recommended for participants, unless unusual problems would require a larger amount (such as traveling long distances in rural areas).

The initial telephone contact may be made by the CHC staff or the contractor's representative. A sample telephone script is shown in Attachment 5. Most CHCs prefer to make the initial contact, and generally know how and when to reach their users. However, the ability and motivation of the staff person selected by the CHC to do this will be unknown and variable among CHCs. Thorough training will not assure success. It will be important, therefore, for the contractor to monitor this process carefully, and to intervene quickly if necessary.

CHC staff can keep the User appointment schedule, and reschedule appointments as necessary. Appointments must be available in non-working hours and weekends, if possible, to accommodate working users. Other special arrangements may be necessary for users who are handicapped or homebound, and for users who have transportation, language, or child care problems. Users with English language difficulties present particular problems that must be addressed. Since CHCs serve many non-English speaking people, arrangements for translators must be made. This should not be difficult because translators are frequently needed during the care of these same patients in the CHC. Methods for addressing these problems should be discussed during the CHC induction interview. At the time that appointments are made, the caller should determine whether translation or other special needs will be required for each respondent.

5.5 User data collection

User data collection is to be accomplished by administration of the User Questionnaire resulting from the pretests. Because the questionnaire is complex and lengthy, smooth and competent administration is essential. The interviewer must be well trained to administer the interview effectively, including several practice interviews. The use of CAP1 is strongly recommended, if feasible. Space for interviews must allow for privacy and no interruptions during the interview. Most CHCs have space available for at least one interviewer to work. When space is not available, the CHC will help arrange for space at a nearby location. Consideration should be given to offering interviews in the user's home when necessary. The sex of the interviewer does not appear to be an issue for male respondents, but a female interviewer is preferred for female users.

As noted previously, a Spanish version of the questionnaire and a bi-lingual interviewer are highly desirable for Hispanic Users. Other Users with English speaking difficulties will require a translator, preferably provided by the CHC, but provided by the User, if necessary. If a CHC translator is used, some pre-interview training should be completed to familiarize the translator with the questionnaire so that ambiguities and interpretation problems are minimized during the interview. If CAP1 is used, a paper copy of the questionnaire should be available for use by translators.

In scheduling user interviews, the characteristics of the respondent will, to some extent, dictate the time required for the interview. We recommend scheduling a minimum of 1.5 hours per interview, but users with many medical problems and/or language barriers may require from 2 to 2.5 hours.

5.6 Visit data Collection

Data for completing the Patient Visit Abstract (PVA) are generally obtained from medical records. Other records, including computer files, may also be used to supplement the medical record data, as necessary. CHCs have staff capable of completing the PVA, and generally prefer that their staff do such abstracting. Given the need for some medical judgment and normal problems with legibility of hand written entries, it is preferable to use CHC personnel for this task who are familiar with the medical records and providers. Training is necessary for CHC staff to do the abstracting correctly. Definitions of terms used on the PVA, and examples of inclusions and exclusions for the data items should be provided. Use of the detailed instructions shown in Attachment 5 is recommended. The condensed instructions shown in Attachment 6 should be provided to the abstractor for use during data collection. In those CHCs where the abstracting is done by the contractor, CHC staff will provide assistance.

Some CHCs have computer files containing detailed visit data that could be used to complete part of the PVA. A determination must be made in each CHC as to what PVA data items are in the computer files, and which are acceptable for completing the PVAs. It is recommended that the medical records be considered the primary source of PVA data. Only computerized data that the CHC knows to be accurate and complete should be used for the PVA. Generally, the patient demographic information, payment sources, and providers seen data are computer data items useful for the PVA. Some clinical data may also be included in the computer files, but may not be complete. For example, only the "principal" diagnosis may be provided. Also, the computer information generally has been coded, possibly introducing error. It is recommended, therefore, that the clinical data, (the reasons for visit, diagnosis, patient seen before, procedures, medications, and disposition), always be abstracted from the medical records. In both pretest sites, the PVAs were initiated by recording the first 6 PVA items directly from the computer visit record. This was sufficient information to identify the patient medical record and the specific sampled visit. In one site, the provider's name was also noted on the form to assure accurate identification of the sample visit. This procedure is recommended when those data items are included in the CHC's computer records.

When the same data are available from more than one source, the potential for conflict exists. In the event that computer data conflicts with the medial records data, the medical records data should be accepted as accurate. When information is different in two sources but not conflicting, it is suggested that all information be recorded on the PVA. For example, if the computer record indicates a procedure was performed that is not found in the medical record (or vice versa), that procedure should be recorded on the PVA. When such differences are found frequently, the CHC administration should be consulted to determine the best source of data.

5.7 Data Analysis

A data analysis plan is presented in Attachment 7 as specific research questions to be addressed by the CHC User and Visit Survey. The data cross tabulations indicated for each question are provided to illustrate how the data will be used to address the stated questions. This is not intended to be an exhaustive list of research questions or tabulations, but rather a range of examples to illustrate the richness of the data set and the breadth of the possible analyses.

5.8 Other considerations

Confidentiality

Confidentiality is a major concern in all CHCs. Assurances that all information obtained in the CHC User and Visit survey must be given by all parties involved. All data collected should have patient identifiers deleted before they are removed from the CHC. Prior to collecting any data, all non-CHC persons involved in data collection should present the CHC Executive Director with a properly executed statement assuring confidentiality of all data. The visit data will not involve collection of identifying information, but requires access to medical records, Most CHCs will allow access to the records by contractor staff with assurances of confidentiality. The user data will be collected directly from the user, so the user must be assured of confidentiality. Identification of persons as CHC users is also sometimes a confidentiality concern. CHCs may view contacting certain users as problematic, and may permit a contractor to make contact only after the CHC has gotten permission from the user. Patients with HIV or AIDS are examples of such users. In some CHCs, any contact with these users may be prohibited. During the CHC induction interview, issues of confidentiality should be discussed, and the necessary steps taken to assure confidentiality of all information collected.

Medical Records Data to Supplement Users Data

The use of medical records data in conjunction with the interview data for the user sample merits reconsideration. This idea was rejected during the early development of the survey, primarily on confidentiality grounds. Data from the medical records, however, would provide valuable information to supplement the information obtained in the user interview. To avoid the confidentiality concerns, the medical records data could be collected by the CHC staff after the user interview, and recorded on forms identified only by a user ID number. This could be kept separate from the user interview data until names were removed, and merged by computer on the basis of ID at a later time. Information on CHC visits, services, conditions, immunizations and medications are examples of data that would be valuable supplements to the user interview data. In addition, such information for user non-respondents would be invaluable in assessing response bias, and for improving survey estimates. It may be necessary in some CHCs to obtain the user's permission to abstract the data. This was not tested in the pretest, but permission could be requested at the end of the user interview. If, however, procedures can be developed that guarantee the medical records data cannot be linked by name with the user, the permission of the

user to abstract the data should not be necessary. Because of the value of the medical records data, this possibility merits additional exploration.

Costs

The costs to a CHC for participation in the User and Visit Survey are estimated in the following table based on the information provided by one pretest site. The same data were requested from the second site, but have not been provided. Unit costs for the pretest are projected to expected national costs per CHC based on a sample of 40 users and 120 visits in each CHC. These costs are based on the CHC staff selecting the samples, contacting the users to arrange and interview, doing follow-up of user non-response, and completing the PVAs.

Table

CHC User and Visit Survey

Estimate of Cost to CHC for Participation

Staff Hours			Activity
York CHC		National projected	
0.5		1	Start-up: reading and reviewing materials, planning
1.0		1	Gathering files, data, etc., in preparation for sampling
2.0		4	Visit sample selection, preparation of Visit File for sampling: deleting out-of-scopes, sorting, etc.
2.0		4	Recording of visit sample, initiation of Patient Visit Abstract
0.5		25	Pulling chart, abstracting data, returning chart
3.0		8	User sample selection, preparation of file, sorting, eliminating out-of-scope users, recording of information for user sample list
1.5		**14**	Retrieve user address and telephone number, prepare letters, mail letters
0.5		16	Initial telephone calls to enlist users, set up appointments
0.25		7	Follow-up calls for no-shows, reschedule appointments
11.25		80.0	**TOTAL HOURS**
$18.30		**$18.00**	Hourly rate, including fringe benefits
$212.06		$1440.00	Total wages
$2.10		$20.00	Postage
$214.16		$1460.00	**TOTAL COSTS**

Attachments

1. Advisory Panel

2. Background Document for Advisory Panel Meeting

3. CHC Site Visit Guide

4. Site Visit Reports
   a) Caroline Health Services, Inc.
   b) Central Virginia Community Health Center
   c) Community Health Centers, Inc.
   d) Crusaders Central Clinic Association
   e) Hamilton Health Center, Inc.
   f) Metropolitan Denver Provider Network
   g) Sunset Park Family Health Center
   h) York Health Center
   i) Henrietta Johnson Medical Center

5. Pretest Materials

   a) Letter to CHCs
   b) Letter to CHC Users
   c) CHC Users Survey Telephone Guide
   d) User and Visit Sample Instructions
   e) Patient Visit Abstract Form
   f) Patient Visit Abstract Detailed Instructions

6. Patient Visit Abstract (PVA)

   a) PVA (NHAMCS form modified)
   b) PVA abbreviated instructions

7. Data Analysis Plan

Attachment 1

Community Health Center User and Visit Survey

Technical Advisory Panel

Attachment 1

Technical Advisory Panel
CHC User and Visit Survey

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Attachment 2

Background Documentation on the Design of Surveys of Cients and Visits to Community Health Centers

Prepared for

Technical Advisory Panel Meeting

December 20, 1993

December 8, 1993

BACKGROUND DOCUMENT ON THE DESIGN OF SURVEYS OF CLIENTS AND VISITS TO CHCs

1. INTRODUCTION

As part of the BPHC strategy for evaluation of the C/MHC program, two national surveys are planned. The first will be a survey of the clients or users of CHCs and the second will survey characteristics of visits to CHCs. To provide comparative databases each of these surveys will be adapted from existing natlonal surveys conducted by the National Center for Health Statistics. In this way characteristics of the users of CHCs can be contrasted to those of the U.S. population, and the diagnoses and services associated with visits to CHCs compared with visits to other provider -types.

The survey of users of CHCs will be adapted from the National Health Interview Survey (NHIS). This is an annual survey of a representative sample of households throughout the U.S. Survey data are collected through personal interviews with all available respondents in each household who provide information on all members of the household. In addition to demographic information, disability, symptoms, diseases, and other conditions are reported, and information regarding health care utilization, various health-related behaviors, perceptions, etc. are collected. Supplements to NHIS are designed to obtain additional detail on special topics of interest each year. Because the core sample for the NHIS includes about 49,000 households and represents approximately 127,000 persons, national estimates derived from the NHIS have relatively good statistical reliability for separate age/sex cohorts, those residing in metropolitan versus non-metropolitan areas, by race, and by family income.

Adapting the NHIS questionnaire/methodology for a survey of CHC users requires:

- The questionnaire format must be slightly modified from that designed for a household interview to one for collecting information about only one person (this is not a difficult problem since it is already used in one-person households). The interview protocol must be modified to address problems of when and how to select a proxy for those CHC users unable to respond for themselves.

- A sampling strategy which provides representative data on the users of CHCs. This involves shifting from a sample of residential units (for households) to a sample of known users of a sample of CHCs. After selecting CHCs for survey, the sampling frame for the users of each included CHC will depend on what lists are available from that CHC.

- Interview procedures will also be different, with the need to develop protocols for contacting users drawn for the sample, assessing their willingness to participate and arranging for interviews. Special issues of

confidentiality arise because of the selection of known users of the CHCs for the interview, and because of the need to assure the respondents that the information they provide will neither be disclosed nor affect their subsequent medical care.

- Because of BPHC interests, some questions may be dropped and some replaced by questions which more directly address issues concerning CHCs and alternative sources of care, the content and process of care experienced by CHC users, and perceptions of the users about access barriers.

- It will also be appropriate to consider other potential modifications which may contribute to improved interview completion, reduction in survey costs, or enhanced reliability of the responses.

As indicated above, the CHC user survey must differ in some important respects from the NHIS methodology, yet will follow as closely as possible the NHIS in order to preserve comparability.

The survey of **visits** to CHCs will be adapted from the National Hospital Ambulatory Medical Care Survey (NHAMCS). NHAMCS include separate surveys of emergency rooms and organized outpatient department clinics. The outpatient department survey instrument from NHAMCS will be modified to serve as the survey instrument for visits to CHCs. Because this is a retrospective medical record-based survey, the contents can be varied to reflect the special interests of CHCs and BPHC without risk to the comparability of findings from the unchanged data elements. NHAMCS also contains a core set of questions which replicate certain of those contained in the National Ambulatory Medical Care Survey, an ongoing national survey of visits to office-based physicians, thus broadening the comparison base for the planned survey of visits to CHCs.

Sampling issues for the survey of visits to the CHCs are similar to those with the survey of users. The sampling frame within each selected CHC must permit deriving accurate weights for each sampled visit in order to develop national estimates. The NHAMCS data collection protocols must also be modified to accommodate the confidentiality concerns of CHCs, unique medical record system formats, availability of some data in automated format, and opportunities and limitations for utilizing CHC staff to abstract needed medical record data.

2. ROLE OF THE TECHNICAL ADVISORY PANEL

A Technical Advisory Panel (TAP) consisting of CHC representatives, BPHC/HRSA staff, NCHS survey methodology staff, and a technical support contractor (the Center for Health Policy Studies) has been formed to provide survey design and pretest guidance. Although much of the surveys' content represent "givens" and cannot be changed, TAP advice is needed for a number of design decisions. This document presents the design issues for TAP review and advice.

After assisting with the assessment of design alternatives and development of recommendations, the TAP will review plans for pretesting protocols and instruments. The Center for Health Policy Studies (CHPS), in cooperation with NCHS, will then conduct the pretest. Following the actual pretests, the TAP will review the findings and develop final recommendations for additional changes, and preparation of the request for Office of Management and Budget (OMB) approval for the conduct of the national surveys. The actual conduct of the survey will be dependent on receipt of OMB approval, availability of funds, and award of a competitive contract for survey implementation.

3. DESIGN OF THE SURVEY OF USERS OF CHCS

3.1 Sampling Issues for Consideration

A multistage sample is planned, consisting of grantees, service sites (when relevant), and users. The process for selecting users for interview may vary among CHCs, depending upon the availability of sampling frame(s) at the CHC, number of service sites, and the distributions of types of services and users by service site. If a CHC has a comprehensive list of all users, covering all sites, only one sample will be needed. The survey is being designed to collect information about "current" medical users of Section 330 funded CHCs and will exclude migrant farmworkers and homeless individuals if they are separately identified in the sampling frame (because these individuals often cannot be contacted except at time of visit for services, it is not feasible to include them in the present survey design). Seasonal migrant clinics and clinics specifically for the homeless will be excluded, but decisions as to other types of special service or user clinics have not been reached.

ISSUE - Will many CHCs refuse to participate? What are likely objections? What can we offer CHCs, other than study results?

ISSUE - If a CHC operates special clinics at different locations and does not have a central unified list of users, should each site's users be sampled separately? Which, if any, types of clinics should be excluded (e.g., school clinic, women's health, AIDS clinic, etc.)?

ISSUE - The survey will obtain information on current users of CHCs, but what should be the definition of a "current user"?

ISSUE - What types of lists or data bases containing current users are likely to be available, and what are the pros and cons of using each for selection of the users to be surveyed?

ISSUE - Who should draw the sample of users, the CHC staff or the survey contractor? Will the CHC authorize non-staff to have access to lists of users for purposes of sampling?

3.2 PROTOCOLS FOR CONTACTING USERS

It is envisaged that users will be offered a nominal payment to come to the CHC, or other specified location, for the interview. Although some of those interviewed will use the occasion to also seek services at the CHC, it is not intended that the interviews be conducted in conjunction with a service visit. All participation will be voluntary and it is hoped that the interview can be condensed to no more than about one hour. Because users will know that they have been selected for the interview because they are users of the CHC, the protocol for contacting them must be handled carefully. Confidentiality of the fact that they use the CHC must be considered, as well as the perceptions that users may have about whether a decision not to participate might jeopardize their future care at the CHC.

Contacting some users may be difficult if they do not communicate well in English. Also, some users, such as young children, the very old, or individuals who are not competent due to disability, cannot give informed consent for the interview and need to have a proxy respond for them.

ISSUE - Will the CHC's records indicate which of the users selected for survey do not speak or read English and, if so, what spoken and written languages are appropriate? Do CHC records indicate which users, other than children, require a proxy respondent? Where in the record would such information be located?

ISSUE - Once a user has been selected for the sample, how will contact be initiated? Will CHCs be willing to contact clients and invite their participation in the interview? Will CHCs make appointments for interviews? Will the CHC only determine if the user is willing to be contacted by the survey contractor, or will the CHC only advise all users that the survey is being performed and encourage participation? Should the initial contact be by mail, phone, or both? What proportion of users will not be contactable by either method? What proportion of users are likely to refuse to participate when contacted?

ISSUE - CHCs make provisions for contacting users after lab test results are received, etc., can these procedures and "no contact" criteria be used when recruiting users to participate in the interview?

ISSUE - How large a financial inducement to participate in the survey should be offered? Should the amount vary with the distance the user must travel? Will other inducements be necessary, such as child care at the interview site, transportation in rural areas, etc.? For any homebound users (either due to temporary disability or, if care is delivered through a home visit program, permanent disability) included in the sample, should provisions be made for conducting the interview in the home? Should we mix personal interviews with telephone interviews (for those unable to come to the CHC or other central location)?

ISSUE - How do CHCs deal with users who speak a language other than English or Spanish? Should a bilingual family member be allowed to serve as interpreter? If a family member services as interpreter for the interview, should an honorarium be provided to this person? What are options for providing translators and the advantages and disadvantages of each?

3.3 PROTOCOLS FOR CONDUCT OF THE INTERVIEWS

It is anticipated that from 25 to 100 users will be interviewed at each selected CHC, depending on the number of CHCs sampled. Most, if not all, interviews will be conducted at the CHC. However, if space does not permit conduct of confidential interviews at the CHC, we will need temporary space nearby (rent a mobile van and park it next to the CHC, or rent space in an adjacent building). The number of concurrent interviews will determine space needs. Having more interviews shortens the time period for interviews, and allows more efficient scheduling, shorter waits by interviewees, etc. Interviews are designed to take about an hour, but a lone interviewer may only complete five interviews per day due to scheduling problems, no-shows, etc. Three interviewers, however, may average six to seven per day since some overscheduling can be done to anticipate no-shows, interviewers can work staggered hours into the evening, etc. Several interviewers working concurrently also makes possible scheduling same-sex interviews, including Spanish speaking interviewer, etc.

ISSUE - Because space for conduct of private interviews may be at a premium at some CHCs, how much space per interviewer, and how many interviewers will be needed? Is this much space likely to be available? If not, what are the pros and cons of the alternatives?

ISSUE - Will evening and weekend interviews be necessary? If so, can these be performed at the CHC? Who and how will interviewees be greeted upon arrival at the CHC? If a CHC is very busy, can those coming to the CHC for the interview only avoid queues at the information or registration desk (might we have a sign directing those to be interviewed to a special room or area, rather than to the main waiting area)? If the central waiting area is used by interviewees, will special provisions and staff for checking them in as they arrive be needed? Should interviewees be provided with baby sitting service at the CHC, with refreshments, or with special reading materials about the survey if they have to wait?

ISSUE - To what extent can overscheduling be used to reduce the problem of now-shows? What proportion of no-shows can be expected? How long can an interviewee be expected to wait if we do overbook, but every interviewee arrives on time?

ISSUE - Will same-sex interviewers be required? How about for children?

ISSUE - If the user of a rural CHC lives at a great distance, or in a geographically inaccessible area, may a telephone (or radio) interview be substituted?

3.4 OTHER INFORMATION ON SAMPLED USERS

Demographics and medical history of the sampled users are already available in the records at the CHC. Obtaining these data from the records shorten the interviews, but may alter the comparability with data obtained through personal interviews (NHIS). Additional confidentiality issues also arise if information from the medical record is linked with personal interview responses. Some information which is not normally collected through the NHIS may be available through the review of the user's medical record (e.g., immunization

history), but even greater value can then be garnered by having the interviewer follow-up on incomplete or unusual information abstracted from the medical record.

ISSUE - Should the personal interviews be supplemented with CHC record data on source of payment, family income, race and ethnicity, dates and reasons for visits to the CHC, medical history, immunization history and height/weight measurements? Will the CHCs require that users give their permission for obtaining these data even if there are no individually identifiable names or numbers on the data sheets? Will individually identifiable data be needed on the interview sheet and medical record abstract to permit subsequent follow-back? If so, and these data are incomplete in the CHC's records, should these data be abstracted before the interview and then have the interviewer seek to fill in the gaps? Should the interviewer seek to update or verify CHC record information? Might a user object to the interviewer having been provided with confidential medical information prior to the interview, or could the interviewer be considered to be the agent of the CHC as long as no individually identifiable data is retained by the survey contractor or BPHC (e.g., remove the patients name from the interview record and visit records, but assign a unique number to each such that they may be linked for analysis)?

ISSUE - If patient permission is needed to abstract medical record information, are those users participating in the interviews likely to provide permission for abstracting certain information from their medical records? If so, should this be a condition for participation and done prior to the interview?

ISSUE - Who will abstract information from the CHC's records? If CHC staff abstract and link the data, then remove patient identification from these data, will permission of the user be required? Will CHCs have staff available to do this on a timely basis? Would this cause many CHCs to decline to participate?

ISSUE - What information would be of use to CHCs? Should this information be added to the interviews of CHC users? Should it be added to the information to be abstracted from CHC records?

4. DESIGN OF THE SURVEY OF VISITS TO CHCS

4.1 SAMPLING ISSUES FOR CONSIDERATION

The same CHCs selected for the survey of users will be used for the visit survey. Sampling issues to the point of selecting specific visits for survey are similar. Because the NHAMCS abstract is designed for medical visits, CHC medical visits will be surveyed.

ISSUE - Considering the need for comparability with NHAMCS and NAMCS, what will be the operational definition of a medical visit? The BCRR contains a definition and provides counts of encounters on a calendar year basis. Should this definition, be used for the planned survey?

ISSUE - What sampling frames for visits exist at most CHCs -- day sheets? Billing files? Automated systems which can produce the sample according to specifications? Do most CHCs have monthly counts of "medical visits" for a stratified monthly sample?

ISSUE - Will CHC staff be willing and able to draw the sample if provided with instructions and reimbursement? If not, will the CHC give BPHC representatives (or the survey contractor) access to the sampling frame to do the sampling?

ISSUE - Once a specific visit is selected for the sample, how often might that patient's medical record be missing? Information on the visit be incomplete in the record?

4.2 ISSUES REGARDING CONFIDENTIALITY, USER CONTACT, AND THE ABSTRACTING PROCESS

Visit information to be abstracted need not include anything which identifies the patient, although basic demographic data will be needed. It is possible that CHC staff might be contracted to draw the sample, abstract the visits, and provide only de-identified abstracts to the BPHC.

At present the NHAMCS abstract can be completed in 2-8 minutes by a medical records professional, depending on the complexity of a visit, and excluding time to pull and refile a record. Between 100 to 800 visits will be abstracted for each surveyed CHC.

ISSUE - Will CHCs authorize the survey contractor to have access to the medical record if no patient identification appears on the abstract? If CHC user permission is required for abstracting the record, will CHCs assist in obtaining such permission? Can this be done by phone, or will a mailed permission slip be required? CHCs currently obtain permission of patients to provide medical record information to third party payers; is this permission broad enough to include research studies?

ISSUE - Certain of the data elements require medical judgement (e.g., was this patient seen in this clinic for the same medical condition before?). Will CHC medical records staff be able to make such judgements, or will nurses be needed to do the abstracting?

ISSUE - If medical records are illegible, incomplete or unintelligible to the abstractor:

- Will it be possible to ask the provider to clarify or interpret the data?
- If a non-CHC abstractor, will the CHC medical records staff consult regarding interpretation of CHC-specific terminology, abbreviations, etc?
- What types of medical visits may be poorly or incompletely documented in the medical record? What criteria will define that the wrong medical record was pulled rather than the documentation for the selected visit was missing?

4.3 CONTENT OF THE VISIT ABSTRACT

Although the NHAMCS visit record will be used as the basis for the abstract design, there may be other data elements which should be added. Questions need to be resolved concerning how to deal with conflicting or updated information in the medical record.

Some data elements which might be useful and which are available in CHCs but not necessarily in hospital OPD records might be added. Other items which are commonly encountered in hospital OPD records may not be routinely entered in CHC medical records. We need TAP advice concerning present NHAMCS and potential data elements.

ISSUE - Should information entered in the medical record after the visit be used to update and expand upon the physician's entries at time of visit (e.g., the lab result comes back and indicates which of several "rule-out" diagnoses actual applies, or the pharmacist calls the physicians and requests permission to substitute a different medication that than prescribed)? What if a test was ordered, but there is no indication in the record that it was performed?

ISSUE - If the medical record entries are internally inconsistent for a particular visit (as might occur, for example, when the patient was seen by both a midlevel provider and a physician), what should be done?

A sample copy of the 1993 NHAMCS outpatient department visit record is attached. Sample copies of NHIS interview forms will be provided to TAP members on December 20 at the meeting.

SAMPLE 1993 PATIENT RECORD FORM – OUTPATIENT DEPARTMENT

NHAMCS

3. OATE OF VISIT: 3 / 16 / 93 (Month Day Year)

4. DATE OF BIRTH: 8 / 16 / 63 (Month Day Year)

5. SEX
- 1 [ ] Female
- 2 [X] Male

6. RACE
- 1 [X] White
- 2 [ ] Black
- 3 [ ] Asian / Pacific Islander
- 4 [ ] American Indian / Eskimo / Aleut

7. ETHNICITY
- 1 [ ] Hispanic origin
- 2 [X] Not Hispanic

6. EXPECTED SOURCE(S) OF PAYMENT *(Check all that apply)*
- 1 [ ] Private / commercial
- 2 [ ] Medicare
- 3 [ ] Medicaid
- 4 [X] Other government
- 5 [ ] HMO/ other prepaid
- 6 [ ] Patient paid
- 7 [ ] No charge
- 8 [ ] Other

a.. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?
- 1 [ ] Yes
- 2 [X] No

10. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT (la *patient's own words)*

a. Most important: Pilonidal cyst 28250

b. Other.

c. Other.

11. PHYSICIAN'S DIAGNOSES

1 Principal diagnosis / problem associated with item 10.a: Pilonidal cyst 685.1

b Other:

c. Other.

12. HAS PATIENT BEE SEEN IN THIS CLINIC BEFORE
- 1 [ ] Yes
- 2 [X] No

If yes, for the condition in item 11a?
- 1 [ ] Yes
- 2 [ ] No

13. TESTS, SURGICAL AND NONSURGICAL PROCEDURES, AN0 THERAPIES None [ ]

a. SELECTED SERVICES *(Check all ordered or provided)*
- 1 [X] Blood pressure
- 2 [ ] Urinalysis
- 3 [ ] Spirometry
- 4 [ ] Allergy testing
- 5 [ ] HIV serology
- 6 [ ] Other blood test

b. ML OTHER SERVICES

Include:
- Tests
- Imagings
- Surgeries and other procedures
- Other therapies (such as contact lenses, psychotherapy, or physiotherapy)

Exclude:
- Services in item 13a
- Counseling I education
- Medications

(Record one on each line and check performed or ordered for each.)

		Performed	Ordered
1	I + D 8603 10080	[X]	[ ]
2		[ ]	[ ]
3		[ ]	[ ]
4		[ ]	[ ]
5		[ ]	[ ]
6		[ ]	[ ]

14. COUNSELING/EDUCATION *(Check all ordered or provided)*
- 1 [X] None
- 2 [ ] Exercise
- 3 [ ] Cholesterol reduction
- 4 [ ] Weight reduction
- 5 [ ] Smoking cessation
- 6 [ ] Growth / development
- 7 [ ] Injury prevention
- 8 [ ] HIV transmission
- 9 [ ] Other STD transmission
- 10 [ ] Other

15. MEDICATIONS / INJECTIONS None [ ]

Include:
- Rx and OTC
- Immunizations
- Allergy shots
- Anesthetics
- Ueds ordered, supplied, or administered
- New meds
- Continuing meds (with or without new orders)

1. Keflex 16475
2. Percocet 23385
3.
4.
5.

16. DISPOSITION THIS VISIT *(Check all that apply)*
- 1 [ ] No follow-up planned
- 2 [X] Return to clinic PRN
- 3 [ ] Return to clinic · appointment
- 4 [ ] Telephone follow-up planned
- 5 [ ] Return IO referring physician
- 6 [X] Refer to other physician/clinic
- 7 [ ] Admit to hospital
- 8 [ ] Other *(Specify)*

17. PROVIDERS SEEN THIS VISIT *(Check all that apply)*
- 1 [ ] Resident/Intern
- 2 [X] Staff physician
- 3 [ ] Other physician
- 4 [ ] Physician assistant/ Nurse practitioner
- 5 [X] Registered nurse
- 6 [ ] Licensed practical nurse
- 7 [ ] Nurse's aide
- 8 [ ] Other *(Specify)*

Attachment 3

Community Health Center User and Visit Survey

Site Visit Guide

Attachment 3

Community Health Center User and Visit Survey
Site Visit Guide

A. GENERAL INFORMATION

1. Who is most appropriate person to receive HRSA introductory letter?

2. Decision to participate:

   a. What is the process?
   b. Who are the key people likely to be involved?
   c. What are the major factors influencing the decision?
   d. How can barriers to participation be reduced and overcome?

3. Is the BPHC information current?

   a. Service site(s) and address(es) correct?
   b. Volume of services data correct and still appropriate measure of size?

4. Are "medical services" provided at each service site, i.e. are all sites eligible for the study?

B. SAMPLING OF CHC USERS

[Questions on user files to determine if a list of users exists that is suitable for use as a sampling frame. It should be complete, unduplicated and include certain minimum, current information.]

5. Do you maintain a file of all of your CHC users?
   More than one file?

6. If this is a multi-site CHC, do you maintain a central file that includes users for all sites or does each site maintain its own file of users?

   If central file: Can user's primary service site be identified?
   If no central file:
   a. Can users be included in more than one file?

      YES ---> About what % of users are listed in more than one file?

b. Obtain the following information for **each** file.

7. Is the tile computerized?

YES
NO--> In what form is it kept?

a. Does the CHC use a data processing service organization for its patient registration, encounter and billing data processing?

8. Are **all** users included on the file?

YES
NO---> What users are omitted?

9. How frequently is information in the user file updated?

10. Are former (inactive) users deleted from the file?

YES ---> when
NO

11. Which of the following items of information are included in the file for each user?

* Name and address (including zip code)
* Unique identification number
* Medical record number
* Telephone number
* Date of first service at CHC or date of registration
* Date of last service
* Whether last service was a medical service
* Site of last service (if more than one site)
* Age or date of birth
* Special language requirements
* Payment source
* Family or household composition
* Mobility problems

For each of the above items not on the user file:

a. Is that information available in another CHC file?"

YES ---> (specify item and file)
NO

12. What other information is in the user file? specify
(Obtain a record layout for file or blank data form, if *available.)*

13. Is information available to facilitate sampling of selected users, for example, perinatal service users?

C. SAMPLING OF PATIENT VISITS

[Questions about visit log to determine if a list of patient medical visits exists that is suitable for use as a sampling frame. It should be complete for some time period, contain relatively few cancellations, and some minimum information.]

14. *If this is a multi-site CHC,* do you maintain a central visit or encounter log including visits for all sites, or does each site maintain its own visit log?

a. If separate logs, ask the following for **each** site.

15. Do you maintain a visit or encounter log for patient visits?

a. Do you maintain more than one log?

YES ---> How many? How do the logs differ?
NO

b. How long are completed logs retained ?

16. Is the log computerized?
YES
NO--> In what form is it kept?

17. Does the log include all visits by all patients? (That is, all patients that should be entered on that particular log.)
(Are walk-in patients, referrals, scheduled appointments, etc. included?)

YES
NO ---> What types of visits are not included?
About what % of visits are not included?

18. Does the log include appointment cancellations or other patients who did not complete a visit after being entered on the log?

YES ---> What type of patients are they?
Can these patients be identified on the log?
NO

19. **Can medical services** encounters be identified (as opposed to dental encounters and encounters for ancillary and other services)?

20. If a patient has encounters with different provider types during the same visit, will this be noted in the log?

21. Which of the following items are included on the log for each visit?

* Patient name
* Date
* Medical record number
* Provider type
* Type of service
* Payment source
* Patient age
* Patient sex
* Patient race
* Reason for Visit

22. Is other information included on the visit log? (specify)
(Obtain copy of log form **if** *available)*

23. *Is* a count of **total** medical encounters for the service site available by the week? month? year?

D. MEDICAL RECORDS INFORMATION

[Questions about the medical records to determine characteristics of the medical records system. Information for the sample of patient visits will be abstracted from the patient's medical record.]

24. *Are* the medical records for all patients maintained at one location in the CHC?

If multi-site CHC, are records for all patients maintained at one central location or does each site maintain its own medical records?

If no central records system, ask the following for each records system maintained

2.5. *Are your* medical records computerized?

YES
NO ---> How are they organized?

26. Is the information in the medical record entered in a specified format such as SOAP, problem oriented, or other system?

YES ---> specify
NO

27. Do all provider types make entries concerning encounters in the same single medical record? If no, or a separate record used, please describe differences for the following provider types:

* Dentist
* Nurse
* Nutritionist
* Mental Health Counselor
* Psychiatrist
* Social Worker
* Health Educator

28. Which of the following items are normally available in the medical record for each medical encounter?

* Date of service
* Patient age
* Patient sex
* Patient race
* Reason for visit/complaint or symptom
* Tests and procedures ordered and provided
* Diagnosis (coded?)
* Medications ordered, provided, continued
* disposition decision
* provider types
* referral information (in and out)
* Payment source

29. Is any other information routinely recorded in the medical record? specify
(Obtain a copy of any form used to record information in the medical record)

E. CONFIDENTIALITY ISSUES

[Questions on confidentiality issues to determine nature of any confidentiality problems and possible approaches for resolving them.]

30. Could arrangements be made for a BPHC contractor's representative to have access to your user file to select a sample of users for this study?

a. Will approvals be necessary, by whom?
b. Will other conditions on availability be set? If yes, describe.

31. Could arrangements be made for a BPHC contractor's representative to have access to your visit log(s) to select a sample of visits?

   a. Will approvals be necessary, by whom?
   b. Will other conditions on availability be set? If, describe.

32. Could arrangements be made for a BPHC contractor's representative to have access to your medical records to abstract data for this study?

   a. Will approvals be necessary, by whom?
   b. Will other conditions on availability be set? If yes, describe.

F. CHC CAPABILITY AND WILLINGNESS TO ASSIST

33. Is the CHC willing and are available staff capable of selecting a random systematic sample of users following specific instructions? a sample of visits?

34. Is CHC willing to:

   a. Send a letter to the user sample inviting their participation (50 users? 100 users?)
   b. Call users and arrange appointments for interviews?
   c. Identify users requiring proxy respondents, translators, or special transportation and make appropriate arrangements for same?
   d. Follow-up on no-shows and cancellations to reschedule appointments?

35. Does CHC have suitable space for:

   a. Private personal interviews of users? (One, two or three concurrently)
   b. Child care for interviewees?
   c. Waiting area for interviewees?
   d. Personal computer (CAPI), including electrical outlet?

36. Does CHC have staff available to abstract medical records and complete encounter forms? (3-5 min. per form, 100 forms? 300 forms?)

   a. Title/background of staff
   b. Estimated time requirement to complete

37. If abstracting is done by contractor staff:

   a. Will CHC pull records and re-file them **after abstracting?**
   b. Is staff available to assist abstractor with problems?
   c. How much advance notice is needed for pulling charts?

d. Is office and work space available?

G. OTHER CONSIDERATIONS

38. What is an appropriate amount of reimbursement for participants in user study? should it be provided by cash, check, money order?

39. If users have special transportation needs, will CHC know that in advance? can CHC staff make the arrangements?

40. Will female interviewers be acceptable for male and female users, or should an effort be made to have same sex interviewers?

41. Does CHC know in advance any user needing translator help? Does the CHC have translators on staff or available for assistance?

42. How will CHC derive costs for reimbursement for:

a. Drawing samples of users and visits
b. Contacting users
c. Space and equipment
d. Translators
e. Abstracting medical records
f. Providing supplemental data for users and visits

Attachment 4

Community Health Center User and Visit Survey

Site Visit Reports

a) Caroline Health Services, Inc.
b) Central Virginia Community Health Center
c) Community Health Centers, Inc.
d) Crusaders Central Clinic Association
e) Hamilton Health Center, Inc.
f) Metropolitan Denver Provider Network
g) Sunset Park Family Health Center
h) York Health Center
i) Henrietta Johnson Medical Center

SITE VISIT REPORT

CAROLINE HEALTH SERVICES, INC.
Denton, Maryland

March 9, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

CAROLINE HEALTH SERVICES, INC.
Denton, Maryland

1. Purpose of Site Visit

This CHC was visited as part of the pretest and information gathering for the design of surveys of CHC users and visits. Topics for discussion were: 1) the process through which this CHC would assess whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for users and visits, **3)** single versus multi-site sampling and data collection, 4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the survey, and **6)** any special considerations regarding design or implementation of the surveys at this CHC.

2. Conduct of Site Visit

Site Visit Team: Ben Duggar and Steve Wojcik

Persons Contacted: Center Director (J. Wayne Howard)
Medical Director (J. Corwin, M.D.)

Date of Visit: The visit was conducted March 9, 1994

Although this grantee operates three sites, we visited only the Denton site which is the main office. The meeting took exactly 2 hours, which included conduct'of a quick review of several medical records. Site staff were very cooperative and all or our questions were answered.

3. Site Description

Caroline Health Services (CHS) employs three full time physicians (a pediatrician, a family practitioner, and a general practitioner) to staff two full time clinics and one part time clinic. Denton, the main clinic, is near the geographic center of Caroline County. The Goldsboro site is about 20 miles to the north, the Federalsburg site (operated 2 days per week currently) is about 20 miles to the south almost on the county line. Although there is no hospital in Caroline County, there is a diagnostic center in Denton operated by the hospital from the adjacent county. The diagnostic center does most of the ancillary services for CHS, so there is very limited laboratory and X-ray on-site. Through agreements with the U. of Maryland medical school they have a rotation of medical students through the CHS clinics each year. With Georgetown University they also get nurse practitioner students each summer.

In 1993 there were about 4900 active users, 45% of whom customarily used the Denton site, 45% the Goldsboro site, and 10% the Federalsburg site. Although some patients use two sites, all have a "primary site" at which their medical record resides.

Although each site has a nurse, there are no health educators on site, no social workers, no WIC or nutritionists, no mental health staff. The CHC refers pregnant women to the county health department which also runs WIC. The nurse at the clinic does provide some patient education, as for diabetics or those with hypertension. The CHC also does EPSDT on site.

CHS has no evening or weekend hours at present, but recognizes that this would be desirable for conduct of the survey interviews. The user population is about 17% black, a few Haitians or Hispanics, but mostly white English speaking. When they have a non-English speaking patient, CHS contacts the DelMarVa project about arranging for a Haitian Creole or Spanish translator.

4. **Sampling of Users and Visits**

The CHC uses a single central computerized information system for all three sites. Data are transmitted through dedicated phone lines to terminals at each site. The computer is an Altos 3500S5 which operates on a 486DX2/66 MHZ chip and has 8 MB of RAM and 520 MB of hard drive storage. Software is UNIX based. They use the JSI MIS software package, which is also used by a number of other CHCs.

The computer contains all active users (those with any use in the past 24 months at present) and can be used to select a random stratified sample. Right now they have plenty of disk space, but in a few years might go to an 18 month interval for purging inactive users. It was suggested that if we have several CHCs in the survey which use the JSI software, we should recommend that the survey contractor approach JSI about writing the sampling algorithm and then use the same program for each such CHC. The user file contains all of the data elements we requested (e.g., name and address, phone, DOB, sex, date of last visit and all previous visits, type of service, place of service, provider ID, insurance status, diagnosis in ICD-9-CM, CPT codes for visit). The computer can also be used to draw the sample of visits, then could print out and provide in machine readable format most of the visit information which otherwise would have had to be abstracted from the chart.

Attached is a copy of the encounter form. All data from this form is in the computer and can be used for sampling or as a substitute for abstracting from the chart for the sample of visits. The patient registration file is also in the computer and has poverty level, sliding fee category, and contact information.

5. **Recruiting of CHC Participation and Willingness to Play Expanded Role**

For this CHC is was suggested that the initial letter should come to the Executive Director inviting participation, with a copy to the medical director (it was agreed that

the copy to the medical director would not really be necessary). The CHC would be willing to send out the contact letters on their stationery if we wrote the copy. The secretary would also be willing to call users and make appointments for interviews. The Executive Director believes that most of the users have a phone, although on occasion they have to call a neighbor, but all users can be reached through the phone system at least indirectly.

There is a space problem at CHS clinic sites, however, and it was strongly recommended that the survey firm arrange for off-site interview space. The following were suggested:

- Utilize the senior centers as a place for interviews. Seniors could get there via the senior transportation van and would also not mind waiting for interviews since they have much to do there while waiting.

- Utilize the county library system. There is a branch in Denton, Goldsboro and Federalsburg, and each has a meeting room available. This also has the advantage of plenty of reading material while waiting (Wayne is on the Library Board and feels this would be an acceptable use).

- We could rent a Winnebego, do interviews at each site, or even at the housing project if we had 4-5 users in the sample that resided there.

- The 4-H has buildings in most of the communities and could be talked into letting the survey interviewers use space (need to talk to the County Extension agents about space).

- Church buildings can also be used for interviews, would be especially good for the black community since these churches are generally very convenient to a substantial proportion of the residences.

Transportation for the interviews can be a problem for some patients, but by having interviews conducted at several locations in the county, this should not be a problem. The Area Agency on Aging should be contacted about helping with their transportation service (about 25% of the CHS users are Medicare). Also, the Rural Development Corp. provides a transportation service for Medicaid patients.

There is a part-time nurse who works for CHS and who might be willing to do the abstracting of visits during her non-work days. She knows the medical records and can read the physicians' handwriting!

6. **Medical Records Organization and Contents**

The medical records for children have an immunization record. All records of continuing patients also have a problem list, with dates of service related to each and change in status. Physicians hand write notes -- they do not have good handwriting

and it would be difficult for an outsider to abstract from them. Therefor, it is much better to get most of the NHAMCS data elements from the computer or from a copy of the encounter form. A copy of the patient registration form was in the record, but the encounter forms were not always filed. We examined a thick chart with ten years of encounters -- the dates of encounters were clear throughout. Apparently the CHC used to type all physician notes (they were in SOAP format) until 1988 when the practice changed to hand written notes (these were so intelligible that we could not verify if they are currently SOAPed). We examined a chart for a user with only one visit a few months earlier (for an acute condition) and found this chart to be incomplete (all visit information was there, but no problem list, med list; or immunization record). We looked at a young child's record and found it to be quite complete, including charts for growth and development, immunizations, etc.

Because of the detail in the computer file, the job of abstracting, can be made to be limited to only the reason for visit, medications, whether previously treated for this condition by CHS (which will be in the computer for past 2 years or so), disposition, referrals (particularly for off-site ancillary services), and whether seen by the nurse for services other than health education (the encounter form captures health education services, whether provided by the nurse or physician -- CHS has added a suffix to CPT 99401 to indicate the type/topic of health education).

7. Conclusions

This would be an easy site for conduct of the surveys of users and visits. We do not see the need to stratify the sample by service site and recommend a straight random sample of all users meeting the criterion for "active". Sampling can be done using the computer, both for users and for visits, and with almost any conceivable stratification. Their willingness to take on much of the logistics for interviews (on a cost reimbursable basis where cost is labor rate plus fringe plus other direct costs, such as postage, phone, reproduction) will help to control survey implementation costs. If the survey contractor arranges with major software vendors serving CHCs to prepare sampling/abstracting programs, these costs could be quite low when amortized over 3 or more CHCs in the sample which use the same system.

Space for interviewers would be the only potential problem, but there are many alternative acceptable solutions.

[] P.O. Box 122
Goldsboro, MD 21636
410-634-2380

[] 332 N. Main Street
Federalsburg, MD 21632
41 O-754-9021

Tax I.D. 52-1116591

Caroline Health Services, Inc.

MEDICAL CENTERS

[] P.O. Box 660
Denton, MD 21629
41 o-479-2650

[] J. Corwin, M.D.
[] H. DiTommaso, 0.0.
[] I. Unnissa, M.D.

PATIENT INFORMATION

Patient Name | Birthdate | Sex M F | Today's Dare

Address | Relationship to Insured Person: Self ____ Spouse ____ Child ____ Other ____

Insured Person's Name | Insurance Carrier

Address | Insurance I.D. # | Group #

Complaint | Room # | Telephone #

PROCEDURES

OFFICE VISITS	NEW	EST.
Minimal	99201	99211
Brief	99202	99212
Limited	99203	99213
Extended	99204	99214
Comp.	99205	99215
EPSDT		W907
Other		

OFFICE PROCEDURES	✓ CODE FEE
Anoscopy	46600
Aspiration	20610
Biopsv/Excision	11
Cautery	17100
Cryotherapy	17340
Ear irrigation	69210
EKG	93000
Incision/Drainage	I O -

OFFICE PROCEDURES	✓ CODE FEE
Inj. Major Joint	20610
Ini. Paraverebral Joint	64442
Laceration CM_ Simple	12___
Laceration CM_ Intermed.	12___
Laceration CM_ Complex	12___
Wart Destruction	17110
Other	

IMMUN/INJECT.	✓ CODE FEE
Flu	90724
Pneumonia	90732
DPT	90701
Oral Polio	90712
MMR	90707
TB Tine	86585
TB Intradermal	86580
Tetanus/dt	90702
HIB	90737
Tetramune	
Allergy Inj.	95115

LAB	✓ CODE FEE
Glucose	82948
Guiac	82270
HCT	85014
KOH	87220
Mono Spot	86300
Pregnancy Test	86006
Procurement	36415
Throat Culture	87060
U/A with Micro	81000
U/A w/out Micro	81002
Wet Mount	87210

LAB	✓ CODE FEE
MD Special	
6/60	

HEALTH EDUCATION	
BSE Instruction	99401 B
Cardiovascular R/A	99401C
FP Counseling	99401 F
Geriatric Assessment	99401G
STD Prevention	99401S

DIAGNOSES

	✓ CODE FEE
Abdominal Pain	789.0
Alcoholism	303.9
Allergic Rhinitis	477.9
Anemia	285.9
Anxiety	300.00
Arthritis	716.9
Asthma	493.9
Back Pain	724.5
Bronchitis	466.0
Bursitis/Tendonit	726.90
Chest Pain	786.50
Cong. Heart Failure	428.00
Conjunctivitis	372.30
COPD	496
Contraceptive Mgt.	V25
Depression	311
Dermatitis	692.9
Diabetes	250.0
Fracture	800-829
Gastroenteritis	558.9
GYN Exam	V72.3
Headaches	784 0

	✓ CODE
Health Maint. Adult	V70.0
Heart Disease	429.9
Hyperlipidemia	272.4
Hypertension	401.1
Impacted Cerumen	380.4
Mioraine	346.9
Open Wound, Location	870-897
Otitis Externa	380.23
Otitis Media	382.0
Pharyngitis	462
PID	614.9
Pleurisy	511.0
Pneumonia	481
Prostatitis	601.9
PUD	533
Sciatica	724.3
Seizure Disorder	345.9
Serous Otitis	381.1
Sinusitis	473.9
Skin Lesion	709.9
Sprain	840-848
Tobacco Abuse	305 1

	✓ CODE
Tonsillitis	463
Upper Resp. Inf.	465.9
Urinary Tract	599.0
Vaginitis	616.10
Viral Svndrome	079 9
Well Child Ck.	V20.0
Wheezing	786.09

CHARGES

Previous Balance	$
Today's Charges	$
Adjustments	$
Balance Due	$
Payment	$
New Balance	$

Next Appointment
Date
Time
Place

☐ P.O. Box 122
Goldsboro, MD 21636
41 b-634-2380

Cl 332 N. Main Street
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☐ H. DiTommaso, D.O.
n I. Unnissa, M.D.

PATIENT INFORMATION

Patient Name | Birthdate | Sex M F | Today's Date

Address | Relationship lo Insured Person: Self ____ Spouse ____ Child ____ Other ____

Insured Person's Name | Insurance Carrier

Address | Insurance I.D. # | Group #

Complaint | Room # | Telephone #

PROCEDURES

OFFICE VISITS	CODE NEW	CODE EST.
Minimal	99201	99211
Brief	99202	99212
Limited	99203	99213
Extended	99204	99214
Comp.	99205	99215
EPSDT		W907
Other		

OFFICE PROCEDURES	CODE FEE
Anoscopv	46600
Aspiration	20610
Biopsy/Excision	11___
Cautery	17100
Cryotherapy	17340
Ear irrigation	69210
EKG	93000
Incision/Drainage	10___

OFFICE PROCEDURES	CODE FEE
Inj. Major Joint	20610
Inj. Paraverebral Joint	64442
Laceration CM_ Simple	12___
Laceration CM_ Intermed.	12___
Laceration CM_ Complex	12___
Wart Destruction	17110
Other	

IMMUN/INJECT	CODE FEE
Flu	90724
Pneumonia	90732
DPT	90701
Oral Polio	90712
MMR	90707
TB Tine	86585
TB Intradermal	86580
Tetanus/dt	90702
HIB	90737
Tetramune	
Allergv Inj.	95115

LAB	CODE FEE
Glucose	82948
Guiac	82270
HCT	85014
KOH	87220
Mono Spot	86300
Pregnancy Test	86006
Procurement	36415
Throat Culture	87060
U/A with Micro	81000
U/A w/out Micro	81002
Wet Mount	87210

LAB	CODE FEE
MD Special	
6/60	

HEALTH EDUCATION	CODE
BSE Instruction	99401 B
Cardiovascular R/A	99401C
FP Counseling	99401 F
Geriatric Assessment	99401G
STD Prevention	99401S

DIAGNOSES

	CODE FEE
Abdominal Pain	789.0
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Allergic Rhinitis	477.9
Anemia	285.9
Anxiety	300.00
Arthritis	716.9
Asthma	493.9
Back Pain	724.5
Bronchitis	466.0
Bursitis/Tendonit	726.90
Chest Pain	786.50
Cong. Heart Failure	428.00
Conjunctivitis	372.30
COPD	496
Contraceptive Mgt.	V25
Depression	311
Dermatitis	692.9
Diabetes	250.0
Fracture	8001829
Gastroenteritis	558.9
GYN Exam	V72.3
Headaches	784 0

	CODE
Health Maint. Adult	V70.0
Heart Disease	42919
Hyperlipidemia	272.4
Hvoertension	401.1
Impacted Cerumen	380.4
Migraine	346.9
Open Wound, Location	870-897
Otitis Externa	380.23
Otitis Media	382.0
Pharyngitis	462
PID	614.9
Pleurisy	511 .o
Pneumonia	481
Prostatitis	601.9
PUD	533
Sciatica	724.3
Seizure Disorder	345.9
Serous Otitis	381.1
Sinusitis	473.9
Skin Lesion	709.9
Sprain	840-848
Tobacco Abuse	305 1

	CODE
Tonsillitis	463
Upper Resp. Inf.	465.9
Urinary Tract	599.0
Vaainitis	616 10
Viral Syndrome	079.9
Well Child Ck.	V20.0
Wheezing	786.09

Previous Balance	$
Today's Charges	$
Adjustments	$
Balance Due	$
Payments	$
New Balance	$

Next Appointment
Dale ____
Time ____
Place ____

SITE VISIT REPORT

CENTRAL VIRGINIA COMMUNITY HEALTH CENTER
New Canton, Virginia

February 17, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

CENTRAL VIRGINIA COMMUNITY HEALTH CENTER
New Canton, Virginia

1. Purpose of Site Visit

This CHC was visited as part of the pretest to gather information for the design of surveys of CHC users and visits. Topics for discussion were: 1) the process through which this CHC would determine whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for users and visits, 3) single versus multi-site sampling and data collection, 4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the survey, 6) confidentiality concerns, and 7) any special considerations regarding design or implementation of the surveys at this CHC. In addition to discussions with administrative personnel, direct testing of the User Interview Instrument through test interviews with CHC users were conducted. No medical records were abstracted, though a review of the medical records to evaluate the availability of selected data items was performed.

2. Conduct of Site Visit

Site Visit Team: Ben Duggar, Jim DeLozier, Kyung Keel, Trish Royston

Persons contacted: Mr. Roderick Manifold, Executive Director
Dr. Randall Bashore, Medical Director

Date of Visit: February 17, 1994

3. Site Description

Central Virginia Community Health Center is a rural facility serving a 5 county area in the central part of the state. This grantee operates three delivery sites, a central location in New Canton, the Southern Albermarle Family Practice in Esmont, and the Women's Health Center in Farmville. The latter is primarily and OBG services site. We visited only the New Canton location. The New Canton facility employs about 5 FTE providers, Farmville about 2, and Esmont about 1 FTE . The meetings took from 10:00 am to 3:30 pm, which included interviews with 3 users and review of several medical records. The CHC has several vans to provide transportation to needy users. Virtually all users are English speaking so that translators are not an issue. Site staff were very cooperative and all or our questions were answered.

4. Sampling of Users and Visits

The CHC uses a single central computerized information system for all three sites. The computer system is primarily a billing and accounting system, but the files include data for all visits as well. All users for all three sites are included in the files. Users are divided into three files depending on their date of last service and whether they have paid all outstanding bills. The files are labeled "Archive", "Historical" and "Current". However, all files are easily accessible, and a file of current users could be assembled with virtually any definition of "current". This file can be used to select a random stratified sample of both users and visits. The CHC would be willing to select samples according to written specifications if given sufficient time.

The user file contains all of the data elements needed for selecting the user and visit samples (e.g., name and address, phone, DOB, sex, date of last visit and all previous visits, type of service, provider ID, insurance status. In addition to the visit sample, the computer file can be used to provide many data items for the patient visit data abstract record which otherwise would have to be abstracted from the chart.

5. Recruiting of CHC Participation and Willingness to Play Expanded Role

For this CHC, it was suggested that the initial letter should be sent to the Executive Director inviting participation. The CHC would be willing to send out the user contact letters on their stationery if we wrote the copy and provided it on diskette. The CHC should also be permitted to personalize the letter, if they want, subject to HRSA final approval. This CHC would also be willing to call users and make appointments for interviews. Most of the users have an address and phone number where they can be reached. About 20% of users have no phone, but they can be reached through a neighbor or relative.

There is generally not a space problem at this CHC, and they felt they could accommodate two or three interviewers simultaneously. This CHC also has a child care area for users with small children.

This CHC expressed a general willingness to participate in the study but felt that they should be reimbursed for any staff time needed to participate. They would expect that most of the work would be done by their staff, and they would be willing to draw samples, type and mail the letters, arrange appointments, and abstract visit data.

6. Medical Records Organization and Contents

The medical records are not computerized, though many entries are typed. All entries are in a SOAR format. A problem list is present, but only major and chronic

conditions are included. Each chart contains an immunization history sheet with the source of the information generally recorded. Records reviewed were quite complete and detailed. Referral information might be difficult to find since it may be necessary to look for a visit to another provider to know referral type. "Seen before in this clinic" will need special effort to identify, although follow-ups are recorded because billing is different for an initial visit and a follow-up visit. Definition is needed for the seen before item. For multi-site CHC, does this question refer to the CHC or to a particular clinic?

Each of the three facilities maintains its own medical records. A user's records are kept at the "principal" site for that user. If a visit is scheduled for another site, the record is sent to the site for the visit and returned after the visit. Walk-in visits to another site are recorded on an encounter form which is sent to the primary site for inclusion in the user's chart.

The CHC indicated willingness to do the medical record abstracting, and had appropriate personnel to do the work. The detailed clinical data in the user computer file could be used to complete the visit data form for many items but not for all needed data.

7. User Interviews

Interviews were conducted with three CHC users. Ms. Keel administered the interviews, and Ms. Royston was an observer.

All sections of the survey except the "cancer screening" section were administered to one or more respondents. In only one case were all relevant sections of the survey administered. The "cancer screening" section refers to women ages 35 and above. Only one respondent qualified. However due to time constraints, the section was not covered. Each respondent was asked questions for approximately an hour. Except for one respondent who elaborated on many of the questions, the process was efficient. Three respondents answered questions using the choices provided for them such as "Yes," "No," "Agree," "Disagree," etc.

All respondents arrived on time for the interview or earlier. None of the respondents commented that they felt uncomfortable with any of the questions and all rated the one hour time length "OK." Three respondents came to the CHC specifically for the purpose of participating in the survey. The fourth participant had other business at the CHC and commented that she would not have come solely for the survey.

With the exception of the person who elaborated on her responses to questions, the amount of time to administer the survey to someone **with one or more health conditions** was not noticeably more cumbersome or longer than administering to someone **without** any health problems. For most of the respondents, it was difficult to provide the

number of times she had visited the CHC in the last year. One respondent had visited the clinic every three to six weeks in the last year. "Routine check-up" was also a source of confusion though most considered their last visit to the CHC as their "routine check-up. " The ease and logic of the skip patterns in the survey were for the most part uncomplicated.

Suggestions for improvements were discussed with the observer after each interview. Survey designers might consider replacing questions that ask for {name} to be inserted or include [He/she] or [his/her] with "you" or "your" to make the question easier to read and follow.

8. Conclusions

The personnel at this CHC were quite cooperative and helpful in making suggestions for the study design. They participate in many such studies and do many themselves. They are experienced in collecting data and would have no problem participating in a User and Visit Survey. Their computer records system would facilitate much of the data collection and they have both the interest and ability to do much of the work. The general discussion yielded the following suggestions:

- The CHC suggest that interviewed patients for which medical records information will be obtained need to sign a release at time of interview. If this proves to be problematic, the CHC would agree to have their staff abstract the needed data from the medical record and return the interview and abstracted data with all identifiers removed. Abstracting of information for visits when the patient is not known, would not need a release.

- It was suggested that the field staff for the survey present the CHC administrator with a signed confidentiality agreement to start the interview process as official documentation of their commitment to maintaining confidentiality of all data.

- The Medical Director pointed out that payment might bias results because poorer, non-working users will be easier to recruit than workers and those with some wealth.

- Walk-in patients are generally much more reluctant and unavailable than scheduled patients. Walk-ins are more often males, workers and sicker than scheduled patients.

- The characteristics of non-respondents can be obtained from the CHC records and compared to respondents to evaluate bias. This CHC would be willing to do this on an anonymous basis, ie by providing aggregate information. Since the number of refusals might be small in a CHC, this may or may not be feasible.

- Confidential users, mostly teens, will present some diffkulties. It would not be permissible to contact them at their homes, and they may be more reluctant than most to participate. They could be contacted at the CHC if a visit is scheduled during the survey

period (not likely). It could also be possible to disassociate the CHC from the contact process and do the interview wherever the respondent is comfortable. Since there are very few of these users, they can be handled individually.

- The introductory letter to children below a certain age must be addressed to the parent and the child. Although 18 would seem to be the logical age for this cutoff, this may be tricky for teens. Solicit more CHC advice on this.

- This CHC recommends against any community publicity of the study. They think it would not be helpful and could be confusing-or counterproductive in some user groups.

- This facility presents an unusual decision problem for obtaining the patient visit data. Much, but not all of the visit data could be obtained directly from the computerized user file. Some data items are not on the user file and some are on the file but not in the format needed for the Patient Record Abstract. The temptation would be to have the available data tabulated from the computer and abstract only the missing data from the medical record. When this possibility occurs, the rules for deciding how to proceed should be spelled out in advance. Some important considerations are: How to "connect" the data for a given patient visit from two or more sources. How would the information be processed? What is done when items are missing from the computer record? Would one then look in the medical record? What is done when the computer record included information that is not in the medical record, such as the patient source of payment?

SITE VISIT REPORT

COMMUNITY HEALTH CENTERS, INC.
Colorado Springs, Colorado

March 21, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

COMMUNITY HEALTH CENTERS, INC.
Colorado Springs, Colorado

1. Purpose of Site Visit

An on-site assessment was made at Community Health Centers, Inc. (CHCI) as part of the pretest and information gathering phase for the design of surveys of center users and visits. The following topics were discussed: 1) the process through which this CHC would assess whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for users and visits, 3) single versus multi-site sampling and data collection, 4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the proposed surveys, and 6) any special considerations regarding design or implementation of the surveys at this CHC.

2. Conduct of Site Visit

Site Visit Team: Steven Wojcik

Persons Contacted: Chief Operations Officer (Gayle Taylor)
Systems Manager (Velvet Talley)
Medical Records Director (Lynn Threllfall)

Date of Visit: March 21, 1994

The visit took place in one of the three sites operated by the grantee, the main site, which is located in an industrial/commercial park in east Colorado Springs. The meeting took approximately two and one half hours and included a tour of the facility and the examination of an arbitrary sample of several medical records. The administrative staff were very cooperative and eager to answer and elaborate on all questions posed to them.

3. Site Description

The main site is large, well-designed, modern and well-equipped. Funds to construct the facility came from a local foundation has resulted in an attractive "model" or showcase CHC building, very different from the average CHC. This is the only site operated by the grantee that provides comprehensive medical services.

The patient services are divided into primary health care, family health care, and women's health care sections. The primary health care section handles acute cases, emergencies, and walk-ins. The family health care section handles scheduled appointments, chronic care, follow-up visits, and pediatric care (including

immunizations). The women's health section handles obstetric and gynecological care and routine perinatal services. This CHC participates in the Comprehensive Perinatal Care Program (CPCP) and is funded by BPHC to enhance perinatal services to include services such as case management, risk assessment, and substance abuse counseling. The center also provides diabetic counseling through its Diabetes Education and Support Center (DESC), mental health counseling (a psychiatrist sees patients a couple times per week, and county mental health staff use the center to counsel juveniles), and case management for referred specialty care (provided by a cadre of 150 voluntary participating physicians in the area).

The main site has a waiting area that can hold over 100 people, and includes a separate area for child care while parents see the provider. The CHC main facility has on-site a clinical laboratory for performing basic tests, and a pharmacy. Other laboratory services are contracted to the local private hospital system. Hospital and radiology services are referred on a ratio of two-thirds to the local private hospital system and one-third to the county hospital. CHCI contracts with a local MRI center for MRI scans. A second site provides a minimal amount of clinical services (1 provider and a case manager) at a red cross homeless shelter several times per week. Users at this site who need additional services come to the main site. The third site provides only dental care, serving all the CHC users. Hours of operation of the main site are from 8-6, weekdays. CHCI is closed on weekends.

CHCI employs the following clinical personnel: 4 physicians, one of whom is a pediatrician and 2 are obstetricians, 5 physician assistants, 3 nurse practitioners, 3 nurses, and 2 case managers. The nurses provide most of the organized health education programs (particular attention is given to patient/family education for diabetes, and to provision of intensive health education and parenting training for prenatal care patients). CHCI also serves as a site for an osteopathic physician training program, and has 5 residents who spend time seeing CHC patients each year.

The service area includes the entire Colorado Springs area. There were approximately 17,000 users and 53,000 visits in calendar year 1992. The user population is 70% white, 14% Hispanic, 12% African-American, with a small Asian and native American population. About 30% of users are Medicaid recipients. Most of the remaining users have no insurance.

4. **Sampling of Users and Visits**

CHCI operates a complicated computer system. The major computer system is a local area network which connects the PCs at CHCI and has information on all patients and services at all three sites. It operates on a Novell network. The hardware consists of an IBM RSC. The patient information system software is from IDX, one of the largest medical information systems software companies in the country. Medical records are tracked using Infotracks software. CHCI switched to its current patient information system in January 1993. No information from the old system was carried over into the new system, nor was a rollback performed.

Therefore, it may appear in the computer files that many patients first visited the clinic in 1993 because none of their utilization data from prior years have been transferred. By the end of 1994 most active users will be in the current system.

There are two additional independent patient information systems in operation within CHCI. Case management information is on-a PC in text format and is not linked to the patient information system. Case management information could be linked with the main computer system, if manpower resources were devoted to this task. Information on CPCP users is also kept on a separate information system. The perinatal services data are entered into a PC using an internally developed MIS (programmed in FoxPro).

The major patient information system contains information on all users with any visits to any of the CHC's service sites since the new software system was brought on-line in January 1993. Users are subdivided into active and inactive groups, based on whether they have visited within the year. Inactive user records have not been purged, but there were only 15 months of users and visits in the system at the time of our visit. Because adequate memory is available, there are currently no plans for purging the system and it could be used to select a stratified random sample of users for any look-back period from January 1994. The center employs an MIS staff and could do the programming. The user inquiry and registration files contain all of the information we requested: name, address (including zip code), phone number, date of birth, sex, date of all visits, type of service, place of service (including department within the CHC), payment source, up to four diagnoses per visit (coded in ICD-9-CM), and services (CPT codes). They employ no special codes to distinguish type of health education.

Files are organized by family account numbers, rather than by individual patient (an individual patient number within the family is assigned). Individuals can be uniquely identified by combining the account number and the patient number. A special needs field identifies patients with mobility or language problems. Updating of patient information varies by payment source, the most infrequent being yearly. The computer could also be used to select a random sample of medical visits within a specific time period. Medical visits can be distinguished from other visits. The computer can also be used to print out and provide in machine readable format much of the visit information which otherwise would have to be abstracted manually from charts. The case management computer system could be used to gain information on referrals, or these may be abstracted from the charts. Information on medications, smoking status, reason for visits, injuries and chronic conditions (unless diagnoses codes were reported on the encounter forms), procedures not codable in CPT, counseling and health education services, and disposition would have to be obtained from the medical charts. Diagnoses data for each visit generally reflect only the principal reason for the visit, plus any complicating chronic condition which had to be considered when planning the treatment for the acute condition. Complete diagnostic information would have to be obtained from the chart.

5. Recruiting of CHC Participation and Willingness to Play Expanded Role

It was suggested that the initial letter inviting participation should be directed to the Executive Director. This CHC would be receptive to participation in such a study. Concerns of the CHC revolve around the numbers of staff involved and the amounts of time required by each. The CHC would be willing to send a letter on their stationery to the sample of users inviting survey participation, if drafted by the BPHC or the survey contractor (subject to minor editing by the CHC). CHCI would also be willing to schedule and reschedule interview appointments. According to the representatives of this CHC, all users can easily be contacted by telephone. The Chief Operations Officer indicated that language barriers are generally not a problem at the CHC. Six staff members speak Spanish and CHCI does offer a translation service. Patients who speak other languages usually provide their own translators. An arrangement with a local deafness center provides sign language services to CHCI when needed. CHCI does not offer transportation services. However, there is a bus stop outside of the clinic which patients use and the county does offer transportation services for the elderly. The Chief Operations Officer did not indicate that she expected either of these issues to be a problem during interviewing. She thought that $20 or $25 would be enough to compensate interviewees and provide an incentive for them to participate.

The Systems Manager had no preference about whether CHCI or the contractor would select the random sample of users and visits. However, because of the complexity of their computer system, it may be wiser for CHCI staff to select the sample using the contractor's instructions. Or, she would be willing to give the contractor a half hour of instruction on the computer system. The Medical Records Director preferred that the contractor abstract medical records since CHCI would not have sufficient staff for this task. They would be willing to pull and refile the records. Records could only be pulled for a few days since they may be needed for clinical purposes. Staff would be available to assist in the interpretation of entries, or for resolving other types of abstracting problems.

There would be ample work space for abstracting on site. The main site has ample private rooms which could be made available for conduct of the interviews. There also is ample waiting room space with a child care room. The clinic has office hours every evening during the week until 6 pm. It is closed on weekends. Space would not be a concern at this site.

6. Medical Records Organization and Contents

All medical records, including those of the people receiving care at the red cross homeless shelter are housed at the main site. Most medical records at CHCI (99%) are transcribed. The other 1% are hand written but legible. The medical records are **fairly complete and physicians' notes are in the** SOAP **format. Medical records of persons** who have not visited for three years are archived. Children's records have a complete immunization record, including information on immunizations received

elsewhere which have been verified. A child's record appeared to be very complete, including immunization and growth records and the results of extensive tests for normal physical and behavioral development. A record of an adult who had visited numerous times was very complete with a problem list, medication list, referral information, hospitalization records, and ancillary service results. It also included information on family medical history.

7. Conclusions

This site would an ideal study participant for both the interviews and the visits. The site has ample space to accommodate interviews and abstracting staff. The fact that there are three service sites would not introduce any complexity to the sampling or data collection. The center is willing to accept confidentiality guarantees and permit a contractor to abstract its medical records and use its computer information system for BPHC authorized research. CHCI is also willing to assist in any way. No major problems were identified at this site.

SITE VISIT REPORT

CRUSADERS CENTRAL CLINIC ASSOCIATION
Rockford, Illinois

March 22, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

CRUSADERS CENTRAL CLINIC ASSOCIATION
Rockford, Illinois

1. Purpose of Site Visit

We visited the Crusaders Central Clinic Association (CCCA) as part of the pretest and information gathering phase for the design of surveys of CHC users and visits. During the site visit the following topics were discussed: 1) the process by which this CHC would assess whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for users and visits, 3) single versus multi-site sampling and data collection, 4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the survey, and 6) any special considerations regarding design or implementation of the surveys at this CHC.

2. Conduct of Site Visit

Site Visit Team: Steven Wojcik

Persons Contacted: Executive Director (John Frana)
Community Services Director (Susan Lundquist)

Date of Visit: March 22, 1994

The visit took place in the main site, one of two sites operated by the grantee. The meeting took approximately two hours and included a tour of the facility, the viewing of a short video describing the services offered, and examination of a couple of medical records. The administrative staff were very cooperative and eager to answer and elaborate on all questions posed to them.

3. Site Description

CCCA operates two comprehensive service sites and provides limited services in 22 other locations around Rockford. The main site is located just west of downtown Rockford in a low-income residential area. The site covers one square city block and is housed in a former high school building that has been partially converted and provides more than adequate amounts of space for current CHC operations. Pediatric services are provided in a house next door. The second site is located five miles away on the south side of the city. Unlike the main site, it is quite small. Both sites offer the same comprehensive medical services and providers rotate between the two sites. CCCA also provides two weekly clinics in community mental health centers and senior citizen centers, and temporary, regular clinics in homeless shelters, soup kitchens, the library, and other places. CCCA also provides services at the county

jail, the juvenile detention center, and at selected locations for other special populations.

In the fall of 1994 CCCA will begin providing obstetrical care to indigent women at four sites. The two main sites offer pediatric care, primary care, dental care, home health care, vision care, HIV/AIDS care, social services, and health education. Health education includes diabetes and hypertension counseling, and dealing with chronic care. CCCA does perform simple X-rays, basic laboratory tests, and operates a retail pharmacy. In addition, the grantee also participates in the Comprehensive Perinatal Care Program (CPCP) which provides enhanced prenatal care. CCCA also provides EPSDT for its own patients and offers a full range of immunizations. CCCA also has a homeless program in which it offers housing assistance, substance abuse and mental health counseling. The site has limited evening hours and is closed on weekends.

CCCA employs the following FTEs of clinical personnel: 13.4 physicians (3 of whom are pediatricians, 3.7 are internists, 1 is an obstetrician, 4.7 are family practitioners, and 1 ophthalmologist), 0.2 podiatrist, 5.0 physician assistants, 3.0 nurse practitioners, 2 pharmacists, and 6 dentists" CCCA also is a site for a residency training program for the University of Illinois Medical School, dietician and nursing programs of Northern Illinois University, and a dental assistant program at a local junior college. The center employs 15 social workers and 2 mental health case coordinators. Most users receive hospital care and any necessary ancillary services not performed by the CHC at a private local hospital center. A small number of users may be hospitalized or receive specialized ancillary services from the county hospital.

The service area includes the entire Rockford area. There were approximately 27,000 medical and optical users and 115,000 visits in calendar year 1993. The user population is 50% white, 36% African-American, 9% Hispanic with a small Asian and native American population. About 50% of users are Medicaid recipients. Most of the remaining users had no insurance.

4. Sampling **of Users and Visits**

The CCCA does have a centralized computer system. Its hardware consists of an IBM RSC 6000. The patient information system is UNIX-based software from Global Health Systems which vends to numerous health facilities and is based in Rockville, MD. The Chicago Board of Health and Cook County are in the process of adopting this same system. The CEO did state that CCCA was dissatisfied with this system and will be changing software by June. He was uncertain as to how much patient information from the old system will be carried over. The computer is able to print out a list of all possible users of medical services and distinguish them from CCCA users receiving non-medical services, although it will he difficult to obtain an unduplicated user list. The computer system has the capability to select a stratified sample or subsamples.

The patient information system contains information on all users since the computer system was set up six years ago. The center employs an MIS staff who could write programs to draw the samples. Records have never been purged. Users are subdivided into active and inactive groups based on whether they have visited within the last two years. The user inquiry and registration files contain all of the information we requested: name, address, phone number, date of birth, sex, date of all visits, type of service, place of service, payment source, diagnoses in ICD-9-CM, and services/procedures coded in CPT. It was mentioned that they may use different versions of CPT, and shift between ICD-9-CM and CPT for certain procedures, depending on the source of payment. Illinois Medicaid requires coding in earlier 'versions of CPT. Illinois Medicaid also is lagging in adopting the annual updates to ICD-9-CM.

CCCA employs no special codes to distinguish among types or purposes of health education provided to patients. The initial contact file does contain information on whether the user requires Spanish language translation or transportation. Updating of patient information varies by payment source, the most infrequent being yearly. The computer can also be used to generate a list of medical visits, from which a random sample can be manually selected. Medical visits can be distinguished from other visits. The computer can also be used to print out and provide in machine readable format much of the visit information which otherwise would have to be abstracted manually from charts. The case management computer system can be used to gain information on referrals. Information on medications, smoking status, injuries, chronic conditions, procedures, counseling and health education services, referral information, and disposition would have to be obtained from the medical charts. Diagnostic and reason for visit information would have to be abstracted from the charts.

5. **Recruiting of CHC Participation and Willingness to Play Expanded Role**

It was suggested that the initial letter inviting participation would be directed to the Executive Director and the center would be receptive to participation in such a study. Concerns of the center would include the length of time required and the fact that during the second and fourth quarter of the year, they would be too busy to participate. The CHC would be willing to send the letter inviting participation drafted by the BPHC or the contractor and addressed to users. CCCA would also be willing to schedule and reschedule interview appointments. All users can easily be contacted by telephone. They indicated that language barriers are generally not a problem at the CHC. Six staff members speak Spanish. Patients who speak other languages, such as Laotian, usually provide their own translators.

CCCA does offer transportation services primarily for the elderly and perinatal care users, but also for those in need. They did mention that there is a potential for abuse of transportation which they have had to deal with in the past. The Executive Director did not indicate that she expected either of these issues to be a problem

during interviewing. They thought that $25 would be enough to compensate interviewees and provide an incentive for them to participate. Most of their users are working poor and would have to take off from work to, participate. Evening or weekend interviewing might be better at this site.

CCCA would prefer to have the CHC staff select the sample of users and perform the medical records abstracting. They would also be willing to pull and refile the records. Records could only be pulled for a few days since they may be needed for clinical purposes. Staff would be available to assist in resolving abstracting problems. There would be ample work space for abstracting on site at the main site. Space for both interviewing and abstracting would be tight at the second site. The main site has ample rooms for interviews and ample waiting room space, However, interviews may not be as private as would be desired. There is a church nearby and other sites which could be used to conduct interviews. Alternative space for interviewing would have to be found adjacent to the second site.

6. Medical Records Organization and Contents

About half of the medical records at CCCA are transcribed. The decision to transcribe is based on the legibility of the physician's handwriting.- The medical records are fairly complete and physicians' notes are in SOAR format. Children's records have a complete immunization record, including information on immtmizations received elsewhere (immunization history is verified). A child's record which we reviewed appeared to be very complete, including immunization and growth records. A record of an adult who had visited numerous times was very complete with a problem list, medication list, referral information, hospitalization records, and ancillary service results.

7. Conclusions

This site would be okay for both the interview survey of users and for the survey of visits. The CHC prefers that its own staff abstract the medical records, and its own staff perform the sampling from the computer information system, but would allow the contractor access if necessary. CCCA is also willing to assist in logistics or any other way.

Space would be a problem at the second site and private rooms for interviewing might be difficult to find at the main site. However, the administrators felt that solutions could be found. They also indicated that because of the large percentage of the user population that works, compensation and timing of interviews would influence participation rates.

SITE VISIT REPORT

HAMILTON HEALTH CENTER, INC.
Harrisburg, Pennsylvania

March 16, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

HAMILTON HEALTH CENTER, INC.
Harrisburg, Pennsylvania

1. Purpose of Site Visit

The Hamilton Health Center (HHC) was site visited as part of the pretest and information gathering phase for the design of surveys of CHC users and visits. During the visit the following topics were discussed: 1) the process through which this CHC would assess whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for CHC users and visits, 3) single versus multi-site sampling and data collection, 4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the survey, and 6) any special considerations regarding design or implementation of the surveys at this CHC.

2. Conduct of Site Visit

Site Visit Team: Jim DeLozier and Steven Wojcik

Person Contacted: Chief Executive Officer (Joseph Summers)

Date of Visit: March 16, 1994

Although this grantee operates seven sites, we visited only the Fulton Street site which is also the main office. The meeting took approximately one and one-half hours. We did not look at any medical records. The Chief Executive Officer was largely cooperative but seemed to have limited time and could only provide brief superficial answers to some of our questions. Nevertheless, the meeting provided the most essential information with the exception of the exact layout of the CHC's MIS user files and medical records.

3. Site Description

HHC employs the following FTEs of clinical personnel: 4.5 dentists, 3.5 pediatricians, 2.5 general practitioners, 1.0 physician assistant, and 1.8 nurse practitioners to staff two full time clinics which provide comprehensive medical and dental services. Both sites offer perinatal services. HHC also has five WIC sites in Harrisburg and surrounding towns, which do not provide medical services. The Fulton Street site is located about one and a half miles almost directly north of the state capitol building in a low-income residential area. The center itself is in a large building in a park and adjacent to a church. The Walnut Street site, which has just re-opened within the last year, is located one-third of a mile south of the state capitol building in the downtown business and government district and about two miles from

the Fulton Street site. HHC plans to operate a clinic from a mobile van, and to implement two school-based clinics in the near future. The van would be located in areas where the need is not sufficient to justify a full-time clinic. The school-based clinics would be open to all users in the neighborhood. Plans for a teen health center are in initial stages. The current service area encompasses the city of Harrisburg. However, HHC has requested to extend the service area to the whole of Dauphin County.

Currently there are about 12,000 active users of medical and dental services, including 1,000 of the 5,000-6,000 WIC recipients. Although some patients use two sites, all have a "primary site, " to which they are encouraged to come and at which their medical record is located. The user population is relatively young and racially and ethnically mixed. The major groups are African-Americans and Hispanics. Smaller groups include Asian-Americans of various ethnicity and a group of recent Russian immigrants. Seventy percent of users are Medicaid recipients who are evenly split between managed care and fee-for-service. Twenty percent of users are self-pay and pay on a sliding fee basis. About seven percent of users have private insurance and three percent are Medicare recipients.

4. Sampling of Users and Visits

HHC uses a single central computerized information system for both sites that provide medical care. The computer is an AS/400. HHC uses a software package from BCA for its patient information system. About 10-15 CHCs nationwide use similar software designed by BCA.

The computer contains information on all users within the last five years. Records are regularly updated and users are subdivided into active and inactive users. Active users are defined as those using services within the past three years. It was indicated that user information allows the distinguishing of WIC recipients who do not use medical and dental services at HHC. Distinguishing between medical and dental visits is easy. A small number of users have had only dental visits to HHC, and it is not known whether they, in fact, have another customary source of primary care, or whether they merely have not sought any medical care. The MIS user file contains the following data elements we requested: name, address, phone number, date of birth, sex, date of all visits, type and place of service for each visit, payment source, family or household composition, diagnoses (ICD-9-CM codes), and CPT codes for all procedures and other codable services. It does not contain information indicating whether a user has special language or transportation requirements.

Information in the MIS is ideal for the sampling of selected users. The computer can also be used to draw the sample of visits, and can print out and provide in machine readable format most of the visit information which otherwise would have to be abstracted manually from charts. Information on medications, reason for visits, counseling and education services, and disposition would have to be obtained from the medical charts.

5. Recruiting of CHC Participation and Willingness to Play Expanded Role

For HHC, it was suggested that the initial letter inviting participation should be directed to the Chief Executive Officer. A decision to participate would be made by the CEO in consultation with the senior management team. HHC would in all likelihood participate if asked by the BPHC. HHC would be willing to send out the contact letters on their stationery if we wrote them. The staff would also be willing to call users selected for interviews and make appointments. All users can easily be contacted by telephone.

Space for three interviewers and a waiting area for interviewees would be difficult according to the CEO, although he stated that some room could be found. They do have a large conference room but the waiting area is small. If additional space is needed, there is a church next door which could provide space, most likely without cost. If neither the CHC nor the church are adequate, he felt that it would be relatively easy to find space nearby for the interviews. Because of the geographic distance between the sites, it is suggested that appointments for interviews be arranged at the interviewee's primary site.

Many staff members are bilingual, speaking both Spanish and English. One staff member speaks Vietnamese. Patients who speak other languages usually provide their own translators. HHC offers no transportation services but Dauphin County transportation service buses are available to all Medicaid recipients and HHC does provide funds for transport in selected hardship cases. The CEO did not indicate that he expected either of these issues to be a problem during interviewing.

The CEO strongly emphasized that the contractor would not be permitted access to medical records unless absolutely necessary. He stated that HHC would provide personnel to abstract medical records. Either medical records or nursing staff could abstract records on their own time (on a cost reimbursable basis).

6. Medical Records Organization and Contents

We did not look at medical records and were unable to assess their completeness or legibility. We did not request to do so because the CEO had stated at least three times during the interview that he would not allow outside persons access to medical records. He declined to provide copies of the encounter form and the user registration forms or user file layout within the MIS after our request. He indicated that they use the SOAP format. The CEO wishes to eventually convert to computerized medical records. It appears that some inactive medical records may be housed in a separate building one block away.

7. Conclusions

As long as CHC staff perform abstracting, this would be an easy site for conduct of the surveys of users and visits. The CHC would feel uncomfortable if the contractor

had direct access to medical records. At this site, the BPHC and the contractor should go out of its way to emphasize the confidentiality of the study to reassure the CHC. The sample does not need to be stratified by service site and we recommend a straight random sample of all users meeting the criterion for "active." It is relatively easy to exclude the individuals in the system who use WIC only and it is easy to distinguish between medical and dental visits. Sampling can be done using the computer, both for users and for visits, and with almost any conceivable stratification. The site would be willing to take on much of the logistics for interviews on a cost reimbursable basis (cost is defined as the number of person hours times each individual's labor rate plus fringe, plus other direct costs such as postage, telephone, and photocopying. Contacting of patients, transportation, language barriers, and space for up to three simultaneous interviews are not expected to be problems.

The CEO of HHC expects that users will not be reluctant to participate. If the survey contractor finds that a number of CHCs using the same software have been selected to participate, arrangements could be made to prepare sampling/abstracting programs for use at all such sites. The major potential problem for this site is that the contractor would have to rely on CHC staff to abstract medical records. However, the CHC does have medical records staff and nursing staff available to do the abstracting, and the CHC would be willing to make arrangements for their participation on a cost-reimbursement basis.

SITE VISIT REPORT

METROPOLITAN DENVER PROVIDER NETWORK
Aurora, Colorado

March 21, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

METROPOLITAN DENVER PROVIDER NETWORK
Aurora, Colorado

1. Purpose of Site Visit

The Metropolitan Denver Provider Network (MDPN) was site visited as part of the pretest and information gathering phase for the design of surveys of CHC users and visits. The following topics were discussed: 1) the process by which this CHC would assess whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for users and visits, 3) single versus multi-site sampling and data collection, 4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the survey, and 6) any special considerations regarding design or implementation of the surveys at this CHC.

2. Conduct of Site Visit

Site Visit Team: Steven Wojcik

Person Contacted: Executive Director (David Myers)

Date of Visit: March 21, 1994

The visit took place in one of the two sites operated by the grantee, the Aurora Clinic, which is across the street from the administrative offices. The meeting took approximately two hours and included a visit to the medical records room and examination of an arbitrary sample of several medical records. The Executive Director was cooperative and forthcoming with information, All questions were answered.

3. Site Description

MDPN was organized in 1989. It operates two full-time clinics on opposite ends of Denver. The Aurora Clinic is located in central Aurora, just east of Denver and southeast of Stapleton Airport in a mixed commercial and low-income residential area consisting of small homes, apartments, and mobile homes. The clinic is located in a former house. The other site is twenty-two miles away in Lakewood, just west of Denver, in Jefferson County. Both clinics operate independently, serving different user populations, and employing separate groups of providers. The Lakewood site is located in the county health department building. In addition to weekday hours, both sites are open one evening per week. Neither site is open on weekends.

MDPN employs the following FTEs of clinical personnel: 2.6 physicians, 2.4 mid-

levels, 0.2 nurse mid-wife, 0.5 generalist case manager, and 2 case managers dedicated to teen pregnancy prevention, The latter two are the only health educators. Both sites provide comprehensive medical services, including adult, pediatric (they also deliver EPSDT and immunizations), and perinatal care. Providers are generally assigned to one site and do not practice at the other site. Health education done by the clinical staff includes prenatal, diabetes, substance abuse, parenting, and auto safety counseling. The staff also assists with referrals for social services. The MDPN is a teaching site for the nurse mid-wifery program at the University of Colorado. MDPN has no social workers and no mental health staff. Users receive ancillary and hospital services at 5-6 hospitals in the Denver area. The Aurora site does have a pharmacy outlet which offers limited pharmaceuticals to clinic users only.

The service area includes the entire Denver metropolitan area, however users reside primarily in the suburbs east and west of the Denver city limits. There were approximately 3,650 users in calendar year 1992, but they have enjoyed great growth and the current number of users is substantially higher (CHC representatives stated that there has been a 40% increase in visits and a 30% increase in users since 1992). Approximately sixty percent of users receive care at the Aurora Clinic and the remaining 40% receive care at the Jefferson County site. The user population is 65 % white, 20% African-American, 10% Hispanic, and a small proportion Asian and native American. Hispanics and recent Russian immigrants are more likely to use the Jefferson County site while the Aurora Clinic has a higher percentage of Asians. African-Americans are evenly distributed between the sites. About 30% of users are Medicaid recipients. Most of the remaining users have no insurance.

4. Sampling **of Users and Visits**

MDPN uses a single central computerized information system for both sites. The computer is a powerful PC (486DX66). Terminals at both sites are connected by a dedicated phone line. MDPN uses a Versyss software package which is UNIX-based.

The computer contains information on all users since the computer system was set up in 1992 and can be used to select a stratified random sample of users. However, two samples would have to be separately selected, one for each site since the computer can only provide complete lists of users by site. This would be better for the survey since interviewing would have to occur at each site for the users of that site, due to the great distance that separates the sites. The user file does not contain information indicating whether a user has special language or transportation requirements. Information such as date of most recent visit and demographics is available to facilitate sampling of selected users. The center employs no MIS staff, but the Executive Director has generated a list of users from which a recent random sample was manually drawn to conduct focus groups. Records have not been purged. Users are not subdivided into active and inactive groups.

The computer user file contains all of the information we requested: name, address, phone number, date of birth, sex, date of all visits, type of service, place of service,

payment source, diagnoses coded in ICD-9-CM code, and services coded in CPT. Visits involving only health education and no medical services can be identified by the presence of C codes unaccompanied by medical codes. The computer can also be used to list all medical visits within a specific time period, again with two separate lists by site of care. A random sample can then be picked manually or possibly a program can be written to select a random sample by computer. The computer can also be used to print out and provide in machine readable format much of the visit information which otherwise would have to be abstracted from charts. Information on medications, smoking status, reason for visits, chronic conditions, referral information, counseling and education services, and disposition would have to be obtained from the medical charts. Also, diagnosis information from the computer will only reflect that for the visit. Complete diagnostic information would have to be obtained from the chart.

5. Recruiting of CHC Participation and Willingness to Play Expanded Role

For MDPN, it was suggested that the initial letter inviting participation should be directed to the Executive Director. Since the organization is small, the entire staff would be involved in the decision to participate. Concerns of the CHC focus on what information will be gathered, how it will be used, and the costs to the CHC to participate (measured in disruption and staff time). The MDPN has conducted some studies of its own, such as focus groups, and is well aware of what is involved in such studies. The CHC would be willing to send a letter on their stationery inviting user participation in the interviews, provided that it be drafted by the BPHC or the survey contractor and that the mailing costs be reimbursed. In their own studies, they have used a consultant who specializes in this area to carefully word letters sent to people for which confidentiality might be a problem, such as persons with HIV+ and teens. Although MDPN recognizes that scheduling and rescheduling appointments is time-consuming, it would be willing to do these tasks.

CHC staff indicated that all users can be contacted by telephone. The Executive Director indicated that language barriers are generally not a problem at the CHC.. Staff members speak Spanish, Chinese, Vietnamese, Russian, and sign language. He also stated that when they do have a problem, they use AT&T's translation service in a three-way telephone conversation. Patients who speak other languages usually provide their own translators. MDPN does offer bus tokens and cab vouchers for people who have difficulty getting to the clinic. The Executive Director did not indicate that he expected either of these issues to be a problem during interviewing. He thought that either $15, $20, or $25 would be fine as compensation for interviewees.

The Executive Director stated that confidentiality provisions would determine whether he prefers that the contractor or MDPN select the sample of users and visits. MDPN prefers to have its own personnel abstract medical records, and to pull and refile the records. Nursing and medical assistant staff members would be responsible for handling medical records abstracting. The cost and time would be factors involved in

this decision. Fifty to one hundred charts would not be a problem for **MDPN.** However, if more charts were to be examined, it would be too much for **MDPN** staff. Records could only be pulled and set aside for a few days since they may be needed for clinical purposes. Thus, it would be necessary to pull several batches of records as the abstracting process continued. If outsiders are to do the abstracting, CHC staff would be available to assist in resolving abstracting problems. There would be little work space for abstracting on site since the medical records at the Aurora Clinic are housed in a tiny room and the entire site has little space. However, the administrative offices are located across the street, and space could possibly be made available there. The Aurora site does not have the space for even one interviewer. The waiting area is tiny and there is no child care. Space for the interviews could be located in the administrative offices. The clinic has office hours one evening per week and is closed on weekends. It is possible that the site could be used for interviews on other evenings during the week or on the weekend. The Executive Director suggests that interviews be held at both sites since they are far apart from each other.

6. **Medical Records Organization and Contents**

Provider notes in most of the medical records have been transcribed. Others appear to be legible, and fairly complete. Physicians' notes are in the SOAP format. Children's records have a complete immunization history, including information on immunizations received elsewhere and verified. A pediatric chart which we reviewed appeared to be very complete, including immunization and growth records. A record of an adult who had visited the CHC numerous times was very complete with a problem list, medication list, referral information, and ancillary service results.

7. Conclusions

Selection of this CHC would produce minor complications for the conduct of both the survey of users and survey of visits. It would be necessary to stratify by service site since the user population varies by site (one site has a special population, Russian immigrants under case management) and the computer can only generate information by site, not for the CHC as a whole. Apart from this complication, the computer could be used to select the sample of users and visits, and sort according to many variables. The CHC would be willing to take on many of the tasks involved in participation in the study.

The other major problem is that of finding space for conducting the interviews and for abstracting records. Space would have to be found off-site. The CHC representatives cautioned us that there could be a small but significant refusal rate among users who are asked to participate. MDPN had difficulty in getting users to participate in its own recent focus group study, attaining only a 20% participation rate. This may be due to the small staff size and lack of experience. The contractor may have less difficulty, but this concern has been broached.

SITE VISIT REPORT

SUNSET PARK FAMILY HEALTH CENTER
Brooklyn, New York

March 23, 1994

Delivery Order 240-93-o 102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

SUNSET PARK FAMILY HEALTH CENTER
Brooklyn, New York

1. **Purpose of Site Visit**

This CHC was visited as part of the pretest to gather information for the design of surveys of CHC users and visits. Topics for discussion were: 1) the process through which this CHC would determine whether or not to participate in the planned surveys, 2) the availability and characteristics of sampling frames for users and visits, 3) single versus multi-site sampling and data collection,-4) medical records organization and contents, 5) conditions under which the CHC would agree to perform administrative and abstracting tasks associated with conduct of the survey, **6)** confidentiality concerns, and 7) any special considerations regarding design or implementation of the surveys at this CHC. In addition to discussions with administrative personnel, direct testing of the User Interview Instrument through test interviews with CHC users were conducted.

2. **Conduct of Site Visit**

Site Visit Team: Ben Duggar, Jim DeLozier and Donna Ruscavage

Persons contacted:
Special Assistant to Executive Director (Molly McNees)
Medical Director (Merle Cunningham,M.D.)
Director of Quality Assurance (Kathleen Madden)
Director, MIS (Bob Miller)
Chief for Outpatient Medical Records (Carlos Baltazar, ART)

Date of Visit: The visit was conducted March 23, 1994

This grantee operates three principal delivery sites and 10 part-time school health sites. We visited only the Sunset Park Family Health Center which is the main service site. The meetings took from 10:00 am to 4:30 pm, which included interviews with 3 users and review of several medical records. Site staff were very cooperative and all or our questions were answered.

3. **Site Description**

Sunset Park Family Health Center is quite different from most CHC's in that it is hospital based and serves as the outpatient department for the Lutheran Hospital Center (LHC) in southwest Brooklyn. It is a large facility, employing 70 full time physician equivalents, including a variety of specialists as well as family practice physicians. Annually, there are several hundred thousand patient visits. In addition to

the main service site, there are two satellite sites, also in southwest Brooklyn, that provide medical services: the Family Physician Health Center, and the Park Slope Family Health Center.

An additional site is operated which provides only mental health and substance abuse services. As part of the substance abuse program, however, limited medical services are provided at this location as a requirement of the state substance abuse program. While discussion and decision is needed as to whether this service is eligible for the study, it is recommended that such medical services be considered incidental to the substance abuse services and, therefore, out-of-scope for this survey.

A large proportion of the CHC user population is of Hispanic origin, and many of the staff are bi-lingual. Translators are readily available for most patients in need.

4. **Sampling of Users and Visits**

The CHC uses a single central computerized information system for all three sites. Their computer system is tied into the hospital main-frame for the registration and encounter data. Data are downloaded to their PC system monthly. They use FOXPRO for accessing and tabulating data from their PC based user files. The computer files contain all active users, and can be used to select a random stratified sample of both users and visits. The CHC would not want a contractor or other outside person to have access to their computer records. They would be willing to select samples according to written specifications if given sufficient time and adequate reimbursement.

The user file contains all of the data elements needed for selecting the user and visit samples (e.g., name and address, phone, DOB, sex, date of last visit and all previous visits, type of service, place of service, provider ID, insurance status, up to 3 diagnoses in ICD-9-CM, and CPT codes for procedures). In addition to the visit sample, the computer file can be used to provide many data items for the patient visit data record which otherwise would have to be abstracted from the chart. Available from the computer file for each visit are: Date of visit, zip code, date of birth, sex, source of payment, diagnosis, provider seen, and disposition decision.

A few special issues were identified during this visit. Since program eligibility/payment source can change frequently, care must be taken to determine source of payment at the time of the selected visit. Since this may be problematic in some CHC's, selection of a visit sample for a recent time period would seem desirable to minimize the problem.

Seen before for same problem may be difficult to determine for some visits. The best source of this information is probably an indication that the visit is for "follow-up". Rules for searching prior visits, using a problem list, and for making a determination for chronic as well as acute and non-illness problems are needed. The time period to be used for determining whether the patient has been "seen before for this problem"

must be defined. A chronic condition treated several years earlier may still exist at the current visit and, therefore, has been "seen before". An acute condition treated 6 months previously, on the other hand, may not be related to the same condition diagnosed at the current visit.

Attached is a copy of an encounter form used in the CHC. All data from this form is in the computer and can be used for sampling or as a substitute for abstracting from the chart for the sample of visits.

5. Recruiting of CHC Participation and Willingness to Play Expanded Role

For this CHC, it was suggested that the initial letter should come to the Executive Director inviting participation, with a copy to the medical director (it was agreed that the copy to the medical director would not really be necessary, but is advisable). The CHC would be willing to send out the contact letters on their stationery if we wrote the copy and provided it on diskette. It was suggested that it be made available in several commonly used software formats for convenience. The CHC should also be permitted to personalize the letter, if they want, subject to HRSA final approval. It was suggested that the letter from BPHC to the CHC should acknowledge the burden this study will present to the CHC staff, express appreciation for participation, make it clear that the CHC will be reimbursed for their costs, and that participation is voluntary. This CHC would also be willing to call users and make appointments for interviews. Most of the users have an address and phone number where they can be reached, although for some it will be through a relative or a neighbor.

There is generally a space problem at CHC clinic sites, but this CHC expects that they could find the needed space in nearby buildings for the interviews. This CHC does not provide transportation for any users.

This CHC expressed a general willingness to participate in the study but strongly emphasized that it would be a burden on their staff. They would expect that most of the work done by their staff to draw samples, arrange appointments, and abstract visit data would be done on an overtime basis, and they wanted to be assured that their costs would be largely covered. They also emphasized the need to know, from the beginning, exactly what they would be expected to do, and that they would be given adequate time to do it.

6. Medical Records Organization and Contents

The medical records are not computerized and are not typed. All entries are by hand in a loose SOAP format. A problem list is present, which is currently being revised. The more serious and chronic problems are entered on the list when they occur, but updating of the information is infrequent. Each chart contains an immunization history sheet with the source of the information generally recorded.

Each satellite facility maintains its own records. A user's records are kept at the "principal" site for that user. If a visit is scheduled for another site, the record is sent to the site for the visit and returned after the visit. Walk-in visits to another site are recorded on an encounter form which is sent to the primary site for inclusion in the user's chart.

The CHC indicated willingness to allow a contractor to do the records abstracting. They also suggested that they often use medical residents for this purpose (LHC is a teaching hospital).

As in other CHC's, the detailed clinical data in the computer file could be used to complete the visit data form for many items but not for all needed data. This presents an opportunity to save part of the effort of completing data for the visit sample, but also presents a few problems. For one, a decision will be needed regarding which data items may be retrieved from computer files, when available, and which must always be abstracted from the medical records. It must be determined whether it is acceptable to use computer data from some facilities and not from others which do not have such computer files. Also, when visit data are obtained from two (or more) sources, the methods/mechanics for merging the data must be detailed. And, the comparability of data in the computer system and in the chart has not been established. That is, will the diagnosis, for example, recorded in the computer system be the same as the diagnosis abstracted from the record for the same visit? These are issues needing further exploration and discussion before a final decision is made on how and whether the computer data may be used as part of the visit data set.

7. User Interviews

Interviews were conducted with three CHC users. Ms. Ruscavage administered the interviews. Mr. DeLozier observed the last interview, but no observer was present for the first two interviews. The first interviewee was an Hispanic female, about age 20. The second was an Hispanic female responding as a proxy for her 12 year old son. Both of these respondents had difficulty with English and required an interpreter. These interviews were extremely difficult and time consuming. Both were terminated after 90 minutes, the first about half way through and the second about one third through. Both the interpreters and respondents had difficulty with many questions. Until a translation of the questionnaire is completed, additional interviewers with non-English speaking users should not be attempted.

The second user presented a special problem for the interviewer. The user was having difficulty getting satisfaction with the care of her child. It was apparent that during the interview the user frequently gave extended answers which reflected her frustration with the "system". Interviewers will need training on how to handle users with their own agenda so that the interview can stay focused on our data collection.

This case was particularly difficult because of the language problem, the emotional state of the respondent, and the child's medical problems.

The third user originally scheduled for an interview turned out to be an non-user who was to be a proxy for his infant child. Because we had done a child proxy already, a replacement user was sought. Few people were willing to spend an hour at that time. One male was identified who initially agreed only to leave when he was told it would require about one hour. A volunteer was finally identified who was a 16 year old, bi-lingual male. He was relatively bright, cooperative and had virtually no health problems. This interview went rather smoothly, but still took nearly an hour. A few specific problems were noted during the interview. These and other comments are included in the interviewer summary comments attached. A summary of Ms. Ruscavage's comments are also attached.

8. Conclusions

This would be a more difficult site for conduct of the surveys of users and visits, primarily because of its size, workload, and the preponderance of non-english speaking users. We do not see the need to stratify the samples by service site and recommend a straight random sample of all users meeting the criterion for "active". Sampling can be done using the computer, both for users and for visits, and with almost any conceivable stratification. Their willingness to take on much of the logistics for interviews on a cost reimbursable basis will help to control survey implementation costs. They would determine costs as labor rate plus fringe, plus other direct costs, such as postage, phone, and reproduction.

USER INTERVIEW PROBLEMS

1. Interview is too long. The easiest interview, a bright young man with no medical problems, took nearly one hour.

2. Several items seemed to be repeated: Job information for past year; Activity limitation; where born; number of times visited CHC in last year.

3. Skip pattern needed for non-drinkers and non-smokers to avoid irrelevant questions on these topics.

4. The dietary questions seem to be answered with guesses. Specific problems; does "beans" include kidney types as well as green/yellow? Do the vegetables and tomato sauce on pizza count as vegetables and fruit juice? (pizza can be a frequent part of kids' diets)

5. Section E5 needs a skip to avoid irrelevant questions when there are zero days when family had no money for food.

6. Rule is needed for age below which certain questions are not asked. eg. family insurance coverage, reason for first visiting CHC (or add a category that parent brought for first time), and immunization data.

7. For bi-lingual people, "do you speak mostly English" might be answered with "where". ie, they speak one language in the home and English outside the home. Also, it should be clear whether this question relates to how well the language is spoken or how much.

8. Length of time for appointment has no response for those who only use CHC as walk-in patient.

9. Question on number of months during past 12 that user had a job was confusing'to respondent and interviewer, or possibly to me. Respondent thought it asked about number of jobs, then about having more than one job at the same time. Not sure he ever understood. Needs to be reworded.

10. Immunization questions using "letters" for the immunization type was confusing. Hib was thought to be HIV. DPT was not known, though tetanus was. MMR was not recognized, but measles was.

MEMORANDUM

TO: Ben Dugger

FROM: Donna Ruscavage

RE: Community Health Center User Survey

25 March 1994

What follows is feedback on the draft instrument for the Community Health Center User Survey based on the pilot test at the Sunset Park Community Health Center in Brooklyn, New York this week.

- Overall, the questionnaire is very long. This does not appear to be problematic if the respondent has few or no health conditions--the one interview I did with a healthy 18 year old male (with only one condition) lasted 55 minutes. However, if the respondent does have several health conditions, it could increase the interview time to over an hour.

- Two interviews were conducted in Spanish with translators. Both of these interviews took about 1 1/2 hours, and I was not able to make it through half of the questions for either respondent. The Condition List 1 + 2 seemed difficult to translate; neither of the two translators could find the Spanish word for cerebral palsy.

- In general, the wording of the questions is awkward and stiff. The interview might go more smoothly (and quickly) if the questions were worded in a conversational style. The awkwardness of the wording sometimes made it difficult for the respondents to figure out what the question was in fact asking. This may be problematic for the full study and may result in some respondents answering questions just to respond (even if they do not understand the question).

- The income questions are somewhat repetitive.

- The skip patterns need to be fixed as Jim noted in his observation and the skips to the Item Cores need to be fixed (right now they are noted in the text and refer to the question to be skipped at the end of the question, not before the question--this is confusing).

- In the Source of Care section, question 5a. is confusing. It needs to be reworded and the choices of very important (yes), somewhat important (no), and not a reason (don't know) are extremely confusing. It might be clearer to ask how important a reason is it for you to.... and give the choices only as very important, somewhat important, or not a reason. Or ask why do you come here rather than another clinic, is it because.. . and have the choices yes and no.

SITE VISIT REPORT

YORK HEALTH CORPORATION
YORK, PENNSYLVANIA

August 31, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

YORK HEALTH CORPORATION
YORK, PENNSYLVANIA

1. Purpose of Site Visits

The York Health Corporation (YHC), along with the Henrietta Johnson Medical Center, was selected for a final test of the CHC User and Visit Survey procedures and instruments. The purpose of this site visit was to test the CHC User and Visit Survey instruments and procedures by conducting an abbreviated version of the complete survey in the YHC. Two visits to the YHC were made to accomplish this, one on August 5 and the second on August 3 1, 1994.

First Visit

The purpose of the first visit was to test the YHC's willingness and ability to accomplish the survey tasks, and specifically to:

- Get the YHC's agreement to conduct the test survey
- Explain the tasks necessary for survey participation
- Determine which tasks the YHC was willing and able to perform
- Provide written and verbal instructions for completing the survey tasks
- Provide survey materials

Prior to the initial visit, a letter from Dr. Marilyn Gaston, Director of the Bureau of Health Care Delivery and Assistance, was sent to the Executive Director of the YHC that described the purpose of the User and Visit Survey and asked for the YHC's cooperation in conducting a final test of the instruments and procedures. A general description of the project and a detailed, step by step, list of the activities required of the YHC was included in the letter.

Specifically, the YHC was asked to:

- select a sample of 40 users from all medical care users during calendar 1993, following the specifications provided

- select 6 users of varied age and sex for recruitment to complete the user interview

- send letters to the 6 users requesting their participation in the survey

- contact the 6 users by telephone to arrange their participation and schedule an appointment for the interview

- provide space for the interviews
- select a sample of 120 visits from all medical care visits which occurred during calendar 1993, following the specifications provided,
- complete patient visit abstracts for 5 of those visits
- document the time and costs required to accomplish the tasks

About one week after Dr. Gaston's letter was mailed, a telephone call was made to the executive director of the YHC, Mr. Stuart Pullen. Mr. Pullen agreed to meet with the CHPS representatives to discuss the survey and a meeting was scheduled for August 5.

At the visit, the YHC's agreement to participate was obtained, and both verbal and written instruction for completing the survey tasks were provided, This included instruction for sample selection, guidelines for telephone contacts with users, and instructions for abstracting records. Survey materials were provided, including draft copies of letters to the user sample and Patient Record Abstracts. The YHC agreed that the abstracting of medical records data and completion of the Patient Record Abstracts would be done by YHC personnel. The user interview was to be done by CHPS personnel. The target date for the completion of all activities was set for August 31.

Second Visit

The second visit to the York Health Corporation (YHC) was made on August 31 for the purpose of reviewing the outcome of the YHC's efforts to complete the above listed tasks, and to evaluate the user questionnaire by conducting interviews with a sample of 4 users. A discussion of these activities and the outcomes are presented below.

2. Conduct of Site Visit

Site Visit Team (First visit):	Chris Moriarty, NCHC Jim DeLozier, CHPS
Site Visit Team (Second visit):	Joanne Lukomnik, MD, Consultant Trish Royston, OPEL, HRSA Kyung Keel, CHPS Jim DeLozier, CHPS
CHC Persons contacted:	Mr. Stuart Pullen, Executive Director Ms. Suzanne Posey, Administrative Assistant
Date of First Visit:	August 5, 1994

Date of Second Visit: August 31, 1994

3. **Site Description**

The York Health Corporation serves the city of York and surrounding area. This grantee operates three delivery sites, a central location and two smaller satellite facilities. The satellite facilities receive no 330 funding and were, consequently, judged to be out of scope for the survey. In addition, the providers at the YHC occasionally go to schools, senior citizen centers, and group homes in the area to provide medical services. In these situations, the detailed information about the persons served and services provided are kept by the schools and institutions involved. The YHC has information on the time spent by their providers, the general nature of the service provided and, in some instances, the names of persons served. Mr. Pullen stated that the information about the people served under these conditions is considered to be the property of the institution in which the care is provided. It would not be appropriate to include the names of such persons in any list of "users", and it is not possible to access their medical records in the other facilities. These persons, therefore, were judged to be out of scope for the survey.

If these services are of interest in the User and Visit Survey, it is feasible to get information concerning the number of off-site visits by CHC staff according to the general type of service provided (e.g., Immunizations, blood pressure screening, general medical care). Information may also be available on the number of such "users" and their demographic characteristics. Collection of these data for all CHC's in the national sample would permit national estimates for these services and users.

This YHC has about 10% Hispanic users, most of which are bi-lingual. They also have some users who are functionally illiterate. Because this is a small YHC, the staff knows which people have special needs and could identify any that fell into the user sample. The also have translators who could help to administer the user questionnaire to non-English speaking users, if necessary. The YHC staff members were very cooperative and agreed to perform all requested tasks. The first meeting took from 10:00 am to 12:30 PM. The second meeting and interviews lasted from 9:00 am to 5:30 pm.

4. **Sampling of Users**

The YHC maintains a file of users in a LOTUS file. A new user file is constructed each calendar year by entering the name and data for users at their first visit during the year. At any point in time, the file includes only those users who have used the YHC since the prior January 1. An annual file of users is available, therefore, only for a complete calendar year. People who may consider the CHC their primary source of

care, but who make no visits to the YHC during a particular year, will not be included in the file of users for that year. Construction of a multi-year user file would be extremely difficult since it would require merging of the annual files and eliminating numerous duplicates. Constructing an annual file on other than a calendar year basis would be equally as difficult.

For these reasons, the calendar year 1993 file was selected for the user sampling frame for this test survey. Information contained in the file is sufficient to identify users making medical visits, and includes user age and sex for sorting prior to sample selection. Software is not available at the YHC to select the sample from the LOTUS file, but the file can be sorted and the sample selected from a printed list, or directly from the computer screen using the LOTUS line numbers. Information is available in the file to identify the user including, name, age and sex. Patients' address and telephone numbers must be obtained manually from another file.

The sampling procedures were presented in both verbal and written form at the first site visit. After about 30 minutes of review and discussion of sampling specifications, the site visit team and the YHC personnel were satisfied that they understood the specifications and would be able to accomplish the sample selection._

The user sample selection was done by Ms. Posey and was completed on August 17. She stated that she acquired a good understanding of the sampling process from the instructions given at the first visit, and that the written sampling instructions were quite helpful in refreshing her memory and guiding her through the sampling process. The YHC users for 1993 are contained in two lotus files, roughly representing the first and second halves of 1993. There were 6613 users included on the files. That total included 2055 (31%) which were deleted because they were off-site users ruled out of scope for the survey. The remaining 4558 users were sorted by age and sex. This number was divided by 40 to derive the sampling interval of 113. Beginning with a random number (10), every 113th user on the files was selected. A review of the resulting 40 users indicated that the sampling was done correctly.

A method for recording the user sample names and addresses was not specified. Ms. Posey was simply instructed that a list of the sample would be needed. Rather than listing the sample of users on blank paper, M s Posey used a Patient Record Abstract (PRA) for each user, recording the user name, date of first visit for the year, age, sex, race, ethnicity, and source of payment. This was effective, but because there is not much space on the PRA for address and telephone number, that is not the most efficient way to proceed. It may be advisable to provide a form for recording the user sample for those CHC's doing manual sampling. Adequate space could then be designated for the name, address, telephone number and other needed information. This form could also serve as a control sheet by having spaces for indicating the status of the various contacts (e.g., mailing of letter, telephone call, appointment schedule).

Of concern in selecting a user sample are users who should not be identified as CHC users or who would require special contact procedures because of confidentiality considerations. This includes HIV, STD and selected family planning patients. These patients could be deleted from the user list prior to sample selection. These users represent a unique and important patient population for most CHC's, however, and their systematic exclusion from the survey is undesirable. It is preferable that these patients be included in the sample and identified by the CHC as "sensitive" respondents requiring special enlistment procedures. The contact and enlistment procedures for these users must be determined on a case by case basis by each CHC. It is recognized that contact of some such users may not be possible, and that response rates for these users are likely to be lower than for other users. In CHC's where these populations can be identified prior to sample selection, it would be desirable to create a separate stratum for these users in order to control the numbers and types of users selected. It is important, however, to make a special effort to include these groups in the CHC User Survey in order that the results reflect the full range of CHC activity and responsibility.

5. User Contacts

The procedures for selecting and contacting a sample of 6 users were presented and discussed at the August 5 site visit. The 6 users were to be selected from known, recent users such that 2 would be children, 2 young adults and 2 older adults. An effort to get a male and female in each age group would be made. Letters to be sent to the 6 users were provided to the YHC on diskette. After a brief review of the letter by Mr. Pullen, he suggested two modifications. The first was to eliminate reference to the US Public Health Service. He was concerned that the users would associate US PHS with the local public health department which, to some, has negative connotations. It was agreed to substitute CHC Program for the US PHS. The second suggestion was to delete the reference to the authorization by Congress through the PHS Act. Because of OMB requirements for this statement, it will remain in the letter. Responding users will be asked about their reaction to the letter. In addition, alternatives to citing the PHS Act should be explored.

The YHC agreed to generate the letters on their letterhead, and to mail them to the users. They agreed to follow the letter with a telephone call to the users to arrange an interview at the YHC. A telephone guide was provided for the YHC's use, and a target date for the interviews was set for August 31.

At the second visit, it was determined that the letters had been completed, signed and mailed to 6 users on August 19. The changes to the letter suggested by Mr. Pullen were not implemented because of an oversight by the person who prepared the letters. The letters were sent exactly as drafted by CHPS. All six users received the letter. Telephone calls were made to five of the six users on August 24 and 25, to set up appointments for interviews. Three of the five users agreed to the interview, one was unavailable due to a family emergency but would have participated at a later time, and

the fifth declined to participate. The sixth user had no telephone. That user, however, telephoned the CHC from a neighbor's phone to say that she would participate. A second letter was sent to this user specifying the day and time for the interview. The CHC was unable to reach the user to confirm the appointment even though a staff person was sent to the user's home. This user did appear for the interview at the appointed time. Two of the three others who agreed to participate arrived at the scheduled time for the interview. One user called to cancel the appointment due to illness and was willing to reschedule. Since rescheduling for another day was not possible, a substitute user was found from among the CHC staff in order to assure 4 user interviews.

The users were not directly questioned about their reaction to the letter from the YHC, though none commented negatively about it. It -was Ms. Posey's impression from talking with the users, however, that the letter was difficult for most of them to understand. She suggested that it be written more simply with fewer agency names and much less detail. Discussion among the site visit team resulted in agreement that the letter should be simplified and an attachment developed which presents the critical facts about the survey.

6. **User Interviews**

The interviews with 4 users were conducted during the August 31 site visit. The interviews were administered by Kyung Keel with observation by Trish Royston and/or Joanne Lukomnik at three of the four interviews. Interview space was provided in Mr. Pullen's office. Had the interviewing required several days or weeks, another place for the interviews would have been necessary. Mr. Pullen stated that such space would have been available.

All applicable sections of the survey were administered to each respondent. The interviews for each respondent required approximately one hour and 15 minutes. Each respondent answered multiple choice questions with the choices provided and very few questions needed elaboration by the questionnaire administrator.

All respondents arrived on time for the interview or earlier. Two males, a female, and a mother proxy for a seven year old child were the interviewees. One male was 57 years old and the other 65, giving an opportunity to test the instruments for males under 65 and over 65. No respondent commented that they felt uncomfortable with any of the questions or that the interview was too long. All four respondents came to the CHC specifically for the purpose of participating in the survey.

The amount of tirne and effort needed to administer the survey to someone with two or more health conditions were not noticeably greater than administering to someone with only one health problem. Unlike the users interviewed at the Central Virginia Health Center, the respondents did not find it difficult to provide the number of times they had visited the CHC in the last year. Three of the four respondents lived with one other

person while the fourth lived with seven others. The time to administer the survey did not vary by the number of family living in the same household.

In general, the interviews went well. The ease and logic of the skip patterns in the survey were, for the most part, uncomplicated. No major problems were encountered, though a number of relatively minor problems were noted. Some skip patterns were missing, mostly in the recently revised sections. There were some questions during the child interview that were not applicable to children, and there were a few questions that caused some confusion to the respondent. Suggestions for improvements were discussed by the survey team after each interview. Specific suggestions made by Kyung, previously transmitted directly to Trish, are attached.

7. Sampling of Visits

The YHC also uses a LOTUS file for its file of visits. It is a simple chronological listing of visits, kept continuously. In order that the user and visit data are for corresponding time periods, the YHC was instructed to select the visit sample from medical visits made during calendar 1993. To select the sample, the YHC was to determine "start with" and "take every" numbers, and identify the sample from the LOTUS line numbers. The sample frame is to be kept in chronological order, and will include date and site of visit, patient name and provider names.

The visit sampling procedures were presented in both verbal and written form at the first site visit. After about 15 minutes of review and discussion of sampling specifications, the site visit team and the YHC personnel were satisfied that they understood the specifications and would be able to accomplish the sample selection.

The calendar 1993 visit file for the YHC contains 21,635 visits. This includes contacts made with nurses and social workers as well as physicians. The total visit count was divided by 130 to derive a sampling interval of 180. After a random start (4), every 180th visit was selected. Ms. Posey performed the sample selection and stated that she had no difficulty. She understood the instructions given at the first meeting and used the written instructions during the selection process. It was not necessary to print the file of visits. She found it quite easy to use the LOTUS line numbers to identify the sample. Visit sample selection was completed on August 15.

As each sample visit was identified, Ms. Posey partially completed a PRA, recording the patient name, date of visit, date of birth, sex, race, ethnicity and source of payment. To assure that the correct visit was identified in the record, she also noted the provider's name on the PRA. A review of the 130 partially completed PRA's indicates that the sampling was done correctly.

8. Visit Abstracts

After the visit sample was completed, Ms. Posey completed the partially completed PRA's for the first 5 visits. Using the patient name and visit date, the medical record for each patient was retrieved and the visit identified in the chart. Information from the chart was then used to complete the data items on the PRA. Those items completed during the sampling process (date of visit, date of birth sex, race, ethnicity and source of payment) were not verified with chart data. No problems were encountered finding any records or identifying the specific visit in the records. Completion of the 5 PRA's required about 30 minutes. Ms. Posey stated that she believed completion time would average under 5 minutes per PRA after she had completed a few and became more familiar with the needed data items. The abstracting was completed on August 16.

Problems were encountered with the following specific PRA items:

Race and ethnicity -- Recording these items was problematic. The YHC considers Hispanic to be a racial category. Hispanic patients, therefore, do not also have a racial designation of white or black. In addition, many patients refer to themselves as "bi-racial" which is a category recorded in the YHC records. This cannot be coded on the PRA.

Was patient referred. -- This question pertains to referrals to the CHC by non-CHC physicians. These referrals are rare at the YHC, and the referral information is sometimes not recorded in the record. There may also be interest in referrals by non-physician providers. In addition, there may be a need to collect information about referrals within the CHC by other CHC providers. This question could be modified to accommodate these needs.

Has patient been seen before.. .-- This is difficult to ascertain from records. Guidelines are needed to help abstractor. Verbal review of this item should emphasize the rules.

Counseling/education -- This information is not readily available in the YHC records. Most providers are thought to do such counseling when appropriate, but seldom record it in the record.

Disposition -- The CHC study may need alternative categories such as referral to another provider in the CHC. In addition, the category "refer to other physician/clinic" was interpreted to include referral to the hospital OPD clinic for an x-ray or lab test.

Dr. Lukomnik suggested the addition of an item to capture any care provided by other providers before or after the medical care visit. For example, nutritional counseling, dental consults, social services, or prenatal classes might be scheduled on the same day as a medical care visit.

9. Translation, interpretation

Because of a significant Hispanic population at the YHC, several staff members are used as translators. Discussion was held with two staff members regarding the need for a translated version of the user questionnaire. While no conclusions or solutions were reached, several points were made:

- Spanish is likely to be the only language sufficiently common to justify a translation of the questionnaire. This would not be a straightforward process since there are many Spanish dialects used in various parts of the country and among different Hispanic groups.

- It would be possible to translate just the response options cards given to the respondent. This would be helpful, but would still require a translator for all other parts of the questionnaire.

- There are at least three options for sources of translators: 1) Provided by the contractor, 2) Provided by the CHC, and 3) Provided by the respondent. The first option is most desirable since the person could be trained and would not present the response bias introduced by the other two options. Because of cost considerations and the wide variety of languages, however, this will not be feasible in many locations. The second option is the next most desirable. The CHC's generally know their patients well enough to know what each user's translation needs are. In addition, some training of CHC translators could be accomplished to minimize response bias. The third option may be the only option in some instances where no other translator is available.

- Some medical terms have no Spanish equivalent and are not translatable. The English must be used for these terms and the term defined in Spanish.

9. costs

In order to estimate the costs incurred by CHC's to participate in the User and Visit Survey, the YHC was asked to record the time needed to accomplish the various survey tasks performed for this test. Ms Posey did most of the work for the test survey, and recorded her time. She noted that it was difficult to keep track of the time because she had to do the survey tasks when she could find the time among her normal obligations. As a result, the survey tasks were often interrupted by the need to perform normal work. A stop watch was not used to record the time. Ms. Posey believes the estimates she made are somewhat low. Not included-in the estimates are the time needed for the initial site visit to enlist the CHC's cooperation and to instruct them in the survey procedures. Also not included is the time required of the CHC staff during the day(s) that the user interviews are being conducted. The hours and costs by task estimated for the YHC are as follows:

CHC User and Visit Survey
Cost Estimates for York Health Corporation

Staff Hours	Activity
0.5	Start-up: reading and reviewing materials, planning
1.0	Gathering files, data, etc. in preparation for sampling
2.0	Visit sample selection, preparation of Visit File for sampling: deleting out-of-scopes, sorting, etc.
2.0	Recording of visit sample, initiation of Patient Record Abstract
0.5	Pulling chart, abstracting data, returning chart (5 visits)
3.0	User sample selection, preparation of file, sorting, eliminating out-of-scope users, recording of information for user sample list
1.5	Retrieve user address and telephone number, prepare letters, mail letters (6 users)
0.5	Initial telephone calls to enlist users, set up appointments (6 users)
0.25	Follow-up calls for no-shows, reschedule appointments (1 user)
0.5	Outreach contact (1 user)
11.75	TOTAL HOURS
x $18.85	Hourly rate
$22 1.49	TOTAL WAGES
+ $1.74	Postage (6 letters)
$223.23	TOTAL COST

10. Summary

Mr. Pullen and Ms. Posey were quite cooperative, helpful, and interested in the study. Mr. Pullen expressed an interest in knowing the results of the final study, and suggested that it would be exciting if the data were sufficient to tabulate for individual YHC's. He kept a copy of the user questionnaire to review because he has an interest in someday surveying his users.

Overall, the survey procedures went rather smoothly. The time allowed for completion of the tasks was adequate for the small number of records to be abstracted and users to be contacted. Sampling of users and visits, even with unsophisticated computer systems, was relatively easy to complete. The Patient Record Abstract and the user's questionnaire both functioned well, with only minor problems that may be corrected. The YHC personnel were quite cooperative and willing to assist and advise in the survey operations, as has been the experience with nearly all CHC's involved in developing the User and Visit Survey. Response rate at the CHC level for this survey should not be a problem. A true test of user cooperation has not been attempted, yet, but users at the YHC arrived on schedule and were cooperative and uncomplaining. This, too, is typical of users interviewed in other CHC's.

A few issues need resolution before implementation of the full survey:

- **Off-site users and visits** -- If and how to include off-site users and their visits must be determined. Since this can be a significant part of a CHC's program, it would seem advisable to include these users and their visits. Since limited information may be available in some CHC's for these contacts, counts of users and visits by some categories may be required.

- **Sensitive users** -- Users, such as HIV and STD patients, are an important part of the CHC's user base. Their inclusion in the survey is important, but their contact by the CHC and enlistment into the survey will require specialized procedures, possibly unique to each CHC. A general approach to this problem is needed which allows each CHC to be flexible in identifying and enlisting these users into the survey so that all confidentiality considerations are satisfied

- **Patient Record Abstract** -- Little attention has been paid to modifying the PRA to meet the unique needs of the CHC data. It is possible to conduct the survey using the current version of the NHAMCS form. It is also feasible to modify the PRA and instructions to make the items more appropriate for the CHC data. For example, the source of payment, disposition and provider-seen items have response categories that could be modified to better suit the CHC needs. It is also feasible to add questions, such as one to capture the non-medical services performed on the same day as a medical visit (as described above). As such

changes are introduced, however, the necessity for field testing becomes greater, and the data's comparability to the NHAMCS data is diminished.

- **Reference time period** -- It was apparent at the YHC that collection of information would be quite difficult if the reference period for sampling was other than a calendar year. Of the 8 CHC's visited in this development period, this was the only CHC with this requirement. Other CHC's had a "running" list of users that included everybody who had ever visited the CHC, or at least had visited during the last several years, along with the dates of all visits. Since the NHAMCS and NHIS are conducted on a calendar year basis, it seems logical that the User and Visit Survey could also be conducted on a calendar year basis for comparability. Using the prior calendar year as the reference period should not present the CHC's with any problems of sampling or of data retrieval from medical records. It does present a problem in calculation of rates, however. With a user file constructed like the YHC file, the total user base from which the visits derive is greater than the user sampling frame. Excluded from the frame are those persons who could have used the CHC, but did not. Determining an appropriate user base for rate calculation may be difficult. With a "running" user list, the opposite problem exists. That is, the list may contain people who are no longer "users" and have no intention of returning to the CHC. This situation could be resolved by defining a user as someone having visited the CHC during some defined period. In either event, however, decisions are necessary to define an appropriate user base for use in calculating population based rates.

11. Chronology of Contacts with YHC

Aug. 5 -- Initial visit.

Aug. 11 -- Telephone call from Ms. Posey concerning sampling. She cannot access the 1993 User file as described in our 8/5 meeting. She wants to use the 1992 file instead. She said she could use 93, but it would require much more work. I asked her to estimate the extra cost of using 1993, but go with 92.

Aug. 15 -- Telephone call from Ms. Posey as follow-up to prior call. She got the 93 file she needs from a co-worker. She can use 93 as planned.

Aug. 19 -- Ms. Posey was called to inquire about the status of activities in general and the user interview appointments in particular. She selected the visit sample first because that looked easiest. That is completed. She is nearly done with the user sample, and expects to finish by the 23rd. Letters for the 6 users to be interviewed are ready and should be mailed by 23rd. It will be difficult to schedule interviews on 8/31. It may be the following week.

Aug. 25 -- Ms. Posey called to determine progress and status of user interviews. All sampling has been completed. Letters were sent to users on August 23. Three of four interviews are set for August 3 1. The fourth is pending. CHPS personnel arrival at the YHC at 8:45 on August 31 was scheduled.

Aug. 31 -- Final site visit completed as scheduled.

USER QUESTIONNAIRE COMMENTS
FROM
KYUNG KEEL

1. SPELLING? WORDING? etc.

- ROUTINE CARE & CHC SERVICES, #15 -- Need a left { in from of "name".

- ROUTINE CARE & CHC SERVICES, #16.e -- Change wording from "storing medicines... where {name) in a safe place" to "storing medicines. .. in a safe place" or "storing medicines.. .where {name} cannot reach them. "

- SOURCE OF CARE: SELF, #9.c -- Remove the word "that" from question.

- DISABILITY, #36.a -- Need a right] after "his/her. "

- CORE SECTION D: INCOME AND ASSETS PAGE, #15.b -- Change answers to "Owned or Rented" from "Yes or No," since the question asks if the place where respondent lives is owned or rented.

2. STRUCTURE

- CORE NHIS, SECTION L, #l.b -- Do we mark the boxes if respondent served DURING the wars, but not IN them?

- CORE NHIS, SECTION L, #7.f -- Will "Church" be PRIVATE COMPANY?

- CORE H. CONDITION LIST, 4 -- Does this still refer to the past 12 months or is it have you EVER had.. .?

- HEALTH BEHAVIORS, #E1.a -- One respondent answered " Winter Only." What would be the appropriate category?

- SOURCE OF CARE: SELF, #5.a -- I thii we need a response of DK when asking whether the following are true about the health center.

- SOURCE OF CARE: SELF, #9.d.(1) - Respondent said the reason for the test was not explained at that visit because it was known already (regularly scheduled test). Should this question read "Did someone ever explain the reason for the test or procedure", or do we need another response category?

- **ROUTINE CARE &** CHC SERVICES, **#21** -- We should probably have a NA option since some respondents do not have children or children who need child care (d), or who do not need help with finding a place to live or get food.

3. SKIP PATTERNS

- CORE - LIMITATION OF ACTMTY, ITEM CORE 8 -- Ages 18-69 probably skips to ITEM CORE 14A.
- CORE -- LIMITATION OF ACTIVITY, ITEM CORE 14B -- Other skip to Section G, Health Indicator Page.
- CORE -- LIMITATION OF ACTIVITY, **#12.a** -- Response of "No" skips to Item Core A.
- SOURCE OF CARE: SELF, 16.b -- Response of "No" and "DK" should skip to "Next Section"
- SOURCE OF CARE: FAMILY MEMBERS, 4 -- "THIS health center" should skip to 5.a.
- HEALTH BEHAVIORS, AIDS TESTING, ITEM AIDS -- Need a skip for "Under 18"
- DISABILITY -- SELF RESPONSE, ITEM DO -- Need a skip for < 13 (Proxy) or should under 17 be proxy?

4. ODD **QUESTIONS**

- HEALTH BEHAVIORS, ALCOHOL, **#4.b** -- This question is very similar to question **2.b**, but it requires calculating the average and applying it to the days the person does drink, etc. Respondents thought I was just repeating the same question. Should we remove this question?

SITE VISIT REPORT

HENRIETTA JOHNSON MEDICAL CENTER
Wilmington, Delaware

October 21, 1994

Delivery Order 240-93-0102

Center for Health Policy Studies
9700 Patuxent Woods Drive
Columbia, MD 21046

SITE VISIT REPORT

HENRIETTA JOHNSON MEDICAL CENTER
Wilmington, Delaware

1. Purpose of Site Visit

The Henrietta Johnson Medical Center (HJMC) was one of two CHC's selected for a final test of the survey procedures and instruments. A letter from Dr. Marilyn Gaston, Director of the Bureau of Health Care Delivery and Assistance, was sent to the director of the HJMC which described the purpose of the User and Visit Survey and asked for the HJMC's cooperation in conducting a final test of the instruments and procedures. A general description of the project and a detailed, step by step, list of the activities required of the HJMC was included in the letter (attachment 1). This field test was intended to determine the HJMC's willingness and ability to accomplish the complete range of survey tasks needed to conduct the User and Visit Survey, to evaluate the time requirements for accomplishing those tasks, to evaluate the response rate for users, and to estimate the costs to the HJMC to participate.

Specifically, the HJMC was asked to :

- select a random, systematic sample of 40 users from all medical care users during the previous 12 months, following the specifications provided
- select 6 users at random from the sample of 40 for recruitment to complete the user interview
- send letters to the 6 users requesting their participation in the survey
- contact the 6 users by telephone to arrange their participation and schedule an appointment for the interview
- provide space for the interviews
- select a sample of 120 visits from all medical care visits which occurred during calendar 1993, following the specifications provided
- complete patient visit abstracts for the first 5 of those visits
- document the time and costs required to accomplish the tasks

Three site visits were required to complete the field test and obtain results from the HJMC personnel. The three visits were made on August 2, September 20, and October 19,1994.

First Visit

The purpose of the first visit was to obtain the cooperation of the HJMC, and to instruct the clinic personnel in how to complete the survey tasks. It was determined that Rosa Rivera, the HJMC office manager, would be responsible for performing the survey tasks. During the first visit, Ms. Rivera and Mr. Greg Williams, the Center's executive director, were provided with verbal and written instruction for sample selection, draft copies of letters to users, written guidelines for making the telephone contacts with users, patient record abstract forms, and instructions for abstracting records (attachment 2). It was planned that the abstracting and completion of the Patient Record Abstract (PRA) would be done by Ms. Rivera, and that the user interview would be done at a subsequent visit by CHPS personnel. The target date for completion of activities and the interviews was set for August 29.

Second Visit

Through a series of follow-up telephone calls with the HJMC, it was determined that Ms. Rivera was unable to begin working on the survey tasks until early September because of her normal workload. The August 29 site visit, therefore, was rescheduled for September 20. The purpose of the September 20 visit was to review the completed survey activities and to conduct interviews with several users. However, Ms. Rivera had difficulty enlisting the cooperation of users for the interviews. Therefore, the plan to conduct the user interviews at the second site visit was change. The second visit was conducted, nevertheless, for the purpose of discussing the problems Ms. Rivera had in recruiting users for the user interview, and to debrief her on the performance of the other survey activities that had been completed. Methods for re-contacting users to persuade them to cooperate were discussed, and plans were made for Ms. Rivera to make follow-up calls to the users. The interviews were scheduled for a final site visit on October 12.

Third Visit

Through telephone contacts, it was determined that Ms. Rivera was unsuccessful in her second attempt at enlisting the cooperation of the users selected in the sample. A second set of 5 users was identified. Ms. Rivera was asked to contact them and any others, as needed, to arrange at least 3 interviews for October 19. On October 18, it was confirmed that the interview appointments had been scheduled, and the site visit was conducted on the 19th.

2. Conduct of Site Visit

Site Visit Team (first visit): Ben Duggar, Jim DeLozier, Chris Moriarty

Site Visit Team (second viit):	Jim DeLozier
Site Visit Team (third visit):	Jim DeLozier, Kyung Keel, Donna Eisenhower and Rhoda Cohen of Mathematica Policy Research
HJMC Persons contacted:	Mr. Gregory Williams, Executive Director Ms. Rosa Rivera, Front Office Manager
Date of First Visit:	August 2, 1994
Date of Second Visit:	September 20, 1994
Date of Third Visit:	October 19; 1994

3. **Site Description**

The Henrietta Johnson Medical Center serves the city of Wilmington and surrounding area. This grantee operates two delivery sites. They have a central location and a small satellite facility about 4 miles away that was opened in October, 1993. The satellite facility was not included in the most recent version of the BPHC Directory. HJMC providers do not make visits to patients outside of the two service sites, except for visits to hospital inpatients. Medical records are kept separately in each site. Computer information files kept at the main facility include visit and user information for both sites. This facility has about 8% Hispanic users, but very few need translators. HJMC staff were very cooperative and agreed to perform all requested tasks. The August 2 meeting took from 10:00 am to 12:00 p.m., the September 20 meeting lasted from 2:00 p.m. to 4:30 p.m. and the October 12 meeting from 9:30 am to 3:00 p.m.

4. Sampling of Users

The HJMC uses the MDX computer information system, a UNIX based system. A single central system is used for both service sites. The user file contains all of the data elements needed for selecting the user samples (i.e., name and address, phone, DOB, sex, date of last visit, type of service, provider ID). During the first site visit, the sampling procedures were presented to the HJMC personnel in both verbal and written form. Discussion indicated that the computer system could be used to list all users who had visited the HJMC during any 12 month period. Sorting the user file by age and sex was not possible using their standard report format, but they believed that one of the other available formats would enable such sorting. They did not think that they could select the sample using the computer. The actual selection could be done manually from a printout of all users. The information included in such a printout will vary, depending on the "canned" report being used. They believed that the

information was available to select the sample and contact the individual users. After about 20 minutes of review and discussion of sampling specifications, we and the HJMC personnel were satisfied that they understood the specifications and would be able to accomplish the sample selection.

The user sample was selected about September 5. Sampling instructions were reviewed in detail during a telephone conversation with Ms Rivera on September 1. Using one of the standard tabulation options available in the HJMC's information system, a computer file of all users for the previous 12 month period was generated. This file was sorted by age within sex and printed. The printout included the user name, address, date of birth, date of first visit during the calendar year, and sex. The total number of users on the list was divided by 40 to determine a sampling interval, and a random number was selected for the "start with*' number. (The random number was provided by CHPS during the September 1 telephone conversation.) The sample of 40 users was then determined manually by counting through the printed list and circling each n-th sample name. A review of the list indicates that the sampling was done correctly. Ms. Rivera stated that she did not need to refer to the printed sampling instructions because the verbal instructions given at the initial site visit along with subsequent instructions given over the phone had been sufficient.

The user file contained all users, including users at both service sites and "sensitive" users, that is, users who would need special attention because of confidentiality concerns (HIV, STD patients). After the sample was selected, it was screened for sensitive users and two were identified: One, an HIV positive patient, was determined to have died. The second was a STD patient. If the survey were being done in this CHC, special procedures would be needed to approach that user. The question of how to approach this user for participation in the survey was discussed with Ms. Rivera, but no readily apparent method was identified. It was indicated, however, that any contact with the user would need the approval of the Executive Director.

A subset of the user sample was selected for enlistment into the survey and completion of the user interview. A procedure for selecting six users was provided to Ms. Rivera which would be simple to follow and permit selection of a random subset of users. The subset was selected by starting with the 5th listed sample person and taking every 5th thereafter until six users were selected. It was determined at the second visit that Ms. Rivera followed this procedure. Of the 6 users in the sample, 1 was male and 5 were female. By age, 4 were adults, 1 was a teenager, and 1 was an infant.

5. User Contacts

At the initial site visit, the procedures were presented and discussed for selecting and contacting a sample of 6 users. The 6 users would be selected randomly from the user sample as described above. A draft letter to the users from the CHC was provided on diskette. This letter was subsequently revised based on information from the York

CHC field test that indicated the letter should be simplified. The simplified version was provided to the HJMC. The medical director was asked to comment on the letter and recommend changes if he thought any were needed. He had no changes to suggest. The CHC agreed to generate the letters on their letterhead, and to mail them to the 6 users. The users would then be contacted by telephone to arrange an interview at the HJMC. A telephone guide was provided for the HJMC's use. A target date for the interviews was set for August 29. As noted above, this was rescheduled for September 20, and rescheduled a second time for October 19. Appointments were to be scheduled with at least 4 users, and the CHPS interviewer was scheduled to visit the HJMC to conduct the interviews. The HJMC has space available for the interviews, but indicated that use of space for several weeks during the full survey, would require special arrangements.

Letters were prepared to the 6 users and mailed on September 9. Phone calls were made on September 14 thru 16 in an attempt to schedule interviews on September 20. Three of the users declined to participate, giving no explanation. One user could not be reached because no one answered the telephone. One user agreed to participate, but was not available on the 20th. Only one user, the teenager, agreed to participate and was willing to schedule an appointment on the 20th..

At the second site visit, the results of the telephone contacts were discussed in detail. The telephone contacts with the sample users were made by Ms. Rivera. Discussions with her did not yield definitive information about the reasons for the refusals. In the discussions about how she approached the users, it seemed that Ms. Rivera was somewhat passive and did not make much effort to persuade the users to cooperate for fear of offending them. Methods for overcoming the refusals were discussed, including emphasis on the importance of the survey to the HJMC, and assurances that the information requested is non-threatening and confidential. Mr. DeLozier suggested that a CHPS interviewer would make an attempt to convert the refusing users. Ms. Rivera preferred to make the attempt herself. It was agreed, therefore, that Ms. Rivera would make a second attempt to get the cooperation of the 3 refusals, and would continue to call the user she was unable to reach. Her efforts would be directed toward:

- Convincing the users to participate
- Suggesting a possible interview date only after it is clear the user will participate
- Determining if interview times on weekends or in the evening after working hours would facilitate participation
- Determining the reason(s) for refusal for those who cannot be convinced to participate, and asking the user what could have been done, if anything, to get cooperation.

Regardless of the outcome of the follow-up contacts, interviews will be scheduled with 3 or 4 users in order to test the final version of the user questionnaire. The users to be interviewed will include any of the 6 sampled users available and willing to participate on the selected date, supplemented by other users.

The second attempt to enlist the 4 sample users was not made until September 10, about 3 weeks after the second site visit. Ms. Rivera was unable to convince any of the 4 to cooperate. She also was unable to provide any insight into why the users declined, stating only that they "were not interested"; or were "too busy". On her own initiative, Ms. Rivera selected 5 additional user names from the user sample list and called them to ask their cooperation. No letter was sent in advance, though it was initially stated that the letter was sent. None of-the 5 were persuaded to cooperate. In order to have users to test the questionnaire, Ms. Rivera found 3 persons among those visiting the clinic on October 17 or 18 who were willing to cooperate. Ms. Rivera could offer no information about why most of the 11 randomly selected users would not cooperate in the study. Her only thought was that the users may be afraid that the information they provide would somehow be used against them. She offered no suggestions for how to alleviate such fears.

6. User Interviews

Interviews with users were conducted on October 19. The interviewing was done by Kyung Keel. An observer from Mathematica was present at each interview. The first interview was held in a conference room. Since that room was needed at noon, the subsequent interviews were conducted in the office of the Executive Director, who was out for the day. Three interviews were conducted, all with female users. One respondent arrived on time for the interview, one was 15 minutes late and the last respondent arrived 30 minutes late. All respondents were females; one married, one widowed and one single. Two females were under 70 and one was 7 1, giving an opportunity to test both the instruments for females under 70 and 70 and over. One respondent was pregnant.

All applicable sections of the survey were administered to each respondent. Each respondent was asked questions for approximately an hour and 30 minutes. Each respondent answered with the choices provided and very few questions had to be elaborated upon.

One respondent appeared slightly annoyed when asked a question about race, commenting that "God made only one race and that is the human race." However, she did answer based on the choices available, and when later asked if any of the questions seemed inappropriate, she answered that no questions were. All respondents were asked after the interview whether or not they felt uncomfortable with any questions, whether or not any questions were inappropriate, if any questions were unclear and to comment on the length. All respondents commented that they felt comfortable with all

questions and that the questions were clear. Though none of the respondents knew before the interview how long it would be, all commented that the survey was not too long. Two respondents came to the CHC specifically for the purpose of participating in the survey. One respondent also had come for an appointment prior to the interview.

Administering the survey to someone with two or more health conditions was not significantly more cumbersome and time consuming than administering to someone with only one health problem. However, each health problem added two to three minutes to the interview and could potentially increase the length of interviews more than fifteen minutes.

Unlike prior pre-tests, respondents did not find it difficult to provide the number of times they had visited the CHC in the last year. All respondents were able to answer the questions with the choices provided.

The ease and logic of the skip patterns in the survey were, for the most part, uncomplicated.

7. **Sampling of Visits**

The same computer file available for the user sample can be used to identify the visit sampling frame. This tile contains information for each visit made by each user during the past year. Visits to both sites are included on the same file. To select the sample, the HJMC will generate a list of all medical care visits during the past 12 months. Actual sample selection will be done manually from the printed list of visits. The list will be in chronological order, and will include date and site of visit, patient name and diagnosis. The HJMC noted that they also have encounter forms completed for all visits which are kept in chronological order. Should they have problems selecting the sample using the computer list, they can fall back on the encounter forms.

After about 15 minutes of review and discussion of sampling specifications, we and the HJMC personnel were satisfied that they understood the specifications and would be able to accomplish the sample selection.

Additional, detailed medical data concerning the visits is available through another computer file. As a test, the computer medical data could be compared with the same data abstracted from the medical record for the 5 test abstracts.

As planned, the HJMC computer file was used to produce a listing of all visits during the previous 12 months. The list was not sorted chronologically, as planned, but was sorted in alphabetical order on patients' last names. Ms. Rivera stated that she could have sorted chronologically, but did not understand that that was needed. The list included all visits to both service sites. It also included inpatient visits to hospitalized patients. No off-site ambulatory care visits are made by HJMC staff. Inpatient visits

were easily identified, and were skipped in the sample selection process. The sample list included patient name, date of visit and date of birth. To select the sample, Ms. Rivera divided the total outpatient visit count by 130 to determine a sampling interval. She used a random start provided by CHPS, and manually selected the sample from the computer printout. Using the printed list, the patient name and record number was recorded on a PRA for each sampled visit. No separate list of the sample visits was constructed.

A review of the printout indicated that the sampling was completed correctly. Ms. Rivera stated that she did not use the printed sampling instruction, but relied on the verbal instructions given at the first site visit and subsequent instructions given during a phone conversation.

8. **Visit Abstracts**

After the visit sample has been selected, 5 of the visits would be identified for abstracting. The Patient Record Abstract (1994 NHAMCS Outpatient form) and instruction for abstracting the data from the medical records were provided to Ms. Rivera at the first site visit. The items on the form were reviewed briefly. The HJMC medical records are maintained at both service sites. For this test, it was agreed that 5 visits would be selected which could be completed from records maintained at the primary facility.

The visits selected for abstracting were the first 5 visits selected for inclusion in the sample. Data for the PRA were obtained from 2 sources. The information for items 1 through 9 was abstracted from the patient encounter forms completed by the HJMC for every patient encounter. The other items were completed from the progress notes and data contained in the patient medical record. For each PRA, Ms. Rivera located and copied the encounter form, located and pulled the medical record, completed the PRA, and returned the medical record to the record room.

Two of the selected visits were visits to the satellite service site. (Ms. Rivera forgot that in this test situation she could substitute other visits for satellite visits.) For these visits, the patient name and record number were faxed to the satellite facility. Personnel there pulled the record, copied the visit information and faxed the copy to Ms. Rivera. Only the pages of the record relating to the specified visit were obtained. As a result, information for some of the PRA items was not available. Specifically, other diagnoses and information to determine whether the patient had been seen before for the same problem were unavailable. Had this been the full survey, the complete record would have been reviewed by going to the satellite facility or by having the entire record sent to the abstractor.

Ms. River reported that she had no problem identifying the patients or the appropriate visits selected for abstracting. It took her about two hours to complete the 5 records. This time, however, included the time needed to send and receive the faxes, and time

spent waiting for a physician to interpret his handwriting on one of the medical records. Ms. Rivera estimated that she would need about 15 to 20 minutes to complete an average PRA, including pulling encounter forms and charts and returning them to the record room. This is the highest estimated time for completing a PRA in any CHC. A significant part of the time resulted from using two sources for the information. An encounter form was used for some information, and the medical record for the remaining data. In all other CHC's contacted in this study, the entire PRA could be completed from the medical record, or everything but payment source was available in the record.

Ms. Rivera had several questions about specific PRA items. During the induction of the CHC into the survey, Ms. Rivera was available for only a short time and was given only about 5 minutes of training, along with the- written instructions. Since she did the abstracting more than a month after the training, she probably forgot most of what she learned in that brief session. She did not review the instructions prior to completing the PRA's. This leads to the conclusion that

a) The person designated to complete the study tasks needs to have adequate training
b) The tasks need to be completed relatively soon after the training
c) Instructional materials need to be concise and easily referenced
d) Contractor staff should be easily accessible to the CHC staff throughout the study to provide guidance and answer questions

The following are the PRA items which Ms. Rivera indicated were not completed or were not clearly understood:

Ethnicity - This information is not maintained in the HJMC records. This item was left blank.

Referred by another physician - The clinic gets referrals from many kinds of providers, but rarely from another physician. For example, they get referrals from social workers and public health workers, Ms. Rivera stated that she would have correctly checked yes for this item for referrals by another HJMC physician.

Patient seen before, for same problem - Ms. Rivera had no problem determining new and old patients. How to determine whether the patient had been seen for the same problem was not clear. Some guidelines and explanation of what to include are needed.

Disposition - One patient was referred to the hospital for performance of an imaging procedure. It was not clear whether this should be recorded in disposition as a referral, **or in the Tests and Procedures item as an ordered procedure, or both.**

Providers Seen - This CHC uses part-time physicians. Ms. Rivera did not know if these should be called "staff physicians" or "other physicians".

9. Issues, Conclusions

The discussions with the HJMC personnel at the first site visit went smoothly and there were no unexpected issues raised. The HJMC personnel appeared to grasp the intent of the study and the study procedures readily, including the sampling procedures. They agreed to perform all tasks requested, and to calculate the resources needed to accomplish them. A debriefing was conducted with Ms. Rivera, the only person at the CHC significantly involved in the study.

Results of this field test indicate the need for the following:

- The CHC enlistment process must include a reasonable amount of time for training of CHC personnel. Emphasis should be given to:

  a. Methods for convincing users to participate, overcoming their fears, and being as accommodating as necessary to get cooperation.

  b. Completing the PRA: discussing what each item means, what is included and excluded, deciding on how to code special situations presented by the CHC.

  c. Developing the sampling frames: specifying precisely which types of visits are included and excluded in the visit frame, and which users are to be included in the user frame.

- Assistance from the contractor should be readily available to the CHC staff for help in sampling, recruiting, and answering questions as they arise. If a task is not done within days of the enlistment visit, review of the procedures should be scheduled by telephone or site visit just prior to the beginning of the task. This is particularly important with regard to sampling. Regularly scheduled telephone calls between the contractor and the CHC staff should be arranged, particularly during the startup period.

- Time for the user interviews should be made available during evening and weekend hours. Many of the users selected to participate in the user survey will be working during normal working hours. It is not reasonable to expect these people to take time off from their jobs to complete the interview.

- It may be necessary to complete some user interviews in the user's home. This should not be standard procedure, but could be a last resort for some users in some CHC's if response is not good.

- It will be difficult in most CHC's to know how effective their designated person will be in enlisting the cooperation of users. The background and qualifications of the person will be unknown, and training opportunities will be limited. Monitoring of calls will be virtually impossible. There will be a much higher likelihood of success if the enlistment is attempted by the contractor's trained interviewers. If the CHC insists on playing a role, efforts should be made to limited it to an initial, brief, telephone call. The call could simply let the user know that the CHC supports the study, the CHC needs the user's cooperation, and that the contractor's representative will be calling to provide the details.

- Some respondents will only be able to attend an interview if they can bring a child along. This presents a challenge since most children will be disruptive at least some of the time during an hour plus interview. Few CHC's have supervised areas for children. Some CHC's will have staff to help look after children. Methods for handling children should be discussed with the CHC administration during their induction into the survey. It might be necessary for the interviewer to have available a few toys or books for smaller children, and possibly provide crackers or soft drinks.

- The use of medical records data in conjunction with the interview data for the users sample merits reconsideration. This idea was rejected during the early development of the survey, primarily on confidentiality grounds, but would provide valuable information to supplement the information obtained in the user interview. To avoid the confidentiality concerns, the medical records data could be collected by the CHC staff after the user interview, and recorded on forms identified only by a user ID number. This could be kept separate from the user interview until names were removed, and merged by computer on the basis of ID at a later time. Information on CHC visits, services, conditions, immunizations and medications are examples of data that would be valuable supplements to the user interview data. In addition, such information for user non-respondents would be invaluable in assessing response bias, and for improving survey estimates.

10. Cost of Participation

The following table was provided to the HJMC personnel for completion in order to determine the costs needed for them to complete the pilot survey. They were asked to provide estimates of cost in the categories shown, or to provide other costs estimates based on their own accounting system. At the completion of the project, no cost estimates had been provided.

Table

Henrietta Johnson Medical Center
Costs for Pretest Participation
CHC User and Visit Survey

Staff Hours, expenses	Activity
	Start-up: reading and reviewing materials, planning
	Gathering files, data, etc. in preparation for sampling
	Visit sample selection, preparation of Visit File for sampling: deleting out-of-scopes, sorting, etc.
	Recording of visit sample, initiation of Patient Record Abstract
	Pulling charts, abstracting data, returning charts
	User sample selection, preparation of file, sorting, eliminating out-of-scope users, recording of information for user sample list
	Retrieve user address and telephone number, prepare letters, mail letters
	Initial telephone calls to enlist users, set up appointments
	Follow-up calls for no-shows, reschedule appointments
	Other tasks (specify)_____
	TOTAL HOURS
	Hourly rate
	TOTAL WAGES (Hours x rate)
	Postage
	Other costs (specify)
	TOTAL COST

11. Chronology of Contacts with HJMC

Aug. 2 - Initial contact site visit

Aug. 19 - JD telephoned to inquire about general progress. Nothing has been done to this point. Talked with Rosa who had done nothing and required some reminders to remember the project. She told me to talk with Mr. Williams. Mr. Williams apologized for the lack of progress, stating they have been quite busy. He stated he

will meet with Rosa in the next three days to review tasks and begin. JD asked him to give priority to identifying the users who will be interviewed, and getting their letters out. He was also asked to call if he or Rosa had any questions when they began reviewing the request. He said they will.

Aug. 25 - JD called HJMC and left message for Mr. Williams to call.

Aug. 29 - Mr. Williams returned call, but JD was out of the office.

Aug. 30 - JD called HJMC and left message for Mr. Williams to call.

Sept. 1 - JD called HJMC and reached Mr. Williams. They still have done nothing. Mr. Williams will talk with Rosa Rivera and the two will call later today to review what they need to do.

Sept. 1 - Rosa called JD to talk about the project. Mr. Williams was unavailable at the time. JD reviewed the whole project with Rosa, and went through the sampling step by step. Rosa referred to the materials left during the site visit as she talked. She seemed to understand what was needed and promised that it would be done soon. She had printed a list of all users already JD explained how the user sample would be selected. After the user sample is selected, she was instructed to take every 5th sample person, beginning with number 5, until she gets 6 users to contact for an interview. JD faxed her a revised letter to the users as recommended at the York site visit. The last site visit and the user interviews are scheduled for September 20.

Sept. 13 - JD called HJMC and talked with Rosa about current status of project. She reported that sampling was completed without problems. Letters were completed and mailed on Sept. 8. Telephone calls will be made in next two days. Interviews are still scheduled for 9/20. She will call if any problem arises with scheduling.

Sept. 19 - JD called HJMC to confirm tomorrow's visit. Rosa is out for the day, but JD talked with Mr. Williams. Rosa had difficulty enlisting users. Only one of the 6 contacted was willing to come to the HJMC for the interview, the other 5 declined. One of the 5 was willing, but could not get off work during the interview time frame. Mr. Williams could offer no explanation for the other 4 refusals. No interviews will be conducted tomorrow.

Sept. 20 - JD called Rosa to set up appointment to debrief her on survey activities. An appointment was scheduled for 2:00 today. An effort will be made to determine why the users refused to participate as well as to learn how the sampling and abstracting of records was accomplished.

Sept. 20 - The site visit was completed. The results are detailed in site visit report.

Sept. 23 - JD called Rosa to check on progress of re-contacting user sample and rescheduling for interviews. She is out today and will not return until the 29th.

Sept. 30 - JD called Rosa to check on progress. She has not yet done the calling of users but will "try to get to it soon." Oct. 12 was set as the new target for interviews.

Oct. 7 - JD called Rosa again. She said she has not had time to make the calls. She promised to do it early next week. New target date for interviews set for Oct. 19.

Oct. 12 - JD called Rosa to check on progress. Rosa stated that she was unsuccessful with all 4 re-contacts. She stated that she had selected 5 new users and had sent letters to them two days ago. (It was later determined that no letters were sent.) She planned to call them tomorrow to arrange an appointment for the 19th.

Oct. 14 - Attempts to reach Rosa today and on October 17 were unsuccessful. JD left messages asking for a return call.

Oct. 18 - After JD left several messages, Rosa returned the telephone call at 5 p.m. today. She had set up appointments with 3 users for tomorrow, beginning at 9:30 am.

Oct. 19 - The site visit was completed with 3 user interviews.

Henrietta Johnson Medical Center
Site Visit Report

Attachment 1

[HRSA letterhead]

Date

Dear Ms. Baxter:

The Health Resources and Services Administration (HRSA), Bureau of Primary Health Care (BPHC) is conducting a pretest of a proposed national survey of community health center (CHC) users and visits. The purpose of the pretest it to identify and solve potential survey design problems. The full survey is being planned for 1995 and will provide national and regional profiles of CHC users, their health attitudes, knowledge, health services utilization and needs. The Center for Health Policy Studies (CHPS) has been contracted to assist BPHC in this pretest, and the National Center for Health Statistics is assisting with the sample design and survey instrument development. The enclosed fact sheets provide additional information about the study and the tasks involved in the pre-test.

The final phase of the pretest consists of the conduct of portions of the survey at several CHCs, following the protocols which would be used for the full survey. At this time we are requesting the participation of several CHCs in the pretest, including your CHC. This participation involves the following:

- A preliminary meeting with the CHPS researchers concerning how the sampling would be performed at your CHC and alternative roles for the CHC in survey conduct.
- Arranging for drawing a sample of users and visits.
- Arranging for 3-6 of your users to be interviewed by CHPS' interviewers.
- Arranging for abstracting of 5 visits from medical records.

The preliminary meeting takes about two hours to meet with you, your information systems director and your medical records director. The interviews with users would be scheduled at your convenience on a subsequent day. We are well aware of the many demands on your time and resources and would not ask for your help if this were not important to the program and to BPHC. Every effort has been made to keep the burden on CHCs to a minimum. All information collected from the interviewed users and all information abstracted from medical records will be strictly confidential. No individual identifiers other than the demographic characteristics of the users will be retained. Participation in the pretest is voluntary and CHPS will reimburse your CHC for any programming and computer costs you incur in

drawing the sample.

A representative of CHPS will be contacting you in a few days to make pretest arrangements. I hope that you will agree to cooperate in this important study. In the meantime, for additional information, contact Jerrilyn Regan of BPHC's Office of Evaluation, Analysis, and Research (301-594-4280), or the CHPS Project Leaders, Jim DeLozier or Ben Duggar (410-381-4203). Thank you for your help.

Sincerely,

Enclosures

BUREAU OF PRIMARY HEALTH CARE
EVALUATION STRATEGY:
DESIGN OF USER AND VISIT SURVEYS

The development of CHC user and visit surveys is part of an overall Bureau evaluation strategy for collecting data regarding users, services and outcomes. The need for evaluation of CHCs exists at three levels. First, the grantees must be able to evaluate their services in order to set priorities, allocate resources and improve operations. The Bureau's operational Divisions must be able to assess and monitor CHC performance to assure compliance with statutory program requirements and formulate policy. Third, the BPHC must be able to document achievement of program objectives for outside interest groups and for decision makers within the Department of Health and Human Services.

Visit and client based survey tools will be adapted from the National Hospital Ambulatory Medical Care Survey (NHAMCS) and the National Health Interview Survey (NHIS) through an Interagency Agreement with the National Center for Health Statistics (NCHS). These instruments will be used to collect information on demographics of users, health status, reasons for seeking care, diagnoses, services utilized, and outcomes and satisfaction. Rigorous sampling strategies will be used to permit derivation of national estimates and comparisons with NCHS' national data, including analyses based on customary source of primary care and socioeconomic status. It is anticipated that, if successful with CHCs, the user and visit surveys will also be applied to the collection of information regarding other BPHC programs since many population groups are seen across Bureau programs for a variety of services.

The Center for Health Policy Studies (CHPS) of Columbia, Maryland, is assisting BPHC in assessing alternatives for resolving design issues and conducting pilot testing of both the user and visit surveys. An Advisory Group of CHC, BPHC, and NCHS representatives is consulting with the study team during this process. It is anticipated that field work for the pretests will be completed in July 1994 and the full national survey conducted in 1995.

For additional information, contact Jerrilyn Regan of BPHC's Office of Evaluation, Analysis, and Research. Ms. Regan can be reached at:

Bureau of Primary Health Care
Office of Evaluation, Analysis and Research, Rm 7-3Al
4350 East-West Highway
Rockville, MD 20857
(301-594-4280)

The CHPS Project Leaders are Jim DeLozier and Ben Duggar. They can be reached at (area code 410) 381-4203.

BUREAU OF PRIMARY HEALTH CARE
PRE-TEST ACTMTJES FOR PARTICIPATING CHCs IN THE
SURVEY OF USERS AND VISITS

Pre-test participation involves a preliminary meeting, arranging for drawing a sample of users and visits, contacting and arranging for 3-6 CHC users to be interviewed, and providing space for interviews on a subsequent day. The sequence of pretest activities and CHC involvement are as follows:

Step 1: A brief meeting of the CHC's decision makers with the pre-test staff. This entails an initial 30 minute meeting with the Executive Director or designee to describe and outline the pre-test and answer questions. Next, a 30 minute discussion with the CHC's information systems director to identify sources and methods for drawing the samples. Then, a 30 minute meeting with the Director of Medical Records to arrange abstracting of 5 visits from medical records, followed by a final 15 minute meeting with the Executive Director to finalize arrangements for the conduct of the pretest and reimbursement of costs for drawing the sample.

Step 2: As part of the pretest we wish to determine the costs and best methods for drawing the samples. If your CHC has a suitable computerized information system, the contractor will negotiate arrangements for you to draw the sample and will reimburse you for the costs. Recognizing the shortage of MIS staff at most CHCs, we anticipate allowing 4-6 weeks for each CHC to draw the sample. This sample will not actually be used in the pretest, but the process and costs of drawing the sample is a pretest.

Step 3: Independently of the formal sampling described in Step 2, the CHC will identify an arbitrary sample of 6 recent CHC users and mail each a letter (the draft will be provided by the contractor --- the letter may be tailored by the CHC as long as certain information is retained). The letter describes the purposes of the survey, confidentiality, and that participation in the interviews is voluntary. The letter will state that the contractor will pay each interviewee an honorarium of $25 to offset their costs and time for participation in an interview lasting about one hour. It will state that someone from the CHC will phone in a few days to schedule'the interview, or that the CHC user may call a designated person to schedule the interview.

Step 4: The CHC will contact the letter recipients, assess and record their willingness to participate and, if willing, schedule interviews on a designated day for all or as many of the 6 selected users who agree to participate (we anticipate that regardless of which day is selected l-3 of those receiving the letter will not be available that day).

Step 5: On the designated day, the contractor's interviewer and one or more BPHC observers will come to the CHC to conduct the interviews. Each inteviewee

will be paid the $25 honorarium at the conclusion of the interview.

Step 6: The CHC's Director of Medical Records, or other person designated by the CHC, will abstract an arbitrary sample of 5 visits to the CHC. We estimate that the time required to pull the medical records and abstract the 5 visits will total less than one hour, but wish to know how long it took, including reading the instructions. The 5 visit abstracts and time report will be sent to the contractor without divulging the name of the patient.

That concludes the pretest.

Henrietta Johnson Medical Center
Site Visit Report

Attachment 2

CHC USER AND VISIT SURVEY
Overview of Protocol

FINAL TEST OF PROCEDURES - Henrietta Johnson Medical Center

The **CHC User and Visit Survey** is a survey of Community Health Center (CHC) users and medical care visits to be conducted in a national random sample of Community Health Centers. The survey is conducted in two parts. One is the **User Survey** which involves the collection of data concerning the health and demographic characteristics of CHC users. The second is the **Viiit Survey in** which patient visit data are collected describing patterns of health services utilization. All service sites that provide medical care are included in the survey. **The CHC will be reimbursed for the cost of all survey activities performed by the CHC staff.**

Data for the **User Survey** will be collected through a personal interview with a sample of 40 users in each CHC. The users sample will be randomly selected from among all CHC users who have had one or more visits to the CHC during the previous 12 months. This sample may be selected by computer in those CHC's having a suitable computer file of users. (For this test, the sample of 40 will be selected, but only about 6 users will be contacted and interviewed). The 6 users selected for the test interviews will be sent a letter that briefly describes the survey and asks for their cooperation. The letter will be followed by a telephone contact to verify the user's willingness to participate and to arrange an appointment for a personal interview. The personal interview will be conducted in the CHC or other convenient location by a trained interviewer under contract to the HRSA. The user questionnaire is a subset of the National Health Interview Survey questionnaire, supplemented with questions relating directly to CHC users, and requires about one hour to administer. Users who participate in the survey will be provided remuneration of $25 to defray costs of transportation, child care and other expenses.

Data for the **Viiit Survey** will be obtained by abstracting information from medical records for a random sample of about 120 CHC visits. The visit sample will be randomly selected from among all medical care visits made to the CHC in the previous 12 months. The visit sample'may also be selected by computer in those CHC's having a suitable computer file of visits. (Fot this test, the sample of 120 will be selected, but only 5 visits will be selected for abstraction of data and vompletion of the abstract form). For 5 of the visits selected in the sample, the patient's medical record will be pulled, and an abstract will he completed. The abstract is a one page form similar to the National Hospiital Ambulatory Medical Care Survey data form, and includes about 16 data items. Each abstract requires about 5 minutes to complete.

The survey tasks which you have agreed to perform for this test are:

- Select a sample of **users.** Select a random sample of about 120 "current" users according to specifications provided by the contractor. This is preferably done by computer when

computerized files are available. Otherwise, the best available listing of users must be identified, and a sample selected manually.

- Mail a letter to each sampled user from the CHC administrator. A draft letter will be provided on diskette which the CHC may "personalize" as desired. The finalized letter must be addressed, printed on CHC letterhead, and mailed to each user in the sample.

- Telephone each sampled user and set up an appointment for the user to come to the CHC for an interview. Target date for the interviews is August 19 or a day in the following week. Notify the Center for Health Policy Studies when the appointments are set.

- Provide space in the CHC or help arrange for available space at a nearby location for conduct of personal interviews with the users.

- Select a sample of patient visits. Select a random sample of visits according to specifications provided by the contractor. This is preferably done by computer when computerized files are available. Otherwise, the best available listings or logs of visits for the previous 12 months must be identified, and a sample selected manually.

- Pull the medical records for a sample of 5 patient visits. Abstract about 16 data items from the medical record for each sample visit.

- For the 5 sampled visits, provide a printout of the visit data contained in the computer record for comparison with the data abstracted from the medical record.

- Estimate the cost of performing each of the survey tasks. Meet with the CHPS staff to discuss the outcome of the test.

A. User Sample Selection

Selection of a user sample is straightforward once the sampling frame has been established. The frame is simply a file or list of all users eligible for the survey. For the HJMC User Survey, the frame must include **all** persons who made a visit to the HJMC (including all eligible service sites), for medical care during the 12 months prior to the time of sample selection. This may be a single file covering all service sites, or individual files for each service site. Regardless of the number of files, the sampling process is the same for each file. In HJMC's with computer files of users, the sampling specifications should be easily accomplished. In most instances, the instructions that follow should also be easily completed manually using non-computerized files of users. If computerized files are not available, and the HJMC files make it unreasonable to follow the specifications for manual sample selection, the Contractor's supervisory personnel must be contacted to determine the best sampling plan for the particular HJMC.

Following are instructions for selecting the User sample using computerized files. Modifications acceptable when manual selection is necessary are provided in [brackets].

1. Develop the User Sampling Frame from the HJMC User file(s) by identifying all users who made one or more visits for medical care during the 12 months prior to the date of user sample selection. For example, if the sample is being selected in August 1995, the frame will consist of all users making a visit during the months of August 1994 through the month of July 1995.

2. Sort the users in the User Frame by selected demographic characteristic (e.g. Age, race, sex) as determined by BPHC. For example, if the file is to be sorted by age within sex, all males would be listed first from youngest to oldest. Then all females would be listed from youngest to oldest. [For manual sample selection, sorting may not be feasible. In that case, the user file will be used as available, without sorting.]

3. Assign a 6 digit "user ID number" to each user in the sampling frame in the sorted order, beginning with the number 000001. This number is used for sample selection and will serve as the ID number for the user on all survey materials. [For manual sample selection, assignment of this number prior to sample selection is not necessary. After the sample has been selected, however, a five digit ID number must be assigned to each user selected in the sample.]

4. Determine an exact count of all users in the sampling frame. (For HJMC's with more than one user file, this count will be the total of **all** users in **all** files.) Divide that number by 40, and drop any digits after the decimal. The resulting whole number is the sample "Take Every" (TE) number. (For, example, if the HJMC frame has 2592 users, division by 40 yields 64.8. The TE number, therefore, is 64. The number 40 is used because that will produce the desired sample size of approximately 40.)

5. Determine a random "Start With" (SW) number by using a table or calculator with random numbers. Following instruction for random number selection, select a random number between 1 and the TE number. (For example, if the TE number is 64, the SW number may be any number from 1 to 64 inclusive.) If the sampling frame consists of more than one user list, determine a new random SW number for each list, but use the same TE number for all lists.

6. Select the User Sample by selecting the user with the SW number and each "TE" th user ID number thereafter. (For example, with a SW=20 and a TE=64, the sample will consist of user ID number 20 and every 64th number thereafter. i.e. user ID numbers 20, 84, 148,212, 276,...)

7. Produce the User Sample List on both paper and diskette, including all sampled users in the order selected. The list should contain as much of the following information as available from the files: User's assigned ID Number, complete name, address, telephone number, date of birth, sex, medical record number, principal service site used, parents name if under age 18, date of last HJMC visit.

B. Visit Sample Selection

The visit sample selection, like the user sample process, is straightforward once the sampling frame has been established. The frame must include all visits by all users in the user frame made to the HJMC (including all eligible service sites), for medical care during the same 12 month period used for the user sample frame. This may be a single file or visit log covering all service sites, or individual files for each service site. Regardless of the number of files, the sampling process is the same for each file. In HJMC's with computer logs or files of visits, or users' files that include information on their visits, the sampling specifications should be easily accomplished. In most instances, the instructions that follow should also be easily accomplished manually using non-computerized files of visits. If computerized files are not available, and it is not reasonable to follow the specifications for manual sample selection, Contractor supervisory personnel must be contacted to determine the best sampling plan for the particular HJMC.

1. Develop the Visit Sampling Frame from the HJMC Visit Logs or User file(s), by identifying all visits for medical care during the specified 12 month period.

2. Sort the visits in the Visit Frame by date of visit, from earliest to most recent date. Sort on time of day within date, if available. [For manual selection of visits, sorting may not be feasible. In that case, the visit log or file will be used as available, without sorting.]

3. Assign a 6 digit "visit ID number" to each visit in the sampling frame in the sorted order, beginning with the number 00000 1. This number is used for sample selection and will serve

as the ID number for the visit on all survey materials. [For manual sample selection, assignment of this number prior to sample selection is not necessary. After the sample has been selected, however, a 6 digit ID number must be assigned to each visit selected in the sample.]

4. Determine an exact count of all visits in the sampling frame. (For HJMC's with more than one visit file, this count will be the total of all visits on all files.) Divide that number by 120, and drop any digits after the decimal. The resulting whole number is the sample "Take Every" (TE) number. (The number 120 is used because that will provide the desired sample size of approximately 120 visits.)

5. Determine a random "Start With" (SW) number by using a table or calculator with random numbers. Following instruction for random number selection, select a random number between 1 and the TE number. (For example, if the TE number is 100, the SW number may be any number from 1 to 100 inclusive.) If the sampling frame consists of more than one visit list, determine a new random SW number for each list, but use the same TE number for all lists.

6. Select the Visit Sample by selecting the visit with the SW number and each "TE" th user number thereafter. (For example, with a SW=30 and a TE=100, the sample will consist of visit number 30 and every 100th number thereafter. i.e. visit numbers 30, 130, 230, 330, 430,...)

7. Produce the Visit Sample List on both paper and diskette, showing all sampled visits in the order selected. (For ease of abstracting, the sample may be sorted on medical record number or in other order according to how the medical records are stored.) The paper copy of the list should contain as much of the following information as available from the files. The medical record number, assigned Visit ID Number, patient's complete name, date of visit, date of birth, sex, service site, diagnosis, services or procedures received. The diskette file should contain this information plus additional visit data when available for use in lieu of abstracting it from the medical record. The specific data items which may be included are designated in the Patient Record Abstract instructions.

Introductory Letter to CHC Users

Dear **[User]**

I am writing to ask for your help in a study of Community Health Centers. The Henrietta Johnson Medical Center, like many health centers across the country, provides health care to a wide variety of people with many different health care needs. Information about those health care needs, and the ways that people use health centers, are very important for planning the future of the health center program.

This study is being conducted in many health centers across the country. As a person who has used the Henrietta Johnson Medical Center, you have been randomly selected to represent our health center in this study. To participate, we are asking you to make an appointment to complete a confidential interview at the Medical Center . During the interview, you will be asked questions about your needs for health care, the places you go for care, and your opinion about the care you receive. The interview takes about an hour, and you will be given $25 for your participation.

This is a voluntary study, and there are no penalties if you choose not to participate. However, your cooperation is very important for making the study a success and for helping to assure that Community Health Centers continue to meet the health care needs of their users. All information you provide will be held in strict confidence, and will be used only for statistical purposes.

In a few days, Rosa Rivera from the Medical Center will call you to answer any questions you may have, and to arrange an appointment for the interview. This is a very important study, and I urge you to cooperate.

Thank you for your help!

Sincerely,

Greg Williams
Executive Director
Henrietta Johnson Medical Center

This study is sponsored by the Bureau of Primary Care, Health Resources and Services Administration, DHHS, under authority of Section 24 1 of the US Public Health Service Act.

Letter for child under age 13 or other user unable to respond for self

Dear [User's Parent or Guardian]

I am writing to ask for your help in a study of Community Health Centers. The Henrietta Johnson Medical Center, like many health centers across the country, provides health care to a wide variety of people with many different health care needs. Information about those health care needs, and the ways that people use health centers, are very important for planning the future of the health center program.

This study is being conducted in many health centers across the country. As a person who has used the Henrietta Johnson Medical Center, [child's *name*] has been randomly selected to represent our health center in this study. To participate, we are asking you to make an appointment to complete a confidential interview at the Medical Center . During the interview, you will be asked questions about *[child's name]* needs for health care, the places he/she goes for care, and your opinion about the care he/she receives. The interview takes about an hour, and you will be given $25 for your participation. It is not necessary for *[Child's name]* to attend the interview.

This is a vohmtary study, and there are no penalties if you choose not to participate. However, your cooperation is very important for making the study a success and for helping to assure that Community Health Centers continue to meet the health care needs of their users. All information you provide will be held in strict confidence, and will be used only for statistical purposes.

In a few days, Rosa Rivera from the Medical Center will call you to answer any questions you may have, and to arrange an appointment for the interview. This is a very important study, and I urge you to cooperate.

Thank you for your help!

Sincerely,

Greg Williams
Executive Director
Henrietta Johnson Medical Center

This study is sponsored by the Bureau of Primary Care, Health Resources and Services Administration, DHHS, under authority of Section 24 1 of the US Public Health Service Act.

CHC USER SURVEY
TELEPHONE GUIDE

Hello, M. _____ this is _____ at the Henrietta Johnson Medical Center. How are you today? M. _____, I am calling today to ask for your help in a study we are doing to help improve the services provided at community health centers. We are asking specially selected users of our Center to tell us about their health care needs and to tell us what they think might be done to better meet those needs. The purpose of the study is to gather information to help make sure that our Center can meet your health care needs and the needs of people like, and to help make sure that your needs will continue to be met in the future.

To participate in the study, I would like to arrange an appointment for you to come to the Medical Center to be interviewed by a member of the study team. [We will provide child care during the interview if you need that, and] You will be given $25 to cover the expense of coming here.

The interview takes about one hour. This is an important study that will provide us with valuable information, Your participation is very important to its success, and we urge you to cooperate. Please be assured that all information you provide in this study is held in complete confidence. The information will be used to produce statistics, and will not be given to anyone with your name attached for any other purpose. Even the staff here in the Medical Center will not be allowed to see the information you provide.

If possible, we would like to schedule it for sometime on -- or --- . Are any of these dates convenient for you?

Department of Health and Human Services
Public Health Service, Centers for Disease Control
National Center for Health Statistics

417510

OMB No. 0920-0278
Expires: 6130194
CDC 64.54

NOTICE — Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only **for purposes stated for this study, and will not be disclosed** or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m). Public reporting burden for **this phase of the survey Is estimated to average 3 minutes per response. If you have any comments regarding the burden** estimate or any other aspect of this survey, including suggestions for reducing this burden, send them to the PHS Reports Clearance Officer; Attn: PRA: HHH Building, Rm. 721-S; 200 Independence Ave., S.W., Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0278); Washington. DC 20503.

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

OUTPATIENT DEPARTMENT PATIENT RECORD 1993-94

1. PATIENT NAME

2. PATIENT RECORD NO.

3. DATE OF VISIT
___/___/___
Month Day Year

4. DATE OF BIRTH
___/___/___
Month Day Year

5. SEX
1 ☐ Female
2 ☐ Male

6. RACE
1 ☐ White
2 ☐ Black
3 ☐ Asian / Pacific Islander
4 ☐ American Indian / Eskimo / Aleut

7. ETHNICITY
1 ☐ Hispanic origin
2 ☐ Not Hispanic

8. EXPECTED SOURCE(S) OF PAYMENT (Check *all that apply*)
1 ☐ Private / commercial
2 ☐ Medicare
3 ☐ Medicaid
4 ☐ Other government
5 ☐ HMO/ other prepaid
6 ☐ Patient paid
7 ☐ No charge
8 ☐ Other

9. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?
1 ☐ Yes
2 ☐ No

10. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT
(In patient's own words)

a. Most important.

b. other:

c. Other.

11. PHYSICIAN'S DIAGNOSES

a. Principal diagnosis / problem associated with item 10.a:

b. Other:

c. Other:

12. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE
1 ☐ Yes 2 ☐ No

If yes, for the condition in item 1 la?
1 ☐ Yes 2 ☐ No

13. TESTS, SURGICAL AND NONSURGICAL PROCEDURES, AND THERAPIES None ☐

a. SELECTED SERVICES
(Check all ordered or provided)
1 ☐ **Blood pressure**
2 ☐ Urinalysis
3 ☐ Spirometry
4 ☐ Allergy testing
5 ☐ HIV serology
6 ☐ Other blood test

b. ALL OTHER SERVICES
include:
- Tests
- Imagings
- Surgeries and other procedures
- Other therapies (such as contact lenses. psychotherapy, or physiotherapy)

Exclude:
- Services in item 13a
- Counseling / education
- Medications

(Record one on each line and check performed or ordered for each.)

		Performed	Ordered
1		1 ☐	2 ☐
2		1 ☐	2 ☐
3		1 ☐	2 ☐
4		1 ☐	2 ☐
5		1 ☐	2 ☐
6		1 ☐	2 ☐

14. COUNSELING/EDUCATION
(Check all ordered or provided)
1 ☐ None
2 ☐ Exercise
3 ☐ Cholesterol reduction
4 ☐ Weight reduction
5 ☐ Smoking cessation
6 ☐ Growth / development
7 ☐ Injury prevention
8 ☐ HIV transmission
9 ☐ Other STD transmission
10 ☐ Other

15. MEDICATIONS / INJECTIONS None ☐

Include:
- Rx and OTC
- Immunizations
- Allergy shots
- Anesthetics
- Meds ordered, supplied. or administered
- New meds
- Continuing meds (with or without new orders)

1 _____
2 _____
3 _____
4 _____
5 _____

18. DISPOSITION THIS VISIT
(Check all that apply)
1 ☐ No follow-up planned
2 ☐ Return to clinic PRN
3 ☐ Return to clinic • appointment
4 ☐ Telephone follow-up planned
5 ☐ Return to referring physician
6 ☐ **Refer to other physician/clinic**
7 ☐ **Admit lo hospital**
8 ☐ **Other** *(Specify)* _____

17. PROVIDERS SEEN THIS VISIT
(Check all that apply)
1 ☐ Resident/Intern
2 ☐ Staff physician
3 ☐ Other physician
4 ☐ Physician assistant/ Nurse practitioner
5 ☐ Registered nurse
6 ☐ Licensed practical nurse
7 ☐ **Nurse's aide**
8 ☐ **Other** *(Specify)* _____

417510

Attachment 5

Community Health Center User and Visit Survey

Pretest Materials

a) Letter to CHCs
b) Letter to CHC Users
c) CHC Users Survey Telephone Guide
d) User and Visit Sample Instructions
e) Patient Visit Abstract (NHAMCS form)
f) Patient Visit Abstract Detailed Instructions

Attachment 5.a

Letter to CHCs

Attachment 5.a

Introductory Letter to CHC from HRSA

Dear Dr. Jones:

The Community Health Service (CHC) program has been providing critical health services to a significant segment of the American population for more than 25 years. With the country facing a crisis in health care and making efforts to reform the way care is delivered and financed, it is important to ensure that the needs of those served by CHC's continue to be met. It is also important to ensure that the CHC's have the information they need to continue meeting their users' needs.

Towards that end, the Bureau of Primary Health Care (BPHC) of HRSA has commissioned a survey of CHC users. Of major interest are the health status and health needs of users, their health related attitudes, expectations and concerns, and their patterns of health care utilization. These data will be used to assess the needs of the user population and to inform the planning process to assure that the CHC program will meet user's future health care needs.

To successfully complete this survey, we will need your assistance. A sample of 50 CHC's across the country, including yours, is being asked to participate in this survey by assisting our contractor in the data collection process. This survey has two components. The first is a personal interview survey with a sample of users of your Center, conducted by the trained interviewing staff. The second component is a patient visit survey in which data will be abstracted from medical records for a sample of visits to your Center. These two components of data collection will be modeled after the National Health Interview Survey and the National Ambulatory Medical Care Survey so that resulting statistics will be comparable to existing national data.

Your participation is critical to the survey's success. This survey is authorized by Section 26 11 of the Public Health Service Act. Your participation is voluntary, and there are no penalties for not participating. However, the CHC's selected for the survey have been carefully chosen to represent all CHC's in the country, and the cooperation of all CHC's is important for obtaining accurate, representative data.

The survey protocol is flexible to meet any special needs of your CHC, and to be minimally disruptive to your primary function of providing patient care. Enclosed is a general description of the survey protocol and the role you may be asked to play. Your exact role in the survey will be determined through discussions with our contractor. You will, of course, be reimbursed for the expenses of participation.

Our representative from (contractor) will be calling you in the next few days to discuss the details of the survey, and to determine the most efficient way to complete the survey in your Center. We recognize that this survey will be an extra burden for you and your staff. However, this is an important survey at a critical time in the CHC program history. I strongly urge your full cooperation. Thank you for your consideration.

S.Y. (HRSA official)

CHC Letter Enclosure

CHC USER AND VISIT SURVEY
Overview of Protocol

1. GENERAL

The CHC User and Visit Survey is a survey of Community Health Center (CHC) users and medical care visits. It is being conducted in a national random sample of Community Health Centers. The survey is conducted in two parts. One is the **User Survey** which involves the collection of data concerning the health and demographic characteristics of CHC users. The second is the **Visit Survey** in which patient visit data are collected describing patterns of health services utilization. All service sites that provide medical care are included in the survey.

2. *CHC USERS SURVEY*

Data for the **User Survey** will be collected through a personal interview with a sample of about 40 users in each CHC. The users sample will be randomly selected from among all CHC users who have had one or more visits to the CHC during the previous year. This sample may be selected by computer in those CHC's having a suitable computer file of users. Those users selected in the sample will be sent a letter that briefly describes the survey and asks for their cooperation. The letter will be followed by a telephone contact to verify the user's willingness to participate and to arrange an appointment for a personal interview. The personal interview will be conducted in the CHC or other convenient location by a trained interviewer under contract to the HRSA. The user questionnaire is a subset of the NHIS questionnaire, supplemented with questions relating directly to CHC users, and requires a little over one hour to administer. Users who participate in the survey will be provided remuneration of $25 to defray costs of transportation, child care and other expenses.

3. *CHC VISIT SUR VEY*

Data for the **Visit Survey** will be obtained by abstracting information from medical records for a random sample of about 120 CHC visits. The visit sample will be randomly selected from among all medical care visits made to the CHC in the previous year. This sample may also be selected by computer in those CHC's having a suitable computer file of visits. For each visit selected in the sample, the patient's medical record will be pulled, and an abstract will be completed. The abstract is a one page form similar to the NHAMCS data form, and includes about 16 data items. Each abstract requires about 5- 10 minutes to complete.

4. *DATA COLLECTION*

A private research firm, under contract to HRSA, will have overall responsibility for data collection. Their staff will telephone and visit the CHC to arrange participation, collect

data, and train and assist CHC staff in those survey activities performed by the CHC. A number of survey activities may be accomplished by either contractor staff or CHC staff, depending on the preference of the CHC. The following are the survey activities that pilot tests have shown are generally accomplished most efficiently by CHC staff. These are also activities which many CHC administrators prefer to have done by their staff rather than by a contractor's staff If the CHC prefers, of course, some or all of these activities may be completed by the contractor, with the CHC's advice and guidance as needed. Final decisions on these and other aspects of the survey will be made through discussions between the CHC administration and the contractor. The CHC will be reimbursed for the cost of all survey activities performed by the CHC staff.

5. CHC's ROLE IN SURVEY

The survey tasks which the CHC **may** choose to perform are:

- Select a sample of **users.** With the contractor's assistance, select a random sample of "current" users according to specifications provided by the contractor. This is preferably done by computer when computerized files are available. Otherwise, the best available listing of users must be identified, and a sample selected manually.

- Mail a letter to each sampled user from the CHC administrator. A draft letter will be provided on diskette which the CHC may "personalize" as desired. The finalized letter must be addressed, printed on CHC letterhead, and mailed to each user in the sample.

- Telephone each sampled user and set up an appointment for the user to come to the CHC (or other selected location) for an interview. Re-contact those users who do not appear at the appointed time to arrange a second appointment.

- Provide space in the CHC or help arrange for available space at a nearby location for conduct of personal interviews with the users. The space will be needed for a 2-4 week period and must be reasonably private to permit confidential interviewing, Sufficient space for two simultaneous interviews is preferred.

- Select a sample of patient **visits.** With the contractor's assistance, select a random sample of visits according to specifications provided by the contractor. This is preferably done by computer when computerized files are available. Otherwise, the best available listings or logs of visits for the previous 12 months must be identified, and a sample selected manually.

- Pull the medical records for the sample of patient visits. Abstract about 16 data items from the medical record for each sample visit. In CHC's with computerized information about each patient visit, some of the visit data may be derived from computer files.

Attachment 5.b

Letter to CHC Users

Attachment 5.b

Introductory Letter to CHC Users

Dear **[CHC User]**

I am writing to ask for your help in a study of Community Health Centers. The Small Town Medical Center, like many health centers across the country, provides health care to a wide variety of people with many different health care needs. Information about those health care needs, and the ways that people use health centers, are very important for planning the future of the health center program.

This study is being conducted in many health centers across the country. As a person who has used the Small Town Medical Center, you have been randomly selected to represent our health center in this study. To participate, we are asking you to make an appointment to complete a confidential interview at the Medical Center . During the interview, you will be asked questions about your needs for health care, the places you go for care, and your opinion about the care you receive. The interview takes about an hour, and you will be given $25 for your participation.

This is a voluntary study, and there are no penalties if you choose not to participate. However, your cooperation is very important for making the study a success and for helping to assure that Community Health Centers continue to meet the health care needs of their users. All information you provide will be held in strict confidence, and will be used only for statistical purposes.

In a few days, Rosa Smith from the Medical Center will call you to answer any questions you may have, and to arrange an appointment for the interview. This is a very important study, and I urge you to cooperate.

Thank you for your help!

Sincerely,

Executive Director
Small Town Medical Center

This study is sponsored by the Bureau of Primary Care, Health Resources and Services Administration, **DHHS, under authority of Section 24 1 of the US Public Health Service Act.**

Letter for child under age 13 or other user unable to respondfor self

Dear **[User's Parent or Guardian]**

I am writing to ask for your help in a study of Community Health Centers. The Small Town Medical Center, like many health centers across the country, provides health care to a wide variety of people with many different health care needs. Information about those health care needs, and the ways that people use health centers, are very important for planning the future of the health center program.

This study is being conducted in many health centers across the country. As a person who has used the Small Town Medical Center, *[child's name]* has been randomly selected to represent our health center in this study. To participate, we are asking you to make an appointment to complete a confidential interview at the Medical Center . During the interview, you will be asked questions about [child's *name]* needs for health care, the places he/she goes for care, and your opinion about the care he/she receives. The interview takes about an hour, and you will be given $25 for your participation. It is not necessary for *[Child's name]* to attend the interview.

This is a voluntary study, and there are no penalties if you choose not to participate. However, your cooperation is very important for making the study a success and for helping to assure that Community Health Centers continue to meet the health care needs of their users. All information you provide will be held in strict confidence, and will be used only for statistical purposes.

In a few days, Rosa Smith from the Medical Center will call you to answer any questions you may have, and to arrange an appointment for the interview. This is a very important study, and I urge you to cooperate.

Thank you for your help

Sincerely,

Executive Director
Small Town Medical Center

This study is sponsored by the Bureau of Primary Care, Health Resources and Services Administration, DHHS, under authority of Section 241 of the US Public Health Service Act.

Attachment 5.c

CHC Users Survey Telephone Guide

Attachment 5.c

CHC USER SURVEY
TELEPHONE GUIDE

Hello, M. _____ this is _____ at the Small Town Medical Center. How are you today? M. _____, I am calling today to ask for your help in a study we are doing to help improve the services provided at community health centers. We are asking randomly selected users of our Center to help us by completing an interview about how you use the health center, and how we might do a better job of providing the services you need. This study is being done in many health centers across the country to gather information that will help make sure that our Health Center can meet your health care needs and the needs of people like you in the future.

To participate in this study, I would like to arrange an appointment for you to come to the Medical Center to be interviewed by a member of the study team. [We will provide child care during the interview if you need that, and] You will be given $25 to cover the expense of coming here.

The interview takes about one hour. This is an important study that will provide us with valuable information. Your participation is very important to its success, and we urge you to cooperate. Please be assured that all information you provide in this study is held in complete confidence. The information will be used to produce statistics, and will not be given to anyone for any other purpose. Even the staff here in the Medical Center will not be allowed to see the information you provide.

If possible, we would like to schedule an appointment sometime between . . . . Are any of these dates convenient for you?

Attachment 5.d

User and Visit Sampling Instructions

CHC User and Visit Sampling Instructions

A. User Sample Selection

Selection of a user sample is straightforward once the sampling frame has been established. The frame is simply a file or list of all users eligible for the survey. For the CHC User Survey, the frame must include **all** persons who made a visit to the CHC (including all eligible service sites), for medical care during the calendar year prior to the time of sample selection. This may be a single file covering all service sites, or individual files for each service site. Regardless of the number of files, me sampling process is the same for each file. In CHC's with computer files of users, the sampling specifications should be easily accomplished. In most instances, the instructions that follow should also be easily completed manually using non-computerized tiles of users. If computerized files are not available, and the CHC files make it unreasonable to follow the specifications for manual sample selection, the Contractor's supervisory personnel must be contacted to determine the best sampling plan for the particular CHC.

Following are instructions for selecting the User sample using computerized files. Modifications acceptable when manual selection is necessary are provided in [brackets].

1. Develop the User Sampling Frame from the CHC User file(s) by identifying all users who made one or more visits for medical care during the calendar year prior to the date of user sample selection. For example, if the sample is being selected in March 1995, the frame will consist of all users making a visit during calendar 1994.

2. Sort the users in the User Frame by selected demographic characteristic (e.g. Age, race, sex) as determined by BPHC. For example, if the file is to be sorted by age within sex, all males would be listed first from youngest to oldest. Then all females would be listed from youngest to oldest. [For manual sample selection, sorting may not be feasible. In that case, the user file will be used as available, without sorting.]

3. For computer sampling, assign a 6 digit "user ID number" to each user in the sampling frame in the sorted order, beginning with the number 00000 1. This number is used for sample selection and will serve as the ID number for the user on all survey materials. [For manual sample selection, assignment of this number prior to sample selection is not necessary. After the sample has been selected, however, a five digit ID number must be assigned to each user selected in the sample.]

4. Determine an exact count of all users in the sampling frame. (For CHC's with more than one user file, this count will be the total of **all** users in **all** files.) Divide that number by 40, and drop any digits after the decimal. The resulting whole number is

the sample "Take Every" (TE) number. (For, example, if the CHC frame has 2592 users, division by 40 yields 64.8. The TE number, therefore, is 64. The number 40 is used because that will produce the desired sample size of approximately 40.)

5. Determine a random "Start With" (SW) number by using a table or calculator with random numbers. Following instruction for random number selection, select a random number between 1 and the TE number. (For example, if the TE number is 64, the SW number may be any number from 1 to 64 inclusive.) If the sampling frame consists of more than one user list, determine a new random SW number for each list, but use the same TE number for all lists.

6. Select the User Sample by selecting the user with the SW number and each "TE"th user ID number thereafter. (For example, with a SW=20 and a TE=64, the sample will consist of user ID number 20 and every 64th number thereafter. i.e. user ID numbers 20, 84, 148, 212, 276,...)

7. Produce the User Sample List on both paper and diskette, including all sampled users in the order selected. The list should contain as much of the following information as available from the files. User's assigned ID Number, complete name, address, telephone number, date of birth, sex, medical record number, principal service site used, parents name if under age 18, date of last CHC visit, and provider seen.

B. Visit Sample Selection

The visit sample selection, like the user sample process, is straightforward once the sampling frame has been established. The frame must include all visits by all users in the user frame made to the CHC (including all eligible service sites), for medical care during the same calendar year used for the user sample frame. This may be a single file or visit log covering all service sites, or individual files for each service site. Regardless of the number of files, the sampling process is the same for each file. In CHC's with computer logs or files of visits, or users files that include information on their visits, the sampling specifications should be easily accomplished. In most instances, the instructions which follow should also be easily accomplished manually using non-computerized files of visits. If computerized files are not available, and it is not reasonable to follow the specifications for manual sample selection, Contractor supervisory personnel must be contacted to determine the best sampling plan for the particular CHC.

1. Develop the Visit Sampling Frame from the CHC Visit Logs or User file(s), by identifying all visits for medical care during the specified year.

2. Sort the visits in the Visit Frame by date of visit, from earliest to most recent date. Sort on time of day within date, if available. [For manual selection of visits, sorting

may not be feasible. In that case, the visit log or file will be used as available, without sorting.]

3. Assign a 6 digit "visit ID number" to each visit in the sampling frame in the sorted order, beginning with the number 00000 1. This number is used for sample selection and will serve as the ID number for the visit on all survey materials. [For manual sample selection, assignment of this number prior to sample selection is not necessary. After the sample has been selected, however, a 6 digit ID number must be assigned to each visit selected in the sample.]

4. Determine an exact count of all visits in the sampling frame. (For CHC's with more than one visit file, this count will be the total of all visits on all files.) Divide that number by 120, and drop any digits after the decimal. The resulting whole number is the sample "Take Every" (TE) number. (The number 120 is used because that will provide the desired sample size of approximately 120 visits.)

5. Determine a random "Start With" (SW) number by using a table or calculator with random numbers. Following instruction for random number selection, select a random number between 1 and the TE number. (For example, if the TE number is 100, the SW number may be any number from 1 to 100 inclusive.) If the sampling frame consists of more than one visit list, determine a new random SW number for each list, but use the same TE number for all lists.

6. Select the Visit Sample by selecting the visit with the SW number and each "TE"th user number thereafter. (For example, with a SW=30 and a TE=100, the sample will consist of visit number 30 and every 100th number thereafter. i.e. visit numbers 30, 130,230, 330,430 ,...)

7. Produce the Visit Sample List on both paper and diskette, showing all sampled visits in the order selected. (For ease of abstracting, the sample may be sorted on medical record number or in other order according to how the medical records are stored.) The paper copy of the list should contain as much of the following information as available from the files. The medical record number, assigned Visit ID Number, patient's complete name, date of visit, date of birth, sex, service site, diagnosis, services or procedures received. The diskette file should contain this information plus additional visit data when available for use in lieu of abstracting it from the medical record. The specific data items which may be included are designated in the Patient Record Abstract instructions.

Attachment 5.e

Patient Visit Abstract
(1994 NHAMCS Patient Record Form)

Department of Health and Human Services
Public Health Service,

417512

OMB No.
Expires:

NOTICE — Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section [illegible]. Public reporting burden for this phase of the survey is estimated to average [illegible] minutes per response. If you have any comments regarding the burden estimate or any other aspect of this survey, including suggestions for reducing this burden, send them to the PHS Reports Clearance Officer: Attn: PRA: HHH Building, Rm. 721-B; 200 Independence Ave., S.W., Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (, Washington, DC 20502.

1. PATIENT NAME

2. PATIENT RECORD NO.

3. DATE OF VISIT
Month / Day / Year

4. DATE OF BIRTH
Month / Day / Year

5. SEX
1 ☐ Female
2 ☐ Male

6. RACE
1 ☐ White
2 ☐ Black
3 ☐ Asian / Pacific Islander
4 ☐ American Indian / Eskimo / Aleut

7. ETHNICITY
1 ☐ Hispanic origin
2 ☐ Not Hispanic

8. EXPECTED SOURCE(S) OF PAYMENT *(Check all that apply)*
1 ☐ Private / commercial
2 ☐ Medicare
3 ☐ Medicaid
4 ☐ Other government
5 ☐ HMO/ other prepaid
6 ☐ Patient paid
7 ☐ No charge
8 ☐ Other

9. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?
1 ☐ Yes
2 ☐ No

10. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT
(In patient's own *words*)

a. Most important:

b. Other:

c. Other:

11. PHYSICIAN'S DIAGNOSES

a. Principal diagnosis / problem associated with item 10.a:

b. Other:

c. Other:

12. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE
1 ☐ Yes 2 ☐ No

If yes, for the condition in item 11 a?
1 ☐ Yes 2 ☐ No

13. TESTS, SURGICAL AND NONSURGICAL PROCEDURES, AND THERAPIES None ☐

a. SELECTED SERVICES *(Check all ordered or provided)*
1 ☐ Blood pressure
2 ☐ Urinalysis
3 ☐ Spirometry
4 ☐ Allergy testing
5 ☐ HIV serology
6 ☐ Other blood test

b. ALL OTHER SERVICES
Include:
- Tests
- Imagings
- Surgeries and other procedures
- Other therapies (such as contact lenses, psychotherapy, or physiotherapy)

Exclude:
- Services in item 13a
- Counseling / education
- Medications

(Record one on each line and check performed or ordered for each.)

		Performed	Ordered
1		☐	☐
2		☐	☐
3		☐	☐
4		☐	
5		☐	☐
6		☐	☐

14. COUNSELING/EDUCATION *(Check all ordered or provided)*
1 ☐ None
2 ☐ Exercise
3 ☐ Cholesterol reduction
4 ☐ Weight reduction
5 ☐ Smoking cessation
6 ☐ Growth / development
7 ☐ Injury prevention
8 ☐ HIV transmission
9 ☐ Other STD transmission
10 ☐ Other

15. MEDICATIONS / INJECTIONS None ☐

Include:
- Rx and OTC
- Immunizations
- Allergy shots
- Anesthetics
- Meds ordered, supplied, or administered
- New meds
- Continuing meds (with or without new orders)

1
2
3
4
5

16. DISPOSITION THIS VISIT *(Check all that apply)*
1 ☐ No follow-up planned
2 ☐ Return to clinic PRN
3 ☐ Return to clinic - appointment
4 ☐ Telephone follow-up planned
5 ☐ Return to referring physician
6 ☐ Refer to other physician/clinic
7 ☐ Admit to hospital
8 ☐ Other *(Specify)*

17. PROVIDERS SEEN THIS VISIT *(Check all that apply)*
1 ☐ Resident/Intern
2 ☐ Staff physician
2 ☐ Other physician
4 ☐ Physician assistant/ Nurse practitioner
5 ☐ Registered nurse
6 ☐ Licensed practical nurse
7 ☐ Nurse's aide
8 ☐ Other *(Specify)*

417512

Attachment 5.f

Patient Visit Abstract Detailed Instructions

CHC Patient Visit Abstract (PVA)

Detailed Instructions and Definitions

A. Patient Visit Sample Selection

1. What patient visits are included in sample

Patient visits included in the sampling frame are ALL visits to the CHC during the past year by persons who saw a doctor or other CHC staff for medical purposes. (The inclusion dates for the sample are specified for each CHC). Each visit selected in the sample represents a single visit to the CHC. The specific sample of visits to be abstracted is shown on the **Visit Sample List** along with selected information about the patient and visit. When retrieving data for a sampled visit from a medical record, care must be taken to assure that the proper visit is identified. Generally, the medical record number will be used to identify the proper patient medical record. This is discussed further below. In most cases, the date of visit will be sufficient to identify the proper visit within the medical record, since most patients will make only one visit in a day. In those cases where a patient has made more than one visit in a day, the appropriate sampled visit must be identified using other information included in the **Visit Sample List** such as, provider seen, location of visit, diagnosis or services provided. If it is not possible to distinguish among multiple visits on the same day, the first visit recorded in the record for the specified day is to be used as the sample visit. The person who actually provided medical care or services may be the doctor, nurse clinician, physician assistant (PA), nurse, nutritionist, or other provider staff as defined in the Bureau Common Reporting Requirements (BCRR).

When matching the **Visit Sample List** entry with a particular visit in a medical record, the following rules should be applied to assure an exact match:

Algorithm for Assuring Selection of Correct Patient Record and Visit

1. The **Visit Sample List** will include all or most of the following items for each patient visit to be abstracted:

   - Patients Name
   - Medical Record Number and/or patient registration or other unique identification number
   - Patient Date of Birth

- Patient Gender
- Date of Visit to be abstracted
- Information about the visit such as provider, diagnosis, services received

2. Pull the Medical Record corresponding to the medical record number on the list and check that the name on the record exactly matches the name on the list. Names must match exactly on first, middle and last names except that middle initial and middle name starting with the initial is acceptable. If the number and name match, this is the correct record to abstract. If either the name or number is. not an exact match, or one is missing, check the gender-and date of birth. If both the gender and date of birth match, then the record is the correct one to abstract. If either gender or date of birth does not match, then record does not match. If record cannot be matched, mark on the visit sample list "cannot match record", and go to the next listing.

3. Once the matching items positively identify a match, then open the chart and attempt to locate the progress, chronological or treatment notes for that visit based on the date of visit, providers and services.

4. If notes cannot be located in the record for the same date given on the Visit Sample List, mark on the list, "cannot match visit", and go to the next listing.

5. Once the correct visit in the correct record is identified, proceed with completing the Patient Visit Abstract.

B. Patient Visit Abstract

1. General

Information for the Patient Visit Abstract (PVA) will be abstracted from the patient's medical record or provided in electronic form from computer records. This will vary among CHC's depending on their computer records systems. Prior to beginning records abstraction, the field representative must determine which data items are available from computer records and which must be obtained by abstraction from the patient's medical record.

Those items marked with an * below ***may*** be obtained from computer files when available.

All items not available from the computer files and those not marked with an * must be abstracted from medical records. If an item to be abstracted is not available in the medical record, write "not available" **(N/A)** for that entry and go on.

2. Medical record number

The patient visit sample listing will serve as a control sheet for abstracting data for the Patient Visit Abstracts. The sample listing shows the patient name and medical record number. The first entry on the PVA must be the patient name and the medical record number recorded in the appropriate spaces on the top of the PVA exactly as they appear on the sample listing. It is extremely important that the medical record number be recorded exactly as shown on the sample listing. This number will be used in processing to link the computer generated patient data with the data abstracted from the medical record. When the medical record is pulled, its number and the patient name must exactly match the information entered on the PVA. If it does not, verify that the proper record has been pulled. If the proper record has been pulled and the numbers do not match, use the sample listing number on the PVA and continue with the data abstracting.

3. Explanation of Patient Visit Abstract Items

Instructions for each of the items on the Patient Visit Abstract are provided in numeric sequence on the following pages. Unless specified otherwise, the information recorded on the PVA pertains to ***"this visit",*** defined to be the visit being abstracted.

PATIENT VISIT ABSTRACT ITEMS

* 3 DATE OF VISIT

The month, day and year should be recorded in figures, for example, **5/17/94** for May 17, 1994.

* 4 DATE OF BIRTH

The month, day, and year of the patient's birth should be recorded here, in the same fashion as Date Of Visit above. In the rare event the date of birth is unknown, if age or indicators of age are available, the year of birth should be estimated as closely as possible.

For patients 100 years or older, record year as 18--.

* 5 SEX

Self-explanatory. In this and all other precoded questions, mark with an "X" rather than a check (√).

* 6 RACE

If the patient's race is not known, mark the "unknown" box.

Race	Definitions
1 white	A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
2 Black	A person having origins in any of the black racial groups of Africa.
3 Asian/Pacific Islander	A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.
4 American Indian/ Eskimo/Aleut	A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
5. Unknown	No information on race is available

* 7 ETHNICITY

If the patient's ethnicity is not known, mark the "unknown" box.

Ethnicity	Definitions

1 Hispanic Origin	A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, ***regardless of race.***
2 Not Hispanic	All other persons.
3. Unknown	Hispanic origin information not available

* 8 EXPECTED SOURCE(S) OF PAYMENT

Check the source or sources, that paid for ***the visit being abstracted.***

Source(s) of Payment	Definitions
1 Private/commercial	Charges paid in-part or in-full by a private insurance company. Include payments made directly to.the physician as well as payments reimbursed to the patient.
2 Medicare	Charges paid in-part or in-full by a Medicare plan. Includes payments directly to the physician as well as payments reimbursed to the patient. If charges are covered under a Medicare sponsored prepaid plan, mark this box ***and the*** prepaid plan box below.
3 Medicaid	Charges paid in-part or in-full by a Medicaid plan. Includes payments made directly to the physician as well as payments reimbursed to the patient.
4 Other government	Includes payments made under any other local, state, or Federal health care programs, such as worker 's compensation programs and CHAMPUS.
5 HMO/other prepaid	Charges included under a prepayment plan. Include Health Maintenance Organizations (HMOs), Independent Practice Associations (IPAs), Preferred Provider Organizations (PPOs), etc.

6 Patient paid	Charges, paid in-part or in-full by the patient or patient's family, which will not be reimbursed by a third party. Exclude prepaid plan visits for which no co-payment is charged. Mark one or more boxes if partial payment is expected from one or more third parties.
7 No Charge	Visits for which no fee is charged. Do not include visits paid for as part of a total care package, e.g., prepaid plan visits, post-operative visits included in a surgical fee, and pregnancy visits included in a flat fee charged for the entire pregnancy. Mark the box, or boxes, that indicate how the services were originally paid.
8 Other	Any other source of payment not covered in above categories.

9 WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN (*OR CLINIC*)?

This item provides an idea of the "flow" of ambulatory patients from one source of care to another. Mark the "Yes" or "No" category, as appropriate.

Notice that this item concerns referrals *to the* CHC; box 5 of Item 16 provides information concerning referrals ***by the*** CHC. The information applies to referrals for *this* visit and not to referrals for any prior visit. Referrals to the CHC are defined to be visits to the CHC that are made because of the advice or direction of someone other than the CHC staff.

10 PATIENT'S COMPLAINT(S), SYMPTOM(S) OR OTHER REASON(S) FOR THIS VISIT *(In patient's own words)*

This is one of the most important items on the Patient Visit Abstract. No similar data for visits to CHC's are available anywhere and there is tremendous interest in the findings. Take the time to find the patient's reason for visit, if it **is recorded in the record. Note the following.**

1 If available, record the patient's principal complaints, symptoms or other reason *as stated by the patient.* The physician may recognize right away, or may find out after examination, that the real problem is something entirely different, but in item 10 record how the patient defines his/her problem.

2 The item (like almost all other items on the Patient Visit Abstract) refers to *this visit.* Conceivably, the patient may be undergoing a course of treatment for a serious illness, but if his principal problem on this visit is a cut finger or a twisted ankle, the cut finger or twisted ankle is the information to be recorded.

3 While it is preferred that the complaint or symptom be described in the *patient's own words,* exact recording of patient's words is often not available in medical records. If not, enter the words written in the record to explain why the patient made the visit.

4 Do not record the diagnosis in this item unless that is the only information available, or, for example, the reason is expressed as "I'm here for check of my diabetes" (or other diagnosis).

5. Space has been allotted for both the "most important" and two "other" complaints, symptoms, and reasons mentioned by the patient. The most important should be entered in (a), and the other or others in (b) and (c). By "most important" is meant that problem or symptom which in the physician's judgment was most responsible for the patient making this visit. If it cannot be determined which is most important, list the reasons in the order given in the medical record.

6. There will, of course, be visits by patients for reasons other than some complaint or symptom. Examples might be:

annual checkup,	well baby check-up
routine prenatal care	school physical
postnatal care.	immunization

In such cases, simply enter in this item the *reason for the visit.*

11 PHYSICIAN'S DIAGNOSES

a. Principal diagnosis/ problem associated with item 10a.	*b.* Other	c. Other

Item *11a* refers to the diagnosis associated with the entry in Item 10a. How did the physician diagnose the most important complaint or symptom presented by the patient on this visit? The diagnosis may be tentative, provisional, or definitive; it should represent the physician's best judgment, expressed in acceptable medical terminology including "problem" terms.

If no complaint or symptom is given in Item 10a (e.g., annual check-up, routine prenatal care), and no diagnosis is made, enter "none. "

If a patient appears for *postoperative* care (follow-up visit after surgery), record the postoperative diagnosis as well as any other diagnosis associated with Item 10a. The postoperative diagnosis should be indicated with the letters (P.O.).

In contrast to most items on the form, Items 1 lb and 1 lc do not refer solely to this particular office visit. List in parts b and c diagnoses of *other medical conditions known to exist for this patient at the time of the visit,* regardless of their relationship to the current problem. These may be entered in the notes for this visit, or may be contained in a current problem list.

EXAMPLE

a. **Principal diagnosis/** problem associated with item 10a.	**Acute URI** (The condition which brought the patient to the physician's office on this visit)
b. **Other**	**Diabetes** (Other conditions previously diagnosed by the physician, either on this visit or in the past, and which still exist in the patient)
Other	**Hypertension**

* 12 HAS PATIENT BEEN SEEN IN THIS CLINIC ***(CHC)*** BEFORE?

"Seen" means "provided care for" at any time in the past. Check "Yes" if the patient was seen before by another physician or staff member in the CHC. This box will be checked "no" only when the visit being abstracted is the first visit recorded in the medical record.

If "No" (never saw patient before), mark that box and go on to Item 13.

If "Yes" is marked, also answer the ***sub-question: Has this patient been seen before for the condition diagnosed in Item lla?*** When answering the sub-question, the reference for acute conditions is to the same "episode" of the condition. To answer yes to this question, the patient must have been seen for the acute condition in the previous 30 days. For example, if the diagnosis is strep throat and the patient was seen several months ago for strep throat, these would likely be different episodes of the illness. Therefore, check "no", because the patient was **not** seen for the same condition. For chronic conditions (e.g. hypertension, diabetes), the references is any time in the past. For example, if the diagnosis is diabetes, check "yes" if the patient was ever seen in the CHC for diabetes. For medical records with problem lists, record "yes" if the diagnosis is on the problem list. For those without problem lists, review the record for visits over the prior two years only to see if the condition was treated before.. As a rule, if words like "follow-up" or "returning for.. " are used, check the box "yes". If these words are not used, look back at previous visits for the same acute condition 4 weeks. Look back for the same chronic condition two years.

13 TESTS, SURGICAL AND NONSURGICAL PROCEDURES, AND THERAPIES

a. Selected Services

Mark all services or procedures that were ordered or provided during ***this visit*** for the purpose of screening (i.e., early detection of health problems in asymptomatic individuals) or diagnosis (i.e., identification of health problems causing individuals to be symptomatic). During a visit for a complete physical exam, several of the services

may be ordered or provided. EACH SERVICE SHOULD BE MARKED.

b. All Other Services

Record any additional services in column (b). This includes:

1) Surgical and non-surgical procedures ordered or performed. Record the specific name of any ambulatory (outpatient) surgical procedure performed, ordered, or scheduled at the time of this visit. Routine surgical procedures (e.g. wound care) as well as more complex procedures (e. g . , cataract extraction, vasectomy, hernia repair, growth removal, etc.) should be reported. Any procedure designated in the CPT-4 (which physicians and their staffs will be familiar with) as a surgical procedure may be recorded.

2) Therapeutic services (non-me&cation therapy) ordered or performed. Examples include:

   Psychotherapy - All *treatments* designed to produce a mental or emotional response through suggestion, persuasion, re-education, reassurance or support; e.g., psychological counseling, hypnosis, psychoanalysis, transactional therapy.

   Corrective Lenses - Provision, ordering or prescription for glasses or contact lenses.

   Physiotherapy - Any form of physical therapy including treatments using heat, light, sound, or physical pressure or movement. For example: ultrasonic, ultraviolet, infrared, whirlpool, diathermy, cold and manipulative therapy.

3) Any other screening or diagnostic services not listed in column (a). This includes tests (e.g. EKG, mental status exam) and imaging (e.g. chest X-ray, MRI).

For each test, procedure or therapy listed in column (b), check mark (ü) the "Ordered" or "Performed" box to indicate if it was performed at this visit or ordered to be performed at a later date.

Do not include counseling, advice, educational services or medication. This information is collected in items 14 and 15.

If no tests, surgical or nonsurgical procedures, or therapies were ordered or performed, instruct the physician to check the "None" box.

The following are categories of procedures that would be included in the item 13b

Category	Specific Example
x-ray or other imaging	echocardiograph;, routine chest x-ray, mammogram, CAT scan of head, MRI of brain
incisions	I&D of abscess, incision of pilonidal cyst
excisions	excision of cyst from leg, dermabrasion
dressing	change bandage on wound
removal of ...	skin lesion, pseudophakos (i.e. lens implant), tympanostomy tube (ear tube), toenail
insertion of ...	IUD, bilateral breast implants
repairs	repair of retinal tear by laser, photocoagulation, suture of scalp wound laceration

biopsy	_	closed biopsy of breast, biopsy of skin lesion
endoscopy	_	gastroscopy , culposcopy , flexible sigmoidoscopy
... ectomy	_	vasectomy, upper eyelid rhytidectomy, tonsillectomy
...test	_	pap test, visual acuity test, stress test-treadmill
non-medicine RX	_	hearing aid Rx, contact lens Rx
exams	_	limited eye exam, general medical exam, gynecological exam
other		individual psychotherapy, audiometry

14 COUNSELING / EDUCATION

Check all appropriate boxes for any counseling, advice, education, instructions, or recommendations to the patient provided or ordered during the visit. Mark box 10 “Other Counseling” for all counseling involving a current or potential health problem not listed.

Exclude any form of medication since this will be collected in item 16.

Mark box 1 “None, " if no services were provided.

15 MEDICATION / INJECTIONS

List ***all*** medications (drugs, vitamins, hormones, ointments, suppositories) ordered, injected, administered or provided this visit, using either brand or generic names. When listing medications, include:

prescription and non-prescription medication;

injections

vaccinations;

immunization and allergy shots;

anesthetics

drugs and medications which the doctor ordered or provided, ***previous to this visit*** and ***instructs or expects the*** patient to ***continue*** taking.

Record the same specific drug name (brand or generic) recorded in the medical record.

Do not enter broad drug classes, such as "laxative," "cough preparation," or "analgesic", "antibiotic", cold tablet", birth control pills", etc. The one exception to this rule, is **"allergy shots" which is an acceptable entry.**

Limit entries to drug name only. Additional information such as dosage strength or regimen is ***not*** required.

If no medication was ordered or provided, mark the "None" box.

The following information is not requested and should not be entered on the PVA:

the number of pills prescribed,
the strength of the medication,
how ***frequently it is to be taken and***
how the medication is administered, ordered or provided

There is room for only 5 medications on the PVA (one on each line). When more than 5 are administered, provided or ordered, use the following guide:

List	Medications
1st	*those administered during the visit*
2nd	*those provided*
3rd	*those ordered*

until the 5 spaces are completed (only one entry per line). If this order is not known or cannot be determined, list the first 5 medications in the order given in the record.

* 16 DISPOSITION THIS VISIT

Eight codes are provided to describe the disposition of the case on this visit. Mark as many categories as apply.

Mark all categories that apply:

1 NO FOLLOW-UP PLANNED - No return visit or telephone contact is scheduled or planned for the patient's problem.

2 RETURN TO CLINIC, PRN - The patient is instructed to return to the clinic as needed.

3 RETURN TO CLINIC - APPOINTMENT - The patient is told to schedule an appointment or is given an appointment to return to the clinic at a particular time.

4 TELEPHONE FOLLOW-UP PLANNED - The patient is instructed to telephone the physician or other clinic staff on a particular day to report on his or her progress, or to call at any time if he or she has a problem or wishes further consultation, or a member of the hospital staff plans to call the patient to check on his or her condition.

5 RETURN TO REFERRING PHYSICIAN - The patient was referred to this clinic by his or her personal physician or some other physician and is now instructed to consult again with the physician who made the referral.

6 REFER TO OTHER PHYSICIAN/CLINIC - The patient is instructed to consult or seek care from another physician or clinic. The patient may or may not return to this physician or clinic at a later date.

7 ADMIT TO HOSPITAL - The patient is instructed that further care or treatment will be provided as an inpatient in the hospital.

8 OTHER, SPECIFY - Any other disposition of the case not included in the categories above. Any such "other" disposition should be described on the line provided.
For example, a patient who left before receiving treatment or who left against medical advice.

Item 17 - PROVIDERS SEEN THIS VISIT

Mark all providers seen during this visit. If care was provided, at least in part, by a person not represented in the seven categories, mark the "Other" box and specify the provider in the space underneath.

Attachment 6

Community Health Center User and Visit Survey

Patient Visit Abstract (PVA)

a) PVA (NHAMCS form modified)
b) PVA abbreviated instructions

Attachment 6.a

Patient Visit Abstract
(NHAMCS Form Modified)

Attachment 6.a

Patient Visit Abstract (Modified NHAMCS patient record form)

1. Patient Name _____ **2. Patient Record No.** _____

3. Date of Visit
___/___/___
month day year

4. Date of Birth
___/___/__
month day year

5. Sex
0 male
0 female

6. Ethnicity
0 Hispanic
0 Not Hispanic

7. RACE
0 White
0 Black
0 Asian/ Pacific
0 American Indian/
0 Eskimo/Aleut
0 Unknown
0 Unknown

8. **Expected Source of Payment**
0 Private / Commercial
0 HMO / prepaid
0 Medicare
0 **Medicaid**
0 wic
0 Other Government
0 Patient Paid
No Charge

9. Is Visit Injury Related?
0 Yes → answer a, b, c
0 No
a. Place of occurrence:
0 Home
0 **School**
0 **Athletics area**
0 Street / Hwy
0 Other: ____
b. Is injury work related?
0 **Yes**
0 No
0 Unknown
0 Unknown
c. Cause of injury
_____
_____
_____
_____

10. Patient's Complaint(s), Symptom(s), **or Other Reason(s) for Visit** *(In patients* **own words)**
a. Most important _____
b. Other _____
c. Other _____

11. Physician's Diagnoses 0 None
a. Principal Dx associated with 10.a
_____
b. Other _____
c. Other _____

12. Has Patient Been Seen in this CHC Before?
O yes 0 no
↓
If yes, for the condition in item 11.a?
0 yes 0 no

13. Diagnostic / Screening Services 0 None

EXAMINATIONS
0 Breast
0 Pelvic
0 Rectal
0 Visual Acuity
0 Mental Status
0 Other

TESTS
0 Blood Pressure
0 Urinalysis
0 TB Skin Test
0 Blood Lead Level
0 Cholesterol Measure
0 PSA
0 Mammogram
0 EKG
0 Strep test
0 Endoscopy
0 PAP
0 Pregnancy
0 HIV Serology
0 Other Blood Test
0 Other test _____

IMAGING
0 X-Ray
0 CAT Scan
0 MRI
0 Ultrasound
0 Other
0 All Other, specify
_____

14. Therapeutic and Preventive Services 0 None

COUNSELING / EDUCATION
0 Diet / nutrition
0 Exercise
0 Weight reduction
0 Cholesterol reduction
0 HIV transmission
0 Injury prevention
0 Tobacco use
0 Growth / development

0 Mental Health
0 Drug / Alcohol
0 Contraception
0 Other _____

OTHER THERAPY
0 psychotherapy
0 Corrective lenses
0 Physiotherapy
0 Ambulatory surgery
0 Other: _____

15. Medications / Injections 0 None

include: Rx and OTC, Immunizations, Allergy Shots, Anesthetics
Meds ordered, supplied, or administered
New meds, Continuing meds (with or without **new orders)**

1. _____
2. _____
3. _____
4. _____
5. _____

16. **Disposition this Visit**
0 No follow-up planned
0 Return to clinic, appointment
0 Telephone follow-up planned
0 Refer to other physician / clinic
0 Refer to WIC
0 Refer to dental clinic
0 Refer to Social services
0 Admit to hospital
0 Other _____

17. Providers seen this visit
0 Physician
0 Resident / Intern
0 Physician assistant/ Nurse practitioner
0 RN/LPN
0 Health Educator
0 Social Worker
0 Nutritionist
0 Medical assistant
0 Other _____

Attachment 6.b

Patient Visit Abstract
Abbreviated Instructions and Definitions

Attachment 6.b

Patient Visit Abstract (PVA) - Modified NHAMCS Patient Record
Abbreviated Instructions

Instructions for each of the items on the Patient Visit Abstract are provided in numeric sequence on the following pages. Unless specified otherwise, the information recorded on the PVA pertains to ***"this visit",*** defined to be the visit being abstracted. When marking a check box, use an "X" carefully placed in the center of the box.

Item 1 - Patient Name

Enter the patient's full name in this item. Enter Jr., Sr., etc. as necessary to assure correct identification of patient. To insure patient confidentiality, do not enter patient's name any other place on the form.

Item 2 - Medical Record Number

Enter the clinic's medical record number for the person listed in item 1. This number is needed to match the sampled visit with the patient's medical record.

Item 3 - Date of visit

Record the month, day and year of this visit in numerical figures. For example, May 17, 1995 should be entered as 5/17/95.

Item 4 - Date of Birth

Enter month, day and year of patient's birth in numerical figures as instructed for item 3. If date is not known, and cannot be determined from other sources in the CHC, estimate the year of birth as closely as possible. If patient is older than 99, enter year as 18--.

Item 5 - Sex

Place an 'x' in the proper box.

Item 6 - Race

Mark one box, which is most appropriate to indicate the patient's race. If not known, check the "unknown" box.

Item 7 - Ethnicity

Mark one box to indicate the patients ethnicity. If not known, check the "unknown" box.

Item 8 - Expected Source(s) of Payment

Check ***all*** *that apply*. Check the source, or sources, that will pay for any part of this visit. If both "HMO" and Medicaid (or Medicare) apply, check both boxes. "Other government" includes all state, local and federal agencies or programs not specifically listed in this item.

Item 9 - Is Visit Injury Related?

Check yes if the visit is the result of an injury, regardless of when the injury occurred. New injuries, follow-up visits for recent injuries, and flair-ups of old injuries should all be checked "yes" in this item. For all yes answers, complete parts a, b, and c. Check only *one* place of occurrence. If two places apply, check the one with box with the larger number. For example, an injury occurring on a school playground or in a school gym would be checked as occurring in an "athletic area". Cause of injury should name any object, or substance involved, and the circumstances of the injury Examples: fell off ladder, passenger in auto accident, swallowed cleaning fluid, eye injured with toy.

Item 10 - Patient's Complaint(s), Symptom(s), or Other Reason for This Visit

Record the patient's principal complaint, symptoms or other reason for this visit. Use the words expressed by the patient, when possible. ***Record in part a*** the most important reason for the visit (use your judgment based on the medical record). ***Record in parts b and c my*** other reasons. This information relates to the patients reasons for "this visit". A patient, for example, may have serious medical problems, but if an injured finger causes this visit, "injured finger" is the information to record in this item.. Do not record a diagnosis in this item since that information goes in item 11. Non-illness reasons are also recorded here, such as prenatal care visits, routing check-ups, well baby visits, etc.

Item 11 - Physician's Diagnosis

a. Principal Diagnosis associated with Item 10a

b. and c. Other

It is important that the distinction between **these** two items is understood. Part "a" refers to the diagnosis associated with **the** entry in item **10a:** How did **the** physician diagnose the most important complaint or symptom for **the** patient during **this** visit? -The diagnosis may be tentative or definitive; it **should** represent **the** best judgement at **this** time, expressed in standard medical terminology including "problem" terms.

If no complaint or symptom is given in item **10a** (e.g., annual **check-up, routine** prenatal care), and no diagnosis is made, enter none.

If a patient **appears** for postoperative care (follow-up visit after surgery), record the postoperative diagnosis as well as any **other** diagnosis associated **with** item **10a.** Indicate **the** postoperative diagnosis with the letters **(P.O.).**

In contrast to most items on the form, Items **1** lb-c do not refer solely to this **particular** visit. List here the diagnosis of **other conditions known to exist for this patient at this time,** regardless of their relationship to the present problem.

Example 1

a. Principal diagnosis/ problem associated with item 11a. Acute lumbosacral sprain → **the** condition which brought the patient to the clinic

b. Other Hypertension, benign

C. Other chronic alcoholism

} represent **other** conditions diagnosed by the outpatient department staff or any other physician, either during this visit or in the past, and which still exist in the patient

Example 2

a. Principal diagnosis/ problem associated with **item** 11a. Possible appendicitis → the condition **which brought the** patient to the clinic

b. Other Diabetes mellitus 3

c. Other Obesity

} represent other conditions diagnosed by the outpatient department staff on any other physician, either during **this** visit or in the past, and which **still** exist in the patient

In each of the preceding, diagnosis a) is the condition which brought the patient to **the** hospital on this visit, while b) and c) represent other conditions which have been diagnosed by the physician **either** on this visit or in the past, and which **still exist** in the patient.

Item 12- Has Patient Been Seen in This CHC Before?

This item is self-explanatory, and should be marked as appropriate. Note the sub-question for patients seen before. If "YES" is marked, indicating the patient was seen before in the CHC, it must be determined if the patient has been seen for the diagnosis in 1 la. For an acute condition, "Seen before" refers to the same episode of the condition. For a chronic condition, the patient was "seen before" if: a) the patient's "problem list" indicates the condition was identified sometime prior to the current visit, or b) if a visit for the same condition occurred within the last 2 years.

Item 13 - Diagnostic / Screening Services

Check ***all*** *applicable boxes* for all examinations, tests, or imagings performed or ordered at this visit. Any diagnostic or screening service performed or ordered that is not listed should be specified under the appropriate "other, specify" category. Specify the name of the service and ***not*** the CPT or other code for the service. If no services were provided or ordered at this visit, mark the "none" box in the upper left corner of this item.

Item 14 - Therapeutic and Preventive Services

Check ***all*** *applicable boxes* for any counseling, education, or therapeutic service ordered or provided at this visit. Any counseling, education, or therapeutic service performed or ordered that is not listed should be specified under the "other, specify" category. Specify the name of the service and ***not*** the CPT or other code for the service. w e r e provided or ordered at this visit, mark the "none" box in the upper left comer of this item.

Item 15 - Medications / Injections

List all medications (drugs, vitamins, hormones, ointments, suppositories, biologics) ordered, injected, administered or provided during this visit. Use either the brand or generic name as entered in the record. Include:

- prescription and over-the-counter medications
- immunizations
- allergy shots
- anesthetics
- drugs and medications which have been prescribed or provided previous to this visit which the patient is instructed or expected to continue taking

Be sure to follow these instructions:

- Record the specific drug name (brand or generic) written in the medical record or on the prescription
- Do not enter broad drug classes, such as “cough medicine”, laxative”, or “antibiotic”.
- Limit entry to medication name only. Information on dosage, regimen, etc. is **not** required.

Item 16 - Disposition this Visit

Check ***all*** *applicable boxes* to indicate the follow-up and referral plans determined at this visit. For any disposition plan not listed, check “other” and specify. Do **not** include in this item referrals for diagnostic or screening services. Referrals for such services are included in items 13 as services ordered during this visit.

Item 17 **- Providers seen this Visit**

Mark ***all*** *boxes that apply,* indicating all providers “seen” during this visit. “Seen” means that the person participated in some way with the care or treatment of the patient.

Attachment 7

Community Health Center User and Visit Survey

Data Analysis Plan

Attachment 7

Analysis and Publication Plan
CHC User and Visit Survey

SAMPLE RESEARCH QUESTIONS:

1. What are the demographic characteristics of the CHC user population, and how do they compare with the general population?

   User data tables: Number and percent distribution of users by age, sex, race, education, employment status, insurance coverage, and household characteristics (income, head, family size).

2. What are the health characteristics of the CHC user population, and how do they compare with the general population?

   User data tables: Number and percent distribution of users by disabilities, chronic conditions, impairments, risk factors, hospitalizations, self assessed health status, immunization status of children:

   Visit data tables: Number and percent distribution of Visits by principal Dx., presence of multiple Diagnosis; visit rates by demographic characteristics.

3. What are the general care-seeking practices of the user population?

   User data tables: Number and percent distribution of users by visit patterns to various service sites, regular source(s) of care. Characteristics of "regular" users versus occasional users of the CHC: by income, demographics, conditions, health status, insurance coverage.

4. What are the CHC utilization patterns of the "regular" user population, and how do they compare with the general population?

   Visit data tables: Number and percent distribution of visits by age, sex, payment source, income, various health status indicators. Visit rates by demographic characteristics, and source of payment.

5. What are the health behaviors, knowledge, attitudes of the users?

User data tables: Number and percent distribution of users by risk factors, diet, attitudes, exercise, knowledge of health factors.

6. How satisfied with the CHC services are the users?

User data tables: Number and percent distribution of users by waiting times, provision of adequate information and services, difficulties receiving care, reasons for using or not using CHC, complaints.

7. How well are the CHC's meeting the users needs?

User data tables: Number and percent distribution of users by use of CHC vs. other service sites, use of emergency room, referral patterns, childhood immunizations, prenatal visits, other preventive services.

8. What mix of services and patients are seen in CHC's?

Visit data tables: Number and percent distribution of visit by demographics, Dx., procedures, reasons for visit, providers seen, and disposition.

9. Are the types of providers appropriate for the mix of patient problems?

Visit data tables: Number and percent distribution of visits by type of provider according to Dx, reason for visit, referral patterns.

10. What is the extent of the need and use for special services by the users?

User data tables: Number and percent distribution of users by need for and use of outreach services, transportation, child care, language accommodation.