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This report describes the methods used in the 1992 National Ambulatory Medical Care Survey. This survey is based on data obtained from the national probability sample of visits to hospital emergency and outpatient departments.

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Cooperation of the U.S. Bureau of the Census

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the U.S. Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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Symbols

- - -	Data not available
. . .	Category not applicable
—	Quantity zero
0.0	Quantity more than zero but less than 0.05
Z	Quantity more than zero but less than 500 where numbers are rounded to thousands
*	Figure does not meet standard of reliability or precision

Plan and Operation of the National Hospital Ambulatory Medical Care Survey

by Linda F. McCaig, M.P.H. and Thomas McLemore, M.S.P.H., Division of Health Care Statistics

Introduction

In December 1991, the National Center for Health Statistics (NCHS) inaugurated the National Hospital Ambulatory Medical Care Survey (NHAMCS) to gather and disseminate information about the health care provided by hospital emergency and outpatient departments to the population of the United States. The purpose of this report is to describe the background and development of the NHAMCS and to provide the survey design and methodologies of the 1992 NHAMCS.

NCHS has authority under Section 306(b) (1) (F) of the Public Health Service Act (42 USC 242k) to collect data concerning the public's use of health care and services (see appendix I). Ambulatory care is the predominant method for the provision of health care services in the United States. In 1991 there were approximately 1.43 billion ambulatory visits in the United States (1). Ambulatory care is provided in a wide variety of settings. The largest proportion of the ambulatory care occurs in physicians' offices. Since 1973, NCHS has collected data on patient visits to physicians' offices through the National Ambulatory Medical Care Survey (NAMCS); however, visits to hospital emergency (ED) and outpatient departments (OPD), which represent the second largest segment of the ambulatory medical system, are not covered in the NAMCS (2). These health care settings accounted for an estimated 164 million visits in 1991. Furthermore, hospital ambulatory patients are known to differ from office patients in their demographic characteristics and are thought to differ in medical aspects as well (3). The omission of hospital ambulatory care from the ambulatory medical care database, therefore, has left a significant gap in coverage and limits the utility of the current NAMCS data. The NHAMCS is meant to fill this data gap and to respond to the increasing demand for more complete ambulatory medical care data.

This need for ambulatory care data has been accentuated by increasing efforts at cost containment, the rapidly aging population, the growing number of persons without health insurance, and the introduction of new medical technologies. As a result of these societal changes, there has been considerable diversification in the organization, financing, and delivery of ambulatory medical care.

In an attempt to address these and other issues, NCHS developed a plan to restructure its surveys of health care providers. Under this plan, the NAMCS, the National Hospital Discharge Survey (NHDS), the National Nursing Home Survey (NNHS), and the National Master Facility Inventory (NMFI) have been modified and expanded into an integrated National Health Care Survey (NHCS). One of the stated objectives of the NHCS is to expand coverage into health care providers and settings not previously surveyed. Included in these settings are hospital emergency and outpatient departments, ambulatory surgery centers, home health agencies, and hospices. At the request of NCHS, this plan to develop the NHCS was evaluated by a panel of experts convened by the National Academy of Sciences and the Institute of Medicine. The final report from the evaluation, *Toward a National Health Care Survey: A Data System for the 21st Century,* supported the original NCHS plan that included the development of a survey of hospital ambulatory medical care (4).

NOTE: This report describes the development and methods used in the 1992 National Hospital Ambulatory Medical Care Survey (NHAMCS). The design and execution of a large survey such as the NHAMCS could not have been accomplished without the participation of a large number of people. Many members of the staff of the National Center for Health Statistics (NCHS), in particular, James DeLozier (former Chief of the Ambulatory Care Statistics Branch, DHES) and Iris Shimizu (Office of Research and Methodology), and many others outside of NCHS, participated in the development of the NHAMCS. Private contractors, the National Opinion Research Center, and Westat, conducted feasibility studies and pilot tests of methods. The Bureau of the Census conducted the data collection for the 1992 study. Lastly, we are indebted to the sampled hospitals and their staffs as without their support and cooperation the NHAMCS could not have been successfully completed.

Background

The development of the NHAMCS actually began more than 15 years ago with the first of three major research projects to explore the expansion of the NAMCS into the hospital ambulatory care setting. In 1976, a study was conducted under contract with the National Opinion Research Center (NORC) to assess the feasibility of collecting data from hospital outpatient departments by applying then current NAMCS Patient Record forms and data collection methodologies: these methods included a 1-week reporting period using a prospective method of data collection where visits were sampled as they occurred and Patient Record forms were completed by the physicians and hospital staff near the time of the visit (5). This project demonstrated the feasibility of collecting data from these hospital settings and provided experience in hospital data collection, the use of endorsements, hospital induction procedures, and what to expect in terms of cooperation from hospitals and clinics. Results from this study included recommendations for changes in the Patient Record form and in hospital protocols. Numerous topics for additional study and testing were also recommended.

In 1984, a field test was conducted under contract with NORC to test several alternative data collection methodologies in the hospital ambulatory care setting (6). This study tested two methods of data collection, a retrospective approach in which data were abstracted from medical records and a prospective approach in which data were provided at or near the time of the encounter, and two lengths of data collection (2 and 4 weeks) in hospital emergency and outpatient departments. Data collected using these procedures were then compared with office-based data collected in the NAMCS. Results included a variety of survey design recommendations, including use of a multistage probability design, maintenance of both the prospective and retrospective methods of data collection, use of personal inductions of hospitals and clinics, and changes in the Patient Record form.

In 1989, a pilot study was conducted under contract with Westat to develop the national sample design, including the determination of the optimum number and allocation of the sampling units at each stage of sampling, the stratification variables, and the estimation and variance procedures (7). Methodological issues also addressed in this study included the specification of visit sampling procedures, the development of data validation and other quality control methods, and the evaluation of hospital and clinic sampling frames. Recommendations included the use of two of the four panels of the National Health Interview Survey (NHIS) sample of primary sampling units (PSUs) for the sampling frame; use of a four-stage design with a nonrotating sample of hospitals; stratification of hospitals by various indicators and the clinics by specialty area; and use of a 4-week data collection period.

Sample design

The 1992 NHAMCS included a national probability sample of visits to the emergency and outpatient departments of noninstitutional general and short-stay hospitals, exclusive of Federal, military, and Veterans Administration hospitals, located in the 50 States and the District of Columbia. The NHAMCS was designed to provide estimates based on the following priority of survey objectives: United States, region, emergency and outpatient departments, and type of ownership. The NHAMCS used a four-stage probability design with samples of PSUs, hospitals within PSUs, clinics within hospitals, and patient visits within clinics. A description of each stage of sampling is described in the following text.

Primary sampling units

The first-stage sample consisted of 112 PSUs, which comprised a probability subsample of the PSUs used in the 1985–94 NHIS. The NHAMCS PSU sample included with certainty the 26 NHIS PSUs with the largest populations. In addition, the NHAMCS sample included one-half of the next 26 largest PSUs and 1 PSU from each of the 73 PSU strata formed from the remaining PSUs for the NHIS sample. Procedures for selecting the NHIS PSU sample are summarized below.

The NHIS PSU sample was selected from approximately 1,900 geographically defined PSUs that covered the 50 States and the District of Columbia. A PSU consists of a county, a group of counties, county equivalents (such as parishes and independent cities), towns, townships, minor civil divisions (for some PSUs in New England), or a metropolitan statistical area (MSA). MSAs were defined by the U.S. Office of Management and Budget on the basis of the 1980 Census. The 1,900 PSUs were stratified by socioeconomic and demographic variables and then selected with a probability proportional to their size. Stratification was done within four geographical regions by MSA or non-MSA status. Based on data from the 1980 Census of Population, a computer program was used to minimize the between-PSU variance for the stratification variables. Because the PSUs were selected with a probability proportional to size, the largest PSUs in the United States were selected with certainty. Fifty-two PSUs were so selected and referred to as self-representing PSUs. The remaining PSUs, the non-self-representing PSUs, were combined into 73 strata and 2 PSUs were selected without replacement and with probability proportional to the projected 1985 population within each stratum. A detailed description of the 1985–94 NHIS PSU sample design is presented in a Vital and Health Statistics Series 2 report (8).

Hospitals

The sampling frame for the 1992 NHAMCS was compiled from the hospitals listed on the April 1991 SMG Hospital Market Database. Hospitals with an average length of stay for all patients of less than 30 days (short stay) or hospitals whose specialty was general (medical or surgical) or children's general were eligible for the NHAMCS. Excluded were Federal hospitals, hospital units of institutions, and hospitals with less than six beds staffed for patient use. The SMG Hospital Market Database contained 6,249 hospitals that met this eligibility criteria. Of the eligible hospitals, 5,582 (89 percent) had emergency departments (ED) and 5,654 (90 percent) had outpatient departments (OPD). Hospitals were defined to have an ED if the hospital file indicated the presence of such a unit or if the file indicated a non-zero number of visits to such a unit. A similar rule was used to define the presence of an OPD. Hospitals were classified into four classes: those with only an ED, those with an ED and an OPD, those with only an OPD, and those with neither an ED nor an OPD. Hospitals in the last class were considered as a separate stratum and a small sample (50 hospitals) was selected from this stratum to allow for estimation to the total universe of eligible hospitals and the opening and closing of EDs and OPDs in the sample hospitals.

All hospitals in non-certainty PSUs with five or fewer hospitals were selected with certainty. There were 149 hospitals in 55 PSUs in this category. In non-certainty PSUs with more than five hospitals, hospitals were stratified by hospital class; type of ownership (not-for-profit, non-Federal Government, and for-profit); and hospital size. Hospital size was measured by the combined volume of ED and OPD visits. From the stratified hospital list, five hospitals were selected in each PSU with probability proportional to the number of ED and OPD patient visits. A total of 161 hospitals was selected from this group. In the certainty PSUs, hospitals were stratified by region, hospital class, ownership, and size. From the stratified hospital list, 240 hospitals were selected based on probability proportional to the hospital size. A sample of 50 hospitals was selected from the 427 hospitals that had neither an ED nor an OPD.

The hospital selections were made so that each hospital would be chosen only once to avoid multiple inclusion of very

large hospitals. As shown in table A, a fixed panel of 600 hospitals was selected for the NHAMCS sample; 550 hospitals had an ED and/or an OPD and 50 hospitals had neither an ED nor an OPD.

To preclude hospitals participating during the same time period each year, the sample of 600 hospitals was randomly divided into 16 subsets of approximately equal size. Then each of the subsets was assigned to 1 of the 16 4-week reporting periods beginning December 2, 1991. Therefore, the entire sample does not participate in a given year and each hospital is inducted approximately once every 15 months.

The first three reporting periods were originally intended to be used as a pretest to allow field staff adequate time to familiarize themselves with the forms and procedures. After reviewing the data from these reporting periods, NCHS determined that the data were of sufficient quality to be retained. Hence, the 1992 NHAMCS included data collected from December 2, 1991, through December 27, 1992, and consisted of a sample of 524 hospitals. Subsequent annual samples will consist of 13 reporting periods in the calendar year. Of the 524 hospitals in the 1992 NHAMCS, 474 were in scope or eligible to participate in the survey. The hospital response rate for the NHAMCS during this period was 93 percent.

Outpatient clinics and emergency service areas

Within each hospital, either all outpatient clinics and emergency service areas or a sample of such units were selected. Clinics were in scope if ambulatory medical care was provided under the supervision of a physician and under the auspices of the hospital. Clinics were required to be "organized" in the sense that services were offered at established locations and schedules. Clinics where only ancillary services were provided or other settings in which physician services were not typically provided were out of scope. In addition, freestanding clinics were out of scope since they are included in the NAMCS; and ambulatory surgery centers, whether in hospitals or freestanding, were out of scope since they are to be included in the National Survey of Ambulatory Surgery that will be fielded in 1994. A list of in scope and out of scope clinics is provided in appendix II. The OPD clinic definition excluded the "hospital as landlord" arrangement in which the hospital only rented space to a physician group and was not otherwise involved in the delivery of services. These physicians are considered office-based and are currently included in the NAMCS. Emergency services provided under the "hospital as landlord" arrangement, however, were eligible for the study. An emergency department was in scope if it was staffed 24 hours a day. If an in scope emergency department had an emergency service area that was open less than 24 hours a day, then it was included under the emergency department. If a hospital had an emergency department that was staffed less than 24 hours a day, then it was considered an outpatient clinic.

Hospitals may define the term "separate clinic" differently, for example, by physical location within the hospital, by staff providing the services, by specialty or subspecialty, by schedules, or by patients' source of payment. Because of these differences, "separate clinics" in the NHAMCS were defined as the smallest administrative units for which the hospital kept patient volume statistics.

During the visit by a field representative to induct a hospital into the survey, a list of all emergency service areas and outpatient clinics was obtained from the sample hospital. Each outpatient department clinic's function, specialty, and expected number of visits during the assigned reporting period were also collected. If there were five or fewer clinic sampling units, then all were included in the sample. Approximately 20 percent of the hospitals had outpatient departments with more than five clinics. Generally, these hospitals had fewer than 20 clinics but several had more than 100 clinics. If a sample hospital had more than five clinic sampling units, then five units were randomly selected as follows. The individual clinics were listed first by five clinic categories: general medicine, surgery, pediatrics, obstetrics/gynecology, and other. During data processing, substance abuse clinics were removed from the "other" category and placed in a separate stratum. A listing of specific clinic types and their classification is presented in appendix II. Within each category, clinics were listed in order of clinic size—from smallest to largest. Clinic size was defined as the expected number of patient visits during the assigned 4-week reporting period. Within each clinic group, if a clinic expected fewer than 30 visits, it was grouped with one or more other clinics to form a sampling unit. Over 90 percent of the clinics were large enough to form their own sampling unit. After grouping the clinics into sampling units, five of these sampling units were selected based on probability proportional to the size of the sampling unit. If clinic sampling was required, the sampling was completed by Census headquarters staff in Washington, DC. The 1992 NHAMCS included 854 clinics from 314 outpatient departments.

The emergency department was treated as a separate stratum and all emergency service areas were selected with certainty. In the rare instance that a sample hospital had more than five emergency service areas, a sample of five emergency service areas was selected with probability proportional to the expected number of visits to each emergency service area. Only one hospital in the 1992 NHAMCS reported having more than five emergency service areas and required sampling. The 1992 NHAMCS included 462 emergency service areas from 437 emergency departments.

Table A. Number of hospitals in the National Hospital Ambulatory Medical Care Survey universe and sample

Hospital class	Universe	Sample[1]
Total	6,249	600
Emergency only	168	4
Emergency and outpatient	5,414	531
Outpatient only	240	15
Neither	427	50

[1]The 1992 NHAMCS sample consisted of 524 hospitals that were surveyed from December 2, 1991, throught December 27, 1992.

Visits

Within emergency service areas or outpatient department clinics, patient visits were systematically selected over a randomly assigned 4-week reporting period. A visit was defined as a direct, personal exchange between a patient and a physician, or a staff member acting under a physician's direction, for the purpose of seeking care and rendering health services. Visits solely for administrative purposes, such as payment of a bill, and visits in which no medical care was provided, such as visits to deliver a specimen, were out of scope.

The target numbers of Patient Record forms to be completed for EDs and OPDs were 50 and 150, respectively. In clinics with volumes higher than these desired figures, visits were sampled by a systematic procedure that selected every *nth* visit after a random start. Visit sampling rates were determined from the expected number of patients to be seen during the reporting period and the desired number of completed Patient Record forms. The Sampling Record (NHAMCS-101/S) was used by the field representative to summarize information necessary for clinic and visit sampling and a random start chart was provided on a preprinted label that was attached to the front of the form (see appendix III). This basic procedure was adapted, as necessary, to the recordkeeping systems of the particular hospitals. During the 1992 NHAMCS, Patient Record forms were completed for 36,271 ED visits and 35,114 OPD visits.

Original specifications for visit sampling called for a maximum sampling rate of 1 in 20 visits or a maximum of 500 visits, whichever yielded the smaller sample size. Field experience in the early part of the 1992 study indicated the potential for heavy respondent burden for clinics with high volume. Therefore, the maximum number of sampled visits was reduced to 200 and the sampling rates were increased accordingly.

Data collection procedures

The Bureau of the Census served as the data collection agent for the 1992 NHAMCS. Data collection and Patient Record forms used in the 1992 NHAMCS are shown in appendix III. Definitions of terms relating to the Patient Record forms are provided in appendix IV.

Field training

Census Headquarters staff were responsible for overseeing the data collection process and training the Census Regional Office staff. Regional Office staff were responsible for training the field representatives and monitoring hospital data collection activities. Field representatives inducted the hospitals and trained the hospital staff on visit sampling procedures and completion of the Patient Record forms. However, if hospital staff were unable to complete the forms, some field representatives had been trained to abstract the data. In selecting field representatives for the NHAMCS, every effort was made to choose experienced staff who had also worked on the NAMCS or the NHDS. These field representatives were most familiar with working with medical professionals and had an understanding of medical terminology and procedures.

Census Headquarters staff were responsible for writing the field manual, which contained the following:

- the purposes of the survey
- interviewing techniques
- a description of the NHAMCS induction questionnaire and related forms
- the procedures for inducting hospitals, conducting hospital visits, sampling clinics, determining the random start and take every numbers, instructing hospital staff, supervising patient visit sampling, editing completed forms, and retrieving missing data.

NHAMCS field representative training included both self-study and classroom training. The self-study took approximately 4 hours to complete and was used to introduce the field representatives to NHAMCS concepts and give a general overview of the NHAMCS forms and procedures. Classroom training was conducted in each of the 12 Census Regional Offices for 1½ to 2 days. The training covered the following topics: inducting hospitals, clinic sampling procedures, determination of the random start and take every numbers, instructing hospital staff, supervising patient visit sampling, editing completed forms, and retrieving missing data. While the classroom training provided a more detailed explanation and illustration of the forms and procedures, its major focus was on gaining hospital cooperation and selling the survey. The training utilized many interactive techniques such as role plays, practice interviews, and discussion groups. In many sessions, a NAMCS field representative also attended to point out obstacles in dealing with medical staff and suggestions for overcoming them.

Hospital induction

Approximately 3 months prior to the hospital's assigned reporting period, NCHS sent a personally signed introductory letter from the Director of NCHS to the hospital administrator or chief executive officer of each sampled hospital. The names of the hospital officials were obtained from the *American Hospital Association (AHA) Guide to Health Care.* The letter, which is shown in appendix V, described past ambulatory medical care surveys and the purpose of the present survey. In addition to the introductory letter, NCHS also enclosed endorsement letters from the AHA, the Emergency Nurses Association, and the American College of Emergency Physicians to emphasize the importance of the study to the medical community. These letters are shown in appendix VI.

Approximately a week after the mailing of the introductory letter, the Census field representative called the hospital administrator to arrange for an appointment to further explain the study and to verify hospital eligibility for the survey. Earlier studies indicated that the 3-month lead time was necessary to obtain a meeting with the administrator, gain hospital approval, collect the required information about the hospital's ambulatory care services, develop the sampling plan, and train participating hospital staff (6,7).

During the initial meeting with the administrator, the field representative explained the purpose of the survey, described the data collection methods and length of data collection, and obtained both general descriptive information about the organization of the emergency and outpatient departments and specific information needed to sample clinics within the hospitals. In most hospitals, the hospital administrator appointed another person to act as liaison or hospital coordinator to assist the field representative.

Information obtained by the field representative about the sample hospital was recorded on the NHAMCS-101 (see appendix III). The NHAMCS-101 contains several sections:

- the telephone screener
- the induction interview

- the emergency department description
- the outpatient department description
- the noninterview information
- the disposition and summary

This 11-page questionnaire was administered to screen sample hospitals, verify the hospital sampling frame information, induct the sample hospitals, and obtain emergency and outpatient department data. The field representative also completed an Ambulatory Unit Record (NHAMCS-101/U) for each clinic and emergency service area in the hospital, regardless of whether it was selected to participate or not, to collect information on the location, director, types of services provided, hours of operation, etc. If an ambulatory unit was eligible for the study, but was not selected to participate, only the first section was completed; if the unit was selected, all sections were completed.

Outpatient clinic and emergency service area induction

After the initial visit and the development of the sampling plan, the field representative contacted the hospital coordinator to arrange for induction of the sample emergency service areas and outpatient clinics and for instruction of the hospital staff. At these visits, the field representative described the purpose and use of the survey data and explained the data collection process, including the visit sampling procedures and instructions for completing the Patient Record forms.

Previous studies found that many clinics keep their own appointment logs, which can be used as the sampling frame for visits (6,7). If suitable logs were available, they were used to sample visits. In cases where such a log was not available, the field representative supplied the clinic with a NHAMCS-103 Patient Visit Log (see appendix III) that could be used to record patient names. In order to assure patient confidentiality, the NHAMCS-103 Patient Visit Log was not collected by the field representative at the end of the reporting period but was retained by the hospital. The field representative used the NHAMCS-124 Sampling and Information Booklet to determine the random starts and take every numbers for the clinics and emergency service areas (see appendix III).

Data collection

The actual visit sampling and data collection for the NHAMCS was primarily the responsibility of hospital staff. This procedure was chosen for several reasons. First, the lack of a standard form or record coversheet in hospitals and the individuality of the hospital recordkeeping made field representative training difficult. Second, for confidentiality reasons, numerous hospitals did not want the field representatives to review patient logs or see actual medical records. Third, hospital staffs were better qualified to abstract data since they were familiar with the medical terms and coding, knew the recordkeeping systems, and could complete the forms at or near the time of the visit when the information was the most complete and easiest to retrieve.

Patient visit data were recorded for each sample visit using either a prospective or retrospective data collection method. In the prospective approach, the hospital staff sampled patient visits and then completed the Patient Record forms (largely through observation) during or shortly after the sample visits. In the retrospective approach, hospital staff sampled visits after the patients were seen and then completed the Patient Record forms through medical record abstraction. Hospital staff responsible for completing these forms were instructed how to complete each item by the field representatives. Separate instruction booklets for emergency service areas and outpatient department clinics were prepared and provided to guide hospital staff in this task. These booklets provided an overview of the survey, sampling instructions, instructions for completing the Patient Record forms, and definitions.

A brief, one-page Patient Record form consisting of two sections was completed for each sample visit. To account for the differences in emergency and outpatient care, different Patient Record forms were developed for each of these settings. The top section of both forms, which contain the patient's name and patient record number, was separated from the bottom section by a perforation running across the page. The top section of the form remained attached to the bottom until the entire form was completed. To ensure confidentiality, before collecting the completed Patient Record forms, the top section was detached and given to the hospital staff. The field representatives instructed hospital staff to keep this portion for a period of 4 weeks, in case it was necessary to clarify recorded information or retrieve missing data.

The bottom section of the Patient Record form consisted of either 18 (for the outpatient department clinics) or 19 (for the emergency service areas) items about the patient's demographic characteristics and specific information about the visit, including the patient's reason for visit and physician's diagnoses. These Patient Record forms were patterned after the NAMCS and can be completed in 2 to 3 minutes. The OPD Patient Record form most closely resembles the NAMCS form, while the ED Patient Record form has been designed to reflect the type of care provided in that setting. Copies of the 1992 NHAMCS Patient Record forms are shown in appendix III. Terms and definitions relating to the Patient Record forms are shown in appendix IV.

Each sample unit received a supply of the Patient Record forms that were uniquely assigned to that unit. The Patient Record forms were contained in the NHAMCS folio, a soft cover folder. The forms and folioes were color-coded, yellow for emergency service areas in emergency departments and blue for outpatient department clinics to aid in field operations.

Field quality control

The field representative visited the sampled emergency service areas and clinics each week during the data collection period and maintained telephone contact with the hospital staff involved in the data collection effort. These visits were documented on the NHAMCS-101/U. An essential part of this

documented on the NHAMCS-101/U. An essential part of this effort focussed on the completeness of the patient sampling frame, adherence to the sampling procedures, and assurance that a Patient Record form was completely filled out for every sample patient visit. The field representative reviewed the log or other records used for visit sampling to determine if any cases were missing and also edited completed forms for missing data. Attempts were made to retrieve both missing cases and missing data on specific cases, either by consulting with the appropriate hospital staff or by reviewing the pertinent medical records. A record of this retrieval effort was also made on the NHAMCS-131 Edit Checklist.

On the final visit, the field representative collected the remaining Patient Record forms and obtained or verified the total count of visits occurring during the reporting period by reviewing the log used for sample selection or by obtaining counts directly from hospital staff. Because this information was critical to the estimation process, extensive effort was made to ensure the accuracy of this number.

Additionally, during the first three reporting periods, a short Debriefing Form, NHAMCS-133, was administered to the hospital staff involved in data collection. Staff were instructed to return these forms in a pre-addressed envelope that was provided. Several problems and suggestions provided on this form were used to revise materials and procedures for the remainder of the 1992 NHAMCS.

At the end of the hospital's reporting period, the field representative sent the administrator a personalized "Thank you" letter. A "Thank you" letter was developed during the survey year for distribution to other participating hospital staff. These letters are shown in appendix VII.

Confidentiality

Assurance of confidentiality was provided to all hospitals according to Section 308 (d) of the Public Health Service Act (42 USC 242m). Strict procedures were utilized to prevent disclosure of NHAMCS data. All information that could identify the hospital or their facilities was confidential and was seen only by persons engaged in the NHAMCS and was not disclosed or released to others for any other purpose. Names or other identifying information for individual patients were not removed from the hospitals or individual facilities.

Data processing

Medical and drug coding

Data from the 1992 NHAMCS were coded by trained medical coding personnel from the Division of Data Processing at the NCHS computer facility in Research Triangle Park, North Carolina. Information contained in item 10 of the OPD and item 11 of the ED Patient Record forms ("Patient's complaint(s), symptom(s), or other reason(s) for this visit") were coded according to *A Reason for Visit Classification for Ambulatory Care* (RVC) (9). The physician's diagnoses (item 11 of the OPD and item 12 of the ED Patient Record forms) were coded according to the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (10). Item 10 of the ED Patient Record form ("Cause of injury") was coded according to the ICD–9–CM Supplemental Classification of External Causes of Injury and Poisoning (E–codes). A maximum of three entries was coded from each of these items.

The NHAMCS medication data (item 16 of the OPD and item 17 of the ED Patient Record forms) were coded and classified according to a scheme developed at NCHS based on the American Society of Hospital Pharmacists' Drug Product Information File, which is maintained by the American Druggist Blue Book Data Center. A maximum of five drug entries was coded for this item. A description of the drug coding scheme has been published (11).

Edits

In addition to followups for missing and inconsistent data made by the field staff, numerous clerical edits were performed on data received for central data processing. Detailed editing instructions were provided to manually review the Patient Records forms and to reclassify or recode "other" entries. Computer edits for code ranges and inconsistencies were also performed.

Quality control

All medical and drug coding and keying operations were subject to quality control procedures. Quality control for the medical and drug coding operation, as well as straight-key items, involved a two-way 10-percent independent verification procedure. As an additional quality control, all Patient Record forms with differences between coders or with illegible entries for the reason for visit, diagnosis, E–code, and medication items were reviewed and adjudicated at NCHS. The average keying error rate for nonmedical items was 0.5 percent. For items that required medical coding, discrepancy rates averaged less than 5 percent.

Imputations

Item nonresponse was quite low, 3 percent or less, for all data items with the following exceptions: race (8 percent), ethnicity (15 percent), whether the patient had been seen previously for the same condition, item 12 on the OPD form (7 percent), and whether the visit was alcohol- or drug-related, item 14 on the ED form (8 percent). Incomplete data items were imputed using a "hot deck" procedure by assigning a value from a randomly selected Patient Record form with similar characteristics. For item 13 (urgency) on the ED Patient Record form, the sorting used was ED size by the 3-digit ICD–9–CM code for principal diagnosis. For other ED variables—item 4 (date of birth), item 5 (sex), item 6 (race), item 7 (ethnicity), item 14 (problem alcohol- or drug-related), item 18 (disposition), and item 19 (providers)—the sort used was ED size by urgency by the 3-digit ICD–9–CM code for principal diagnosis. ED size was determined from the entry on the NHAMCS-101/U. For the OPD, imputation procedures were performed for the following variables: item 4 (date of birth), item 5 (sex), item 6 (race), item 7 (ethnicity), item 9 (referral), item 12 (patient seen before), item 17 (disposition), and item 18 (providers). The sorting used was OPD size by clinic type by the 3-digit ICD–9–CM code for principal diagnosis. OPD size was determined from the entry on the NHAMCS-101/U, and clinic type used the following categories: general medicine, surgery, pediatrics, obstetrics/gynecology, substance abuse, and other. Records with imputed variables were flagged on the public-use data tape.

Estimation procedures

The probability sample design of the NHAMCS allowed the sample data to be weighted to produce national estimates for the United States. Unweighted data are not used for analysis as unweighted data ignore the disproportionate sampling used in the NHAMCS.

Statistics from the NHAMCS were derived by a multistage estimation procedure that produces essentially unbiased national estimates. Separate national estimates were produced for visits to hospital emergency and outpatient departments. The weight included three basic components: inflation by reciprocals of the probabilities of selection, adjustment for nonresponse, and ratio adjustment to fixed totals. Each component is briefly described in the following text.

Inflation by reciprocals of probabilities of selection

Because the survey utilized a four-stage sample design, four probabilities of selection existed: the probability of selecting the PSU; the probability of selecting the hospital within the PSU; the probability of selecting the emergency service area or outpatient clinic within the hospital; and the probability of selecting the visit within the particular emergency service area or clinic. The overall probability of including a hospital in the sample was the product of the probability of the PSU being selected multiplied by the probability of the hospital being selected. The probability of selecting the hospital was 1.0 for hospitals in noncertainty PSUs with fewer than five hospitals and was the hospital size divided by a sampling interval for all other hospitals. The sampling intervals for PSUs with more than five hospitals was the cumulative sum of the hospital sizes (the total of ED and OPD visits) in each PSU divided by five. The sampling interval for the certainty PSUs was the cumulative sum of all of the hospitals in these PSUs divided by 240.

The probability of selecting a clinic within a hospital was 1.0 for clinics in hospitals with five or fewer clinics and was the clinic size divided by the sampling interval for clinics in hospitals with more than five clinics. The sampling interval was defined to be the cumulative sum of sizes for the clinics (the expected number of visits during the reporting period) in the hospital divided by five.

The probability of selecting a visit was defined as the actual number of visits during the hospital's assigned reporting period divided by the number of Patient Record forms completed. Estimates were adjusted to account for the extended data collection period for the 1992 survey, which included 14 4-week reporting periods from December 2, 1991, through December 27, 1992. Subsequent survey years will include 13 4-week reporting periods that will be inflated to derive annual estimates.

Adjustment for nonresponse

Estimates from NHAMCS data were adjusted to account for sample units that were in scope but did not participate in the study. These adjustments were calculated to minimize the impact of nonresponse on final estimates by imputing to nonresponding units the characteristics of similar responding units. As nonresponse may occur at each stage of sampling, several adjustments were required. For these adjustments, hospitals were judged similar if they had the same ownership and were in the same PSU or region and MSA status. Clinics were judged similar if they were of the same clinic type and were in the same PSU. Visits were judged similar if they occurred in the same clinic.

Ratio adjustment

NHAMCS estimates were adjusted within 12 strata defined by region and ownership. Separate poststratification adjustments were made for emergency and outpatient department estimates. For ED estimates, the ratio adjustment for each stratum was a multiplication factor that had as its numerator the number of ED visits in the universe in the stratum and as its denominator the estimated number of ED visits in that stratum. For OPD estimates, the ratio adjustment for each stratum was a multiplication factor that had as its numerator the number of hospitals with an OPD in the universe in the stratum and as its denominator the estimated number of hospitals with OPDs in that stratum. The data for the numerator and denominator of both adjustments were based on figures from the SMG Hospital Market Database.

Reliability of estimates

Because statistics from the NHAMCS are based on a sample, they may differ somewhat from the figures that would be obtained if a complete census were taken using the same forms, definitions, instructions, and procedures. However, the probability design of NHAMCS permitted the calculation of sampling errors. The standard error is primarily a measure of sampling variability that occurs by chance because only a sample rather than the entire population is surveyed. The standard error, as calculated for the NHAMCS, also reflected part of the variation that arises in the measurement process, but does not include estimates of any systematic biases that may be in the data. The relative standard error (RSE) of an estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. Generally, an asterisk (*) is used to indicate any estimate with more than a 30-percent relative standard error.

In repeated samples using the same forms and procedures, the chances are about 68 of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 of 100 that the difference would be less than twice the standard error and about 99 of 100 that it would be less than 2½ times as large.

Estimation of standard errors

Estimates of sampling variability for the 1992 NHAMCS data presented in NCHS publications are computed using a first-order Taylor Series approximation of the deviation of estimates from their expected values. The SUDAAN software is used to compute the standard errors. A description of this software and the approach it uses has been published (12).

Standard error approximations

The SUDAAN procedure can be used to compute directly the standard errors and relative standard errors for NHAMCS estimates. However, this procedure is not practical or feasible for all users of the data. Therefore, a generalized procedure for approximating the relative standard errors for the NHAMCS estimates was developed.

Relative standard errors were computed for estimates in the *Advance Data* reports on emergency and outpatient departments (13,14). Regression techniques were then used to produce equations from which a standard error for any estimate may be approximated. These regression equations, represented by parameters a and b, are shown in table B. Separate equations are presented for estimates of visits and drug mentions. Rules explaining the use of these equations are presented in the following section.

Table B. Coefficients for use in the approximate standard error equations for the National Hospital Ambulatory Medical Care Survey, by type of service area: United States, 1992

	Visits		*Drug mentions*	
Type of service area	*a*	*b*	*a*	*b*
Emergency department	0.00158	5,040.5	0.00235	5,142.9
Outpatient department	0.00912	7,516.5	0.01395	5,519.1

To derive error estimates that would be applicable to a wide variety of statistics and could be prepared at moderate cost, several approximations were required. As a result, standard errors computed using this procedure should be interpreted as approximate rather than exact for any specific estimate. The coefficient of determination (r^2) for the ED and OPD visit equations are .62 and .43, respectively, and for the ED and OPD drug mention equations are .82 and .57, respectively. Particular attention should be exercised when the estimate of interest is small or when this procedure is used for estimates based on the American Indian/Eskimo/Aleut or Asian/Pacific Islander race categories. Further, because of the small number of cases in each category, these estimates do not apply to estimates of ambulatory surgical procedures.

Standard error applications

Estimates of standard errors for aggregate estimates

The approximate standard errors for estimates of the number of visits (drug mentions) with a particular characteristic may be computed using the following formula, where x is the aggregate estimate of interest and a and b are the appropriate parameters from table B.

$$SE(x) = \sqrt{ax^2+bx}$$

The approximate relative standard error for the estimated number of visits (drug mentions) with a particular characteristic may be computed as follows:

$$RSE(x) = \sqrt{a+\frac{b}{x}}$$

Estimates of rates where the denominator is assumed to have negligible error

The approximate relative standard error for a rate in which the denominator is the total United States population or one or more of the age-sex-race groups of the total population is equivalent to the relative standard error of the numerator that can be obtained using the relative standard error formula above and appropriate parameters from table B. The standard error is then given by:

$$SE(r) = r\ RSE(r)$$

The population figures used in computing annual rates are based on the July 1, 1992, estimates of the civilian, noninstitutionalized population of the United States and are shown in table C.

Estimates of standard errors of percentages where both the numerator and denominator are estimated from the same sample

Approximate relative standard errors (in percent) for estimates of percentages may be computed using the appropriate relative standard errors for the aggregate statistics as follows. Obtain the relative standard error of the numerator and denominator of the percent. Square each of the relative standard errors, subtract the resulting value for the denominator from the resulting value for the numerator, extract the square root, and multiply by 100.

$$RSE(p) = RSE\ (x/y) = 100\sqrt{RSE^2\ (x) + RSE^2\ (y)}$$

Alternatively, approximate relative standard errors (in percent) for estimates of percentages may be computed using the following formula, where p is the percentage of interest and y is the denominator of the percentage using the appropriate parameter from table B.

$$RSE(p) = 100\sqrt{\frac{b\ (1-p)}{p\ y}}$$

For standard errors, the appropriate formula is:

$$SE(p) = \sqrt{\frac{b\ p\ (1-p)}{y}}$$

The approximation of the absolute or relative standard error is valid if the relative standard error of the denominator is less than 0.05 (15) or if the relative standard errors of the numerator and denominator are both less than 0.10 (16).

Estimates of rates ($r = x/y$) where numerator is not a subclass of denominator

The standard error for a rate may be approximated by:

$$RSE(r) = RSE\ (x/y) = 100\sqrt{RSE^2\ (x) + RSE^2\ (y)}$$

$$SE(r) = r\ RSE(r)$$

This approximation is valid if the relative standard error of the denominator is less than 0.05 (15) or if the relative standard errors of the numerator and denominator are both less than 0.10 (16).

Estimates of differences between two statistics

The standard error of the difference between two statistics is approximated by:

$$SE(x_1 - x_2) = \sqrt{SE^2\ (x_1) + SE^2\ (x_2)}$$

where $SE(x_1)$ and $SE(x_2)$ are computed using the appropriate directions.

This formulation represents the standard error for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in most other cases.

In analysis of the NHAMCS data, the determination of statistical inference is generally based on the t-test. The Bonferroni inequality is used to establish the critical value for statistically significant differences (0.05 level of significance)

Table C. Estimates of the civilian noninstitutionalized population, by selected demographic characteristics: United States, 1992

Characteristic	All ages	Less than 15 years	15–24 years	25–44 years	45–64 years	65–74 years	75 years and over
Race and sex:							
All races	251,448,459	56,442,611	34,384,602	81,328,380	48,501,115	18,469,880	12,321,871
Male	122,187,479	28,891,742	17,097,767	39,999,651	23,305,965	8,275,207	4,617,147
Female	129,260,980	27,550,869	17,286,835	41,328,729	25,195,150	10,194,673	7,704,724
White	209,464,504	44;985,523	27,479,788	67,716,634	41,743,184	16,385,982	11,153,393
Male	102,413,873	23,046,144	13,776,312	33,733,182	20,299,022	7,375,023	4,184,190
Female	107,050,631	21,939,379	13,703,476	33,983,452	21,444,162	9,010,959	6,969,203
Black	31,461,180	8,954,786	5,100,047	9,795,332	4,989,293	1,643,778	977,944
Male	14,722,087	4,555,607	2,450,005	4,424,866	2,227,631	711,472	352,506
Female	16,739,093	4,399,179	2,650,042	5,370,466	2,761,662	932,306	625,438
Other	10,522,775	2,502,302	1,804,767	3,816,414	1,768,638	440,120	190,534
Male	5,051,519	1,289,991	871,450	1,841,603	779,312	188,712	80,451
Female	5,471,256	1,212,311	933,317	1,974,811	989,326	251,408	110,083
Geographic region:							
Northeast	50,000,327	...	...	...	...	...	...
Midwest	61,472,387	...	...	...	...	...	...
South	84,419,002	...	...	...	...	...	...
West	55,556,743	...	...	...	...	...	...

when more than one test is performed simultaneously. Terms relating to differences such as "greater than" and "less than" indicate that the differences are statistically significant. Terms such as "similar" or "no difference" mean that no statistical significance exists between the estimates being compared. A lack of comment regarding the difference between any two estimates does not mean that the difference was tested and found to be not significant.

Nonsampling error

Estimates based on the 1992 NHAMCS are subject to nonsampling as well as sampling errors. Nonsampling errors include reporting and processing errors, as well as biases due to nonresponse or incomplete response. Although the magnitude of the nonsampling errors cannot be computed, these errors are kept to a minimum by procedures built into the operation of the survey. To eliminate ambiguities and encourage uniform reporting, careful attention was given to the phrasing of questions, terms, and definitions. Also, extensive pretesting of most data items and survey procedures was performed. The steps taken to reduce bias in the data are discussed in the sections on field procedures and data collection. Quality control procedures and consistency and edit checks discussed in the data processing section reduced errors in data coding and processing. Because survey results are subject to sampling and nonsampling errors, the total error will be larger than the error due to sampling variability alone.

Data dissemination

Analysis of the NCHS ambulatory medical care data will be of two general types: descriptive analyses of the content of hospital ambulatory medical care and comparative analyses of the content of ambulatory medical care provided in the hospital and office settings. The initial *Advance Data* reports summarizing the NHAMCS emergency and outpatient department data have been published (13,14). Descriptive, analytical, and methodological reports will be published in *Vital and Health Statistics,* Series 1, 2, and 13. Brief reports on topics of special interest will be published in *Advance Data From Vital and Health Statistics.* Information may also be presented in journal articles and in papers presented at professional meetings. As resources permit, special tabulations and analyses will be provided to data requestors inside and outside the Federal Government.

For each data year, a public-use data tape and data tape documentation will be prepared for distribution through the National Technical Information Service (NTIS). The public-use data tape for the 1992 NHAMCS is scheduled for release in the summer of 1994. There are also plans to release NHAMCS data on diskette and CD-ROM using the Statistical Export and Tabulation System (SETS) database software. *The Catalog of Publications, Catalog of Electronic Data Products,* and *Catalog of Public-Use Data Tapes* may be obtained from the Data Dissemination Branch, National Center for Health Statistics, 6525 Belcrest Road, Room 1064, Hyattsville, Maryland 20782, (301) 436-8500.

1993–94 National Hospital Ambulatory Medical Care Survey

A number of refinements were made to the 1992 NHAMCS procedures for the 1993–94 survey. These included:

- revising the Patient Record forms (appendix VIII)
- adjusting the sampling procedures so that the maximum target sample size for the outpatient department was 200, rather than 500
- creating a "Thank you" letter for participating hospital staff
- developing a semiautomated process for sampling that utilizes a Lotus 123 spreadsheet to input clinics, list them, total the visits, select an initial interval for sampling, and choose random number starts.

In addition, several of the data collection forms were revised, eliminated, or combined. Due to the burdensome and unnecessary task of completing the Ambulatory Unit Record (NHAMCS-101/U) for each unit, procedures for the 1993–94 NHAMCS were revised so that NHAMCS 101/U's were completed only for units that were selected rather than on all units. Because much of the information on the NHAMCS-101/S is collected elsewhere, the Sampling Record was eliminated for the 1993 NHAMCS.

Methods for field representative training were revised and in November 1992 a refresher training was held at four regional sites, combining staff from three regional offices into one site and integrating parts of the training with the NAMCS field representatives. To aid this training, booklets were prepared to address definitions of clinics and of common medical terms.

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Appendixes

Appendix I
Legislative authorization

Public Health Service Act
Section 306 (a) & (b)

NATIONAL CENTER FOR HEALTH STATISTICS

Sec. 306. [242k] (a) There is established in the Department of Health and Human Services the National Center for Health Statistics (hereinafter in this section referred to as the "Center") which shall be under the direction of a Director who shall be appointed by the Secretary and supervised by the Assistant Secretary for Health (or such officer of the Department as may be designated by the Secretary as the principal adviser to him for health programs).

(b) In carrying out section 304(a), the Secretary, acting through the Center -

(1) shall collect statistics on-

(A) the extent and nature of illness and disability of the population of the United States (or any groupings of people included in the population), including life expectancy, the incidence of various acute and chronic illnesses, and infant and maternal morbidity and mortality,

(B) the impact of illness and disability of the population on the economy of the United States and on other aspects of the well-being of its population (or of such groupings),

(C) environmental, social, and other health hazards,

(D) determinants of health,

(E) health resources, including physicians, dentists, nurses, and other health professionals by specialty and type of practice and supply of services by hospitals, extended care facilities, home health agencies, and other health institutions,

(F) utilization of health care, including utilization of (i) ambulatory health services by specialties and type of practice of health professionals providing such service, and (ii) services of hospitals, extended care facilities, home health agencies, and other institutions,

(G) health care costs and financing, including the trends in health care prices and costs, the sources of payments for health care services, and Federal, State, and local governmental expenditures for health care services, and

(H) family formation, growth, and dissolution;

(2) shall undertake and support (by grant or contract) research, demonstrations, and evaluations respecting new or improved methods for obtaining current data on the matters referred to in a paragraph (1);

(3) may undertake and support (by grant or contract) epidemiologic research, demonstrations, and evaluations on the matters referred to in paragraph (1); and ...."

(4) may collect, furnish, tabulate, and analyze statistics, and prepare studies, on matters referred to in paragraph (1) upon request of public and nonprofit entities under arrangements under which the entities will pay the cost of the service provided.

Amounts appropriated to the Secretary from payments made under arrangements made under paragraph (4) shall be available to the Secretary for obligation until expended.

Appendix II
Definitions of certain terms used in the survey

Patient—An individual seeking personal health services not currently admitted to any health care institution on the premises. A person under a physician's care for health reasons. Patients are defined as in scope or out of scope as follows:

- *In scope*—A patient seen by hospital staff in an in scope emergency service area or clinic except as excluded below.
- *Out of scope*—Patients seen by a physician in their private office, nursing home, or other extended care institution or in the patient's home. Patients who contact and receive advice from hospital staff via telephone. Patients who come to the hospital only to leave a specimen, to pick up insurance forms, to pick up medication, or to pay a bill.

Visit—A visit is a direct, personal exchange between an ambulatory patient and a physician or other health care provider working under the physician's supervision, for the purpose of seeking care and receiving personal health services.

Drug mention—The entry of a pharmaceutical agent ordered or provided by any route of administration for prevention, diagnosis, or treatment. Generic as well as brand name drugs are included, as are nonprescription as well as prescription drugs. Along with all new drugs, the hospital staff also records continued medication if the patient was specifically instructed during the visit to continue the medication.

Hospital—All hospitals with an average length of stay for all patients of less than 30 days (short stay) or hospital whose specialty is general (medical or surgical) or children's general are eligible for the National Hospital Ambulatory Medical Care Survey, except Federal hospitals and hospital units of institutions and hospitals with less than six beds staffed for patient use.

Ownership—Hospitals are designated according to the primary owner of the hospital based on the SMG Hospital Market Database.

- *Voluntary nonprofit*—Hospitals operated by a church or another nonprofit organization.
- *Government, non-Federal*—Hospitals operated by State or local governments.
- *Proprietary*—Hospitals operated by individuals, partnerships, or corporations for profit.

Urbanicity—Hospitals are classified by their location in a metropolitan or nonmetropolitan area.

- *Metropolitan*—Metropolitan Statistical Area (MSAs) as defined by the U.S. Office of Management and Budget. The definition of an individual MSA involves two considerations: first, a city or cities of specified population that constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with "contiguous" counties that are metropolitan in character so that the periphery of the specific metropolitan area may be determined. MSAs may cross State lines. In New England, MSAs consist of cities and towns rather than counties.
- *Nonmetropolitan*—Other than metropolitan.

Emergency department—Hospital facility for the provision of unscheduled outpatient services to patients whose conditions require immediate care and that is staffed 24 hours a day. Emergency departments that are open less than 24 hours a day are included as part of the hospital's outpatient department.

Emergency service area—Area within the emergency department where emergency services are provided. This includes services provided under the "hospital as landlord" arrangement in which the hospital rents space to a physician group.

Outpatient department—Hospital facility where nonurgent ambulatory medical care is provided under the supervision of a physician.

Clinic—Administrative unit within an organized outpatient department that provides ambulatory medical care under the supervision of a physician. This excludes the "hospital as landlord" arrangement in which the hospital only rents space to a physician group and is not otherwise involved in the delivery of services. Clinics are grouped into the following six specialty groups for purposes of systematic sampling and nonresponse adjustment: general medicine, surgery, pediatrics, obstetrics/gynecology, substance abuse, and other. Clinics are defined as in scope or out of scope as follows:

- In scope—General medicine
  AIDS
  Allergy
  Ambulatory care
  Anti-coagulation
  Anesthesia/pain
  Apnea
  Arthritis
  Asthma
  Brain tumor (and other tumor)
  Cardiology
  Cerebral palsy (adult)

Chest
Coagulant
Cystic fibrosis (adult)
Cytomegalovirus
Dermatology
Diabetes
Diabetic counseling
Digestive diseases
Down's syndrome (adult)
Endocrinology
Epilepsy
Family practice
Gastroenterology
General medicine
Genetics (adult)
Geriatric
Head (nonsurgical)
Head and neck (nonsurgical)
Hematology
Hemophilia (adult)
Homeless
Huntington's disease/chorea
Hyperlipidemia
Hypertension
Immunology
Infectious diseases
Internal medicine
Lead poisoning (adult)
Leukemia/bone marrow aspiration
Lipid
Liver
Lupus (systemic lupus erythematosus)
Medical screening
Melanoma
Metabolic
Movement and memory disorders
Multiple sclerosis
Muscular dystrophy
Myelomeningocele
Nephrology
Neurocutaneous
Oncology
Outreach program (general medicine)
Pacemaker
Pentamidine
Peripheral vascular disease
Pheresis/plasma pheresis
Pigmented lesion
Primary care
Pulmonary
Renal
Rheumatology
Seizure
Senior care
Sexually transmitted diseases (STD)
Sickle cell (adult)
Spina bifida (adult)
Thyroid
Tuberculosis
Urgent care
Walk-in and/or screening
Weight management
24-hour observation

- In scope—Surgery

Amputee (surgery and rehabilitation)
Ano-rectal
Arthroscopy
Back care
Breast
Breast care
Bronchoscopy
Burn
Cardiothoracic
Cast/brace
Chief resident followup (surgery)
Chronic wound
Cleft palate
Club foot
Colon and rectal surgery
Cryosurgery
Cystoscopy
Elective surgery
Endoscopy
ENT (ear, nose, and throat)
Eye
Fine needle aspiration
Fracture
General surgery
Genitourinary
Genitourinary surgery
Hand surgery
Head and neck surgery
Knee
Lithotripsy
Myelo- (and other myelo)
Neurologic surgery
Oncologic surgery
Ophthalmologic surgery
Ophthalmology
Orthopedic
Orthopedic surgery
Ostomy
Otolaryngology
Otolaryngologic surgery
Otology
Otorhinolaryngology
Pediatric ear, nose, and throat
Pediatric orthopedic surgery
Pediatric otolaryngology
Pediatric surgery
Pediatric urology
Plastic surgery
Post-operative
Proctology
Pulmonary/thoracic surgery

Scoliosis (adult)
Sigmoidoscopy
Spine
Sports medicine
Suture
Transplant surgery
Trauma
Urodynamics
Urologic surgery
Urology
Vascular surgery
Visual fields

- In scope—Pediatrics
  Adolescent/young adult
  Adolescent medicine
  Airway (pediatric)
  Allergy (pediatric)
  Behavior and development (child)
  Birth defect
  Cardiology (pediatric)
  Cerebral palsy (child)
  Child sexual assault
  Clotting (pediatric)
  Congenital heart
  Continuity (pediatric)
  Craniofacial
  Craniomalformation
  Critical care (pediatric)
  Cystic fibrosis
  Dermatology (pediatric)
  Developmental disability
  Developmental evaluation
  Diagnostic (pediatric)
  Down's syndrome (child)
  Endocrinology (pediatric)
  Gastroenterology (pediatric)
  Genetics
  Hematology (pediatric)
  Hemoglobinopathy (pediatric)
  Hemophilia (child)
  High risk (pediatric)
  Infant apnea
  Infectious diseases (pediatric)
  Lead poisoning (child)
  Learning disorder
  Neonatology
  Nephrology (pediatric)
  Newborn
  Oncology (pediatric)
  Ophthalmology (pediatric)
  Pediatrics
  Perinatal
  Phenylketonuria
  Pulmonary (pediatric)
  Regional development
  Rheumatic heart
  Rheumatology/arthritis (pediatric)
  Scoliosis (child)
  Seizure (pediatric)
  Sickle cell (child)
  Spina bifida
  Teenage
  Teen-tot
  Well child care

- In scope—Obstetrics/gynecology
  Adolescent gynecology
  Birth control
  Colposcopy
  Dysplasia
  Family planning
  Gynecology
  Gynecologic oncology
  In vitro fertilization
  Infertility
  Maternity
  Maternal health
  Obstetrics
  Obstetrics—high risk
  Obstetrics—post-partum
  Obstetrics—prenatal
  Pregnancy—counseling
  Pregnancy verification
  Prenatal
  Preteen gynecology
  Reproductive
  Reproductive endocrinology
  Well woman
  Women's care

- In scope—Substance abuse
  Alcohol abuse
  Alcohol detoxification
  Alcohol walk-in
  Chemical dependency (excluding methadone maintenance)
  Drug abuse (excluding methadone maintenance)
  Drug detoxification
  Substance abuse
  Women's alcohol program

- In scope—Other
  Adolescent psychiatry
  Adult psychiatry
  Anxiety
  Biofeedback
  Child psychiatry
  Eating disorder
  General preventive medicine
  Mental health
  Mental hygiene
  Myasthenia gravis
  Neurology
  Neurophysiology
  Pain management
  Partial hospitalization program (psychiatric)

Pediatric neurology
Preventive medicine
Psychopharmacology
Sleep disorder
Social evaluation
Toxicology

- Out of scope—Other
Abortion/pregnancy termination
Ambulatory surgery centers
Blood bank
Cardiac catheterization
Chemotherapy
Dental/dental oncology/dental surgery
Employee health service
Hemodialysis
Kidney (renal) dialysis
Methadone maintenance
Occupational safety and health
Occupational therapy
Oral surgery
Pharmacy
Physical medicine/therapy
Podiatry
Radiation therapy/radiation diagnosis/radiation oncology
Radiology/diagnostic x-ray (imaging)
Reading and language
Rehabilitation

Region—Hospitals are classified by location in one of the four geographic regions of the United States that correspond to those used by the U.S. Bureau of the Census.

Region	*States included*
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
Midwest	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

Appendix III
Data collection forms used in the 1992 National Hospital Ambulatory Medical Care Survey

OMB No. 0920-0278: Approval Expires 2/28/92

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 147 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 (0920-0278); Washington, DC 20503.

1. Label

FORM **NHAMCS-101** (4-16-91)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
NATIONAL CENTER FOR HEALTH STATISTICS
CENTERS FOR DISEASE CONTROL

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY
1992 PANEL

2a. Hospital contact information	**b.** Hospital contact information	**3.** Field representative information	
Name	Name	Telephone screener	Code
Title	Title	Hospital induction	Code
Telephone number *(Area code and number)*	Telephone number *(Area code and number)*	Clinic induction	Code

Section I — TELEPHONE SCREENER

4. Record of telephone calls

Call	Date	Time	Results
1			
2			
3			
4			
5			
6			

5. Final outcome of hospital screening

1 ☐ Appointment

Day	Date	Time	a.m. p.m.	Place

2 ☐ Noninterview — *Complete sections V and VI, beginning on page 8.*

During your initial call to the hospital, attempt to speak to the contact person (as provided in item 2a). If the contact person is not available at this time, determine when he/she can be reached and call again at the designated time. If, after several attempts, you are still unable to talk to the contact or have determined the contact is no longer an appropriate respondent, begin the interview with a representative of the contact person or new contact, as appropriate. Record all new contact information in item 2b.

Part A. INTRODUCTION

Good (morning/afternoon) . . .. My name is *(Your name).* **I am calling for the Centers for Disease Control concerning their study of hospital outpatient and emergency departments. You should have received a letter from Dr. Manning Feinleib, the director of the National Center for Health Statistics, describing the study.** *(Pause)* **You've probably also received a letter from the Census Bureau. We are acting as field agent for the study.**

6. Did you receive the letter(s)?

1 ☐ Yes — *SKIP to Part B, Verification of Eligibility, page 2*
2 ☐ No
3 ☐ DK
} *Ask item 7a*

7a. I'd be very happy to send you another copy of the letter. Let me just verify that I am sending it to the right mailing address. Is *(Read address from item 1)* **the correct address?**

1 ☐ Yes — *Read STATEMENT below*
2 ☐ No — *Ask item 7b*

b. What is your correct mailing address?

Number and street

City State ZIP Code

STATEMENT

Although you have not received the letter, I'd like to briefly explain the study to you at this time and answer any questions about it.

Section I — TELEPHONE SCREENER — Continued

Part B. VERIFICATION OF ELIGIBILITY

The National Center for Health Statistics of the Centers for Disease Control is conducting an annual study of hospital-based ambulatory care. They have contracted with the Bureau of the Census to collect data for the study. I am calling to arrange an appointment to discuss your participation.

Before discussing the details, I would like to verify our basic information about *(Name of hospital)* **to be sure we have correctly included your hospital in the study. First, concerning hospital control:**

8. Is this hospital voluntary non-profit, government, or proprietary?	1☐ Voluntary non-profit 2☐ Government 3☐ Proprietary
9a. Does this hospital provide emergency services that are staffed 24 HOURS each day either here at the hospital or elsewhere?	1☐ Yes — *SKIP to item 10* 2☐ No
b. Does this hospital operate any emergency service areas that are NOT staffed 24 HOURS each day?	1☐ Yes 2☐ No
10. Does this hospital operate an organized outpatient department either at the hospital or elsewhere?	1☐ Yes 2☐ No

CHECK ITEM A

1☐ The hospital meets eligibility requirements (Yes in any of items 9a OR 9b OR 10) — *Go to Part C, Study Description*

2☐ The hospital does not meet eligibility requirements (No in all three items 9a AND 9b AND 10) — *SKIP to CLOSING STATEMENT below*

Part C. STUDY DESCRIPTION

Thank you. Our information seems correct. Now I would like to provide you with further information on the study.

- This study is an extension of the NAMCS
- No current source of national data on hospital ambulatory care
- Endorsed by the American Hospital Association, the American College of Emergency Physicians, and the Emergency Nurses Association

The hospital study will be an extension of the National Ambulatory Medical Care Survey, or NAMCS, which collects data on visits to physicians in office-based practice. NAMCS data are used by health service planners, researchers, and educators. Hospitals provide a significant portion of the nation's ambulatory care. Yet, there is no source of national data on this significant area of health care. Extending the coverage of NAMCS to include hospital outpatient care is considered an important priority for the National Center for Health Statistics and is endorsed by such organizations as the American Hospital Association, American College of Emergency Physicians, and the Emergency Nurses Association.

- Nationwide sample of 500 hospitals
- Four week data collection period
- Brief 1 page forms completed for a sample of patient visits

The study is being conducted in approximately 500 hospitals nationwide. Brief, one page forms, similar to those used in the study of office-based practices will be completed for a small sample of patient visits to emergency and outpatient departments over a four week period.

As one of the hospitals that has been selected for the study, your contribution will be of great value in producing reliable national data on ambulatory care.

11. I would like to arrange to meet with you so that I can better present the details of the study. Is there a convenient time within the next week or so that I could meet with you or your representative?

Thank you . . . . for your cooperation. I am looking forward to our meeting. *Record day, date, time, and place of appointment in item 5, page 1; and terminate telephone call.*

CLOSING STATEMENT

Thank you . . . ., but it seems that our information was incorrect. Since *(Name of hospital)* **does not have emergency services or outpatient clinics, it should not have been chosen for our study. Thank you very much for your cooperation.** *Terminate telephone call and complete sections V and VI beginning on page 8.*

NOTES

Section II — INDUCTION INTERVIEW

Part A. INTRODUCTION

I would like to begin with a brief review of the background for this study.

- **Data are already available on patient visits to office-based physicians from NAMCS**
- **NAMCS is sponsored by the NCHS**
- **NAMCS data used extensively by health service planners and researchers**

Data are available on patient visits to physician's offices through the National Ambulatory Medical Care Survey, or NAMCS, sponsored by the National Center for Health Statistics of the Centers for Disease Control. These data have been used extensively by health service planners and researchers.

- **150 million annual ED/OPD patient visits**
- **Currently no national data collection concerning hospital ambulatory care**

Patient visits to hospital emergency and outpatient departments account for about 150 million patient visits annually. However, there is no national data collection on the characteristics and health problems of persons seen in these settings.

- **Bureau of the Census is data collecting agent**
- **Endorsements by the AHA, ACEP, and ENA**

NCHS is conducting an annual study to provide national information on hospital ambulatory care. The Bureau of the Census is responsible for data collection. The study has been endorsed by the American Hospital Association, the American College of Emergency Physicians, and the Emergency Nurses Association. Their endorsements were included with our letter and copies are in the manual.

- **Study is authorized by Title 42, U.S. Code Section 242k**
- **Participation is voluntary**
- **All information held in strict confidence**
- **Collects no patient names or identifiers**

Now I would like to provide an overview of the study protocol and answer any questions you might have. Before we proceed with the details, I am required to advise you that this study is authorized by Title 42, United States Code, Section 242k. Participation in the study is voluntary and there are no penalties for refusing. All information collected, including the name of your hospital, will be held in strict confidence. Patient names and identifiers obtained during data collection will be removed from the data forms and left with the hospital. Data from the study will be used only in statistical summaries.

NOTES

Section II — INDUCTION INTERVIEW — Continued

Part B. SURVEY DESCRIPTION

- **Covers ambulatory care facilities on and off hospital grounds**
- **Covers care provided by or under the supervision of a physician**
- **Excludes office-based physicians**
- **Excludes visits to laboratory and radiology services**
- **Excludes organized ambulatory surgery centers**
- **Four week data collection period beginning ( )**
- **Sample of approximately 50 ED and 150 OPD visits**
- **Form takes only a few minutes to complete**
- **Forms to be completed by hospital staff at their convenience .**

The study covers ambulatory care facilities that are operated by the hospital, here or elsewhere in the area, in which care is provided by a physician or under the supervision of a physician. In general, we are trying to include care by hospital-based physicians and exclude visits to office-based physicians, which are covered under the present NAMCS. Visits to laboratory and radiology services will not be included. Also, organized ambulatory surgery centers will not be included, as NCHS is developing a separate survey for studying these facilities.

Essentially, the data collection task is quite simple. Over a four week period, beginning Monday, ( ), we would like to collect some basic information on a randomly selected sample of patient visits, about 50 in the Emergency Department and about 150 in outpatient clinics.

• *SHOW patient record forms.*

These are the data collection forms. We have tried to make the items self-explanatory and generally the form should take only a few minutes to complete. We will show your staff how to select the sample of patients and fill out the forms. The forms can be completed at the time of the patient's visit, at the end of the day or shift, or in some combination of these times, whichever is most convenient for your staff.

NOTES

Section II — INDUCTION INTERVIEW — Continued

Part C. SURVEY IMPLEMENTATION

As I mentioned earlier, I would like to discuss the plan for conducting the study. Your hospital has been assigned to a 4-week data collection period beginning on Monday, ( ). There are several steps to be completed to prepare for this.

First, I would like to discuss the steps needed to obtain approval for the study. We will be glad to help in any way we can.

Second, I will need to construct the sampling plan for your hospital. For this I will need some basic information on your (emergency department/(and) your outpatient department).

It may take me a few days to develop the sampling plan. I will return to discuss the study with the (emergency department staff/(and) clinic staff) and show them the procedures. Before I return, I will call to determine how you wish me to proceed in contacting these staff.

12. First, could we discuss the steps needed to obtain approval for the study?
Record the approval process in the space provided below. —

13. Now, I would like to make arrangements to obtain the information needed for sampling. I will need to determine how your (emergency department/ (and) outpatient department) (is/are) organized and obtain an estimate of the number of patient visits expected during the 4-week period. Would you prefer I get this information from you or someone else?

1 ☐ Respondent — *Go to Check Item B below*

2 ☐ Someone else — *Specify below*

If different respondent(s), arrange to obtain data today if possible. Otherwise arrange an appointment with designated person(s). Briefly explain the study to the new respondent(s). Then proceed with Section III, Emergency Department Description or Section IV, Outpatient Department Description, as appropriate. Thank current respondent for his/her time and cooperation.

Name

Title

Department

Name

Title

Department

CHECK ITEM B

1 ☐ The hospital provides emergency services that are staffed 24 hours each day. (Yes in item 9a) — *Go to Section III, Emergency Department Description, on page 6.*

2 ☐ The hospital DOES NOT provide emergency services that are staffed 24 hours each day. (No in item item 9a) — *SKIP to Section IV, Outpatient Department Description, on page 7.*

Section III — EMERGENCY DEPARTMENT DESCRIPTION

To develop the sampling plan, I would like to learn how your emergency department is organized. I have a set of specific questions to ask you about this.

14. **Does the emergency department operate any facilities elsewhere in the community or only at the hospital?**

1☐ Only at hospital — *SKIP to item 16*
2☐ Hospital and elsewhere — *Ask item 15*

15. **Do the facilities located outside of the hospital see true emergency patients, that is, patients with conditions that threaten life or function and require immediate attention; or do they see only nonemergency patients?**

(Mark box 1 for emergencies AND nonemergencies).

1☐ Emergencies
2☐ Nonemergencies only

16. **Does the emergency department here at the hospital see both emergency and walk-in nonemergency patients?**

1☐ Both — *SKIP to item 18*
2☐ Emergency only — *Ask item 17*

17. **Where are walk-in nonemergency patients seen?**

During the day

After hours

18. **Are patient visit statistics kept for the emergency department as a whole or for individual patient service areas?**

1☐ Department as a whole
2☐ Individual service areas

19. **Is there one patient registration or arrival log kept for the department or are separate logs kept for different sections? For example, are different logs kept for walk-in and ambulance patients?**

1☐ One log
2☐ Multiple logs
3☐ Other — *Specify* ▽

_____

Review information thoroughly and ask respondent to clarify any points needed. Then complete Section A, Ambulatory Unit Information of the NHAMCS-101/U, Ambulatory Unit Record, for the emergency service area. If more than one service area, complete a separate NHAMCS-101/U, Section A, for each area.

Describe the sample units for the ED. Include emergency service areas that are not staffed or available 24 hours each day, since they are part of an ED that is staffed or available 24 hours each day.

- **To finish the sampling plan I will need a few more details, including an estimate of the number of patient visits (for the ED/each section of the ED) during the four weeks of the study — that is from Monday, ( ) to Sunday, ( ).**

NOTES

Section IV — OUTPATIENT DEPARTMENT DESCRIPTION

In order to develop the sampling plan, I will need some details about the organization of your outpatient services and each of your outpatient clinics. Since we will include only certain types of outpatient services in the study, I first would like to explain the scope of the study.

Explain scope. The study excludes nonphysician clinics, ancillary services, ambulatory surgery centers, facilities not operated by or for the hospital (office-based physicians).

If the hospital does not have an Emergency Department that is staffed or available 24 hours each day, but does have emergency service areas, include them as part of the Outpatient Department.

Now, I would like to ask a few general questions about your outpatient services.

20. **Could you tell me how many clinics are in the outpatient department here at the hospital?**	☐☐☐ Number
21. **Does the hospital operate outpatient clinics at any other locations off the premises? For example, walk-in clinics or drug treatment clinics?**	1☐ Yes — *Go to item 22* 2☐ No — *SKIP to item 23*
22. **How many clinics are there at other locations?**	☐☐☐ Number
23a. **Does the hospital operate an organized ambulatory surgery center?**	1☐ Yes 2☐ No
b. **Does the hospital operate any clinics which are under the supervision of someone other than a physician? (e.g., therapists, nurse midwife)?**	1☐ Yes — *Specify below* 2☐ No _____ _____

Now, I would like to get a few details on each outpatient clinic. I will need the name and type of the clinic and an estimate of the expected number of patient visits for the study period Monday, ( ) to Sunday, ( ).

Complete a separate Section A of the NHAMCS-101/U, Ambulatory Unit Record for each clinic beginning with OPD(s) at hospital. Remind respondent of exclusions and clarify eligibility as needed. Remember to include those emergency service areas that are not part of a 24-hour Emergency Department.

NOTES

Section V — NONINTERVIEW

24. Where did nonresponse occur?

1☐ Hospital — *Ask item 25*
2☐ Clinic(s)
3☐ Emergency service area(s)
} *SKIP to item 27*

25. What is the reason the hospital did not participate in this study?

1☐ Hospital closed — *SKIP to section VI, page 10*
2☐ Hospital not eligible — *Ask item 26*
3☐ Hospital refused — *SKIP to item 30*
4☐ Other — *Specify* ↘

_____

SKIP to section VI, page 10

26. Describe the condition or reason the hospital is ineligible for the study.

1☐ Federal hospital
2☐ No emergency service areas AND no outpatient department
3☐ Other — *Specify* ↘

_____

_____

} *SKIP to section VI, page 10*

27. List the ambulatory unit(s) (clinic(s)/emergency service area(s)) that did not participate.

Indicate the sampling unit number in the space provided and mark (X) the appropriate box for OPD or ED. If more than 3 ambulatory units, contact your supervisor immediately.

Line No.	Clinic/Emergency service area name	Sampling unit No.	ED	OPD
1			☐	☐
2			☐	☐
3			☐	☐

28. What is the reason the (clinic/emergency service area) did not participate?

Mark (X) appropriate box(es).

	Clinic/Emergency service area on line 1	Clinic/Emergency service area on line 2	Clinic/Emergency service area on line 3
a. Clinic/Emergency service area not open during reporting period — *SKIP to section VI, page 10 after completing for each unit marked*	1☐	1☐	1☐
b. Clinic/Emergency service area not eligible — *Ask item 29*	2☐	2☐	2☐
c. Clinic/Emergency service area director refused — *SKIP to item 30*	3☐	3☐	3☐
d. Other — *Specify reason then SKIP to section VI, page 10 after completing for each unit marked.*	4☐ *Specify* ↘ _____ _____	4☐ *Specify* ↘ _____ _____	4☐ *Specify* ↘ _____ _____

29. What is the reason or condition the (clinic/emergency service area) was not eligible?

Mark (X) appropriate box(es).

	Clinic/Emergency service area on line 1	Clinic/Emergency service area on line 2	Clinic/Emergency service area on line 3
a. Clinic/Emergency service not under the auspices of hospital	1☐	1☐	1☐
b. Ancillary service facility (such as laboratory and radiology services)	2☐	2☐	2☐
c. Care not provided by or under the direct supervision of physician(s)	3☐	3☐	3☐
d. Other — *Specify reason or condition then go to section VI, page 10 after completing for each unit marked.*	4☐ *Specify* ↘ _____ _____	4☐ *Specify* ↘ _____ _____	4☐ *Specify* ↘ _____ _____

NOTES

Section V — NONINTERVIEW — Continued

30a. At what point in the interview did the refusal/breakoff occur?

Mark (X) appropriate box(es).

	Hospital	Clinic/Emergency service area on line 1	Clinic/Emergency service area on line 2	Clinic/Emergency service area on line 3
(1) During the telephone screening	1☐			
(2) During the hospital induction	2☐			
(3) After the hospital induction, but prior to the clinic/emergency service area inductions	3☐			
(4) During the clinic/emergency service area induction	4☐	4☐	4☐	4☐
(5) After the clinic/emergency service area induction, but prior to assigned reporting period	5☐	5☐	5☐	5☐
(6) During assigned reporting period	6☐	6☐	6☐	6☐

b. By whom?

Mark (X) appropriate box(es).

	Hospital	Clinic/Emergency service area on line 1	Clinic/Emergency service area on line 2	Clinic/Emergency service area on line 3
(1) Hospital Administrator	1☐	1☐	1☐	1☐
(2) Clinic/emergency service area director		2☐	2☐	2☐
(3) Approval Board or official	3☐	3☐	3☐	3☐
(4) Other hospital official — *Specify*	4☐ *Specify*	4☐ *Specify*	4☐ *Specify*	4☐ *Specify*

c. What reason was given? *If more than 1 unit, please specify the line number of the clinic/emergency service area (from item 27) before recording responses.*

d. Date refusal/breakoff(s) reported

Enter date(s) in appropriate box(es).

	Month	Day	Year
(1) Hospital	☐☐	☐☐	☐☐
(2) Clinic/Emergency service area on line 1	☐☐	☐☐	☐☐
(3) Clinic/Emergency service area on line 2	☐☐	☐☐	☐☐
(4) Clinic/Emergency service area on line 3	☐☐	☐☐	☐☐

e. Was conversion attempted?

If Yes, ask item 30f.

If NO, SKIP to section VI, page 10 after completing for each unit marked.

Hospital	Clinic/Emergency service area on line 1	Clinic/Emergency service area on line 2	Clinic/Emergency service area on line 3
1☐ Yes 2☐ No	1☐ Yes 2☐ No	1☐ Yes 2☐ No	1☐ Yes 2☐ No

f. What was the result?

	Hospital	Clinic/Emergency service area on line 1	Clinic/Emergency service area on line 2	Clinic/Emergency service area on line 3
(1) Hospital administrator refused	1☐	1☐	1☐	1☐
(2) Clinic/Emergency service area director refused		2☐	2☐	2☐
(3) Approval board or official refused	3☐	3☐	3☐	3☐
(4) Hospital adminstrator agreed to see FR	4☐			
(5) Clinic/Emergency service area director agreed to see FR		5☐	5☐	5☐

Section VI — DISPOSITION AND SUMMARY

31. FINAL DISPOSITION

1 ☐ All eligible units completed patient record forms
2 ☐ Some eligible units completed patient record forms
3 ☐ Hospital refused
4 ☐ Hospital closed
5 ☐ Hospital ineligible

32. AMBULATORY UNIT SUMMARY

Line No.	Clinic/Emergency service area name (a)	OPD or ED (b)		SU number (c)	Number of PVs (d)	Completed forms? (e)		Number of completed forms (f)	Assigned PRF numbers (g)
		OPD	ED			YES	NO		
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

NOTES

NOTES

1. Hospital name

2. Hospital number

FORM NHAMCS-101/S
(3 1 91)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
NATIONAL CENTER FOR HEALTH STATISTICS
CENTERS FOR DISEASE CONTROL

EMERGENCY AND OUTPATIENT DEPARTMENT SAMPLING RECORD

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

CHECK ITEM A

1 ☐ The hospital HAS emergency service areas. — *Begin with Emergency Department Sampling Summary Form on page 2. Refer to page 1 of the NHAMCS-124, Sampling and Information Booklet, for instructions on completing this form.*

2 ☐ The hospital DOES NOT have emergency service areas. — *Complete the Outpatient Department Sampling Summary Form on page 3. Refer to page 3 of the NHAMCS-124, Sampling and Information Booklet for instructions.*

RANDOM START LABEL

EMERGENCY DEPARTMENT SAMPLING SUMMARY FORM

1. Page _____ of _____ pages

2. RO code

3. FR code

4. Hospital name

5. Hospital number

Line No. (a)	Name of emergency service area (b)	Expected number of visits (c)	Take every (d)	Start number (e)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
	TOTAL VISITS →			

CHECK ITEM B

Does this hospital have an outpatient department?	1 ☐ Yes — *Go to next page and complete Outpatient Department Sampling Summary Form, refer to page 3 of the Sampling and Information Booklet for instructions.* 2 ☐ No — *Contact the hospital administrator and arrange to meet with the director(s) of the emergency service area(s).*

OUTPATIENT DEPARTMENT SAMPLING SUMMARY FORM

1. Page _____ of _____ pages

2. RO code

3. FR code

4. Hospital name

5. Hospital number

	Name of clinic (b)	Specialty group (c)	Expected No. of visits (d)	SU No. (e)	Proba-bility (f)	Take every (g)	Start No. (h)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
	TOTAL VISITS →						

TO BE COMPLETED BY CENSUS HEADQUARTERS ONLY

SU No. *Col. (e)* (i)	Estimated No. of visits *For each clinic in SU* (j)	TOTAL (k)
	____ + ____ + ____ + ____ + ____	
	____ + ____ + ____ + ____ + ____	
	____ + ____ + ____ + ____ + ____	
	____ + ____ + ____ + ____ + ____	
	____ + ____ + ____ + ____ + ____	
TOTAL SU VISITS →		

NOTES

Contact hospital administrator and arrange to meet with the director(s) of each service area and/or clinic selected for the study.

OMB No. 0920-0278: Approval Expires 2/28/92

FORM **NHAMCS-101/U**
(4-16-91)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
NATIONAL CENTER FOR HEALTH STATISTICS
CENTERS FOR DISEASE CONTROL

AMBULATORY UNIT RECORD

SURVEY OF HOSPITAL EMERGENCY AND OUTPATIENT DEPARTMENTS

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

Section A — AMBULATORY UNIT INFORMATION

a. ED or OPD
Mark (X) one
☐ ED ☐ OPD

b. Emergency service areas/clinics
_____ of _____

c. Hospital name

d. Hospital number

COMPLETE THIS RECORD FOR EACH AMBULATORY UNIT
Enter the name of the emergency service area/clinic. If no name, identify it by location, service type, or some other unique identifier.

1. What is the name of the (emergency service area/clinic)?

Name

2. Where is the (emergency service area/clinic) located?

1 ☐ Onsite at hospital
2 ☐ Elsewhere — *Specify*

Address *(Number and street)*

City/State | ZIP Code

3. What is the name, title, and telephone number of the director of the (emergency service area/clinic)?

Name

Title

Telephone *(Area code and number)*

4. How many patient visits are expected during the 4-week reporting period Monday, _____ through Sunday, _____ ?

_____ Expected number of visits

5. Is this estimate based on a recent period, same month last year, monthly average over last year or some other basis?

1 ☐ Recent Period
2 ☐ Same month last year
3 ☐ Monthly average over last year
4 ☐ Other basis — *Specify*

_____

CHECK ITEM

☐ Emergency service area
☐ OPD clinic — *SKIP to item 9, page 2*

6. What is the function of this service area, that is, what types of patients are seen or services provided?

_____

7. Is a separate arrival log kept for this service area?

1 ☐ Yes — *SKIP to instruction 1, page 2*
2 ☐ No

8. Where is the arrival log for these patients kept and how is it organized?

_____

Section A — AMBULATORY UNIT INFORMATION — Continued

Instruction 1

- If there are more emergency service areas, complete a separate Section A of the NHAMCS-101/U, Ambulatory Unit Record for each additional area, if you have not already done so.
- If there are outpatient department clinics, complete Section IV — Outpatient Department Description on page 7 of the NHAMCS-101 before beginning the first clinic's Ambulatory Unit Record. Complete Section A of the NHAMCS-101/U, Ambulatory Unit Record for each clinic.
- If you have completed a Section A of the NHAMCS-101/U, Ambulatory Unit Record for each emergency service area and each outpatient department clinic, read STATEMENT A below.

9. What type of clinic is this, that is, what physician specialties are seen in this clinic or what type of services are provided?

1 ☐ General medicine
2 ☐ Surgery
3 ☐ Pediatrics
4 ☐ Obstetrics and/or Gynecology
5 ☐ Other — *Specify* _____

Instruction 2

- If there are more OPD clinics, complete a separate Section A of the NHAMCS-101/U, Ambulatory Unit Record for each additional clinic, if you have not already done so.
- Complete Section A of the NHAMCS-101/U, Ambulatory Unit Record for each emergency service area, if you have not already done so. Remember to complete Section III — Emergency Department Description on page 6 of the NHAMCS-101 before beginning the NHAMCS-101/U, Ambulatory Unit record for the first emergency service area.
- If you have completed a Section A of the NHAMCS-101/U, Ambulatory Unit Record for each emergency service area and each clinic, read STATEMENT A below.

STATEMENT A

That is all the information I need for now. Thank you for your assistance. Now I need to do the sampling. It will take a few (days/hours) to complete the sampling plan. Then I will call to discuss arrangements for contacting and training the hospital staff. *Complete the NHAMCS-101(S), Sampling Record for this hospital.*

NOTES

INSTRUCTIONS FOR COMPLETING THE AMBULATORY UNIT RECORD

(Section A should already be completed)

1. Prepare Sections B—L of this form for each emergency service area/clinic selected in this hospital for the study.

2. Complete Section B before meeting with the unit administrator or other designated respondent. Transcribe the information provided in part A of the NHAMCS-101/S to items 1, 2, and 3.

In item 4, enter the total number of visits expected for the entire ED or OPD, as appropriate.

Record the 4-week reporting period for the unit in item 5.

If the unit is part of an outpatient department sampling unit, enter the number of clinics in the sampling unit in item 6. If the unit is part of the emergency department, enter the number of service areas in the emergency department.

3. Complete Sections C and D with the designated respondent for the unit.

4. Section E is completed only when a new Take Every or Random Start number must be calculated (as determined in item D-3). For item E-1, refer to the tables on pages 6 and 7 of the NHAMCS-124. Use the revised estimate of visits for the clinic reported in item D-2 and the original total visits for the department in item B-4 to determine the new Take Every number. Record the new number in the blank provided.

In item E-2, you must determine a new Random Start for sampling patient visits using the newly calculated Take Every number in E-1. Refer to the table affixed to the front of the NHAMCS-101/S and find the next available (i.e., unused) unit row. The new Random Start is located in the cell where this row and new Take Every column intersect. Record this number in the blank provided in item E-2.

5. Enter the name, title, shift and telephone number of each hospital staff member involved with the data collection activities for the unit in Section F.

6. In Section G, record the range of Patient Record Form (PRF) numbers assigned to the unit in the boxes provided. If multiple ranges, or individual numbers not within a range are assigned, record these numbers in the notes section located below Section G.

7. Record the date and time of each training session (i.e., instructions for sampling and completing PRFs) conducted with the hospital staff in Section H. In column (d), enter your name as instructor, and enter the names of the hospital staff receiving training in the multiple cells provided in column (e).

8. After completing Section H, explain the procedures for sampling patient visits and completing PRFs to the hospital staff. Refer them to the ED or OPD Instruction Manual, as appropriate.

9. During the unit's reporting period, you will make weekly Quality Control visits to the clinic to monitor the progress of the study and to collect any PRFs already completed. Provide a record of each of these visits in Section I.

10. Item 1 of Section J asks for the number of visits in the emergency service area or clinic during the reporting period. It is extremely important that an accurate entry be made for this item. To ensure the accuracy of this entry, refer to the ambulatory unit's patient log, appointment book, registration list, records, etc., to accurately determine the number of visits. It is best to complete this each week during your quality control visit.

In item 2, record the number of PRFs completed during the unit's reporting period. This number should be equal to the number of PRFs transmitted to the regional office.

The remainder of the items in Section J should be completed when the reporting period is over and all PRFs are collected.

11. Complete Section K only for those units reporting during the first three reporting periods.

A NHAMCS-131, Debriefing Form, is completed by all hospital staff members involved in the data collection activities. List the name and title of each staff member, and indicate their role in the study and the date of debriefing.

12. Should any new hospital staff members become involved with the study (or any other notable changes in staff occur), provide an updated report of the hospital staff information in Section L.

Section B — INFORMATION FROM SAMPLING RECORD

Transcribe information from part A, page 2 or 3 of the NHAMCS-101(S) to items 1—4 and 6.

1. Random Start number	2. Take Every number	3. Estimated number of visits in this unit during field period	4. Total estimated number of visits for the entire ED/OPD during the reporting period.

5. PERIOD	From	To	6. Number of clinics in this SU

Section C — EMERGENCY SERVICES/OUTPATIENT CLINIC INFORMATION AND LOGS

1. What are the usual operating hours of this unit?

Day(s) (a)	Time (b)			Mark (X) ONLY one: Open 24 hours (c)	Not open (d)	Hours vary (e)
Monday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐
Tuesday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐
Wednesday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐
Thursday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐
Friday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐
Saturday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐
Sunday	a.m. p.m.	TO	a.m. p.m.	1☐	2☐	3☐

2. How many separate shifts are there in this unit? — Number of separate shifts

3a. How many separate patient registration logs are maintained in this unit? — Number of logs

b. How (is/are) the log(s) organized?

1☐ One log for all patients
2☐ Computer log supplemented by handwritten entries
3☐ Separate logs for different type of cases
4☐ Other — *Specify* ↓

_____

_____

Section D — VERIFICATION OF ESTIMATED VISITS

Verify with ED/clinic director

1. According to our information, about *(Number from B-3)* **patient visits are expected during the survey period. Do you agree with this estimate?**

1☐ Yes — *SKIP to section F, page 5*
2☐ No

2. About how many visits do you expect during the reporting period, _____ to _____? — Revised estimate

Determine if new Take Every and Random Start must be calculated for this clinic.

3a. Divide the revised estimate by the original estimate from B-3.

$$\frac{\text{Revised estimate}}{\text{Original estimate}} = \frac{\square}{\square} = \square \text{ (Result)}$$

b. Is the result of (a) between 0.7 and 1.3?

1☐ Yes — *SKIP to section F, page 5*
2☐ No

Section E — CALCULATE NEW SAMPLING INTERVAL AND RANDOM START FOR THIS CLINIC

1. Calculate new sampling Take Every, using the tables on page 6 or 7 of the NHAMCS-124. (Use the revised estimate of visits from D-2 and the original total visits from B-4).	New Take Every ☐☐
2. Calculate a new random start, using the next available row on the label affixed to the front of the NHAMCS-101/S.	New Random Start ☐☐

Section F — DATA COORDINATOR AND KEY HOSPITAL STAFF

Enter the name, title, shifts, and telephone number of the data coordinator and key hospital staff involved in the data collection.

Line No. (a)	Name (b)	Title (c)	Shift (d)	Telephone number (e)		
				Area code	Number	Ext.
1						
2						
3						
4						
5						
6						
7						
8						

Section G — PATIENT RECORD FORM INFORMATION

This AU assigned patient record forms _____ to _____

NOTES

Section H — TRAINING

Enter dates and times of training sessions, the names of the instructor, and the names of the hospital staff members trained.

Line No. (a)	Date (b)	Time (c)	Instructor (d)	Trainee(s) (e)		
1		a.m. p.m.		1	2	3
				4	5	6
2		a.m. p.m.		1	2	3
				4	5	6
3		a.m. p.m.		1	2	3
				4	5	6
4		a.m. p.m.		1	2	3
				4	5	6

Begin instruction on patient visit sampling and completing Patient Record Forms. Refer to the ED or OPD Instruction Manual, as appropriate.

Section I — QC VISITS

~~Record dates and times of QC visits~~ and the contact(s) at the visit?

Line No. (a)	Date (b)	Time (c)	Contact(s) (d)	
1		a.m. p.m.	1	2
			3	4
2		a.m. p.m.	1	2
			3	4
3		a.m. p.m.	1	2
			3	4
4		a.m. p.m.	1	2
			3	4
5		a.m. p.m.	1	2
			3	4
6		a.m. p.m.	1	2
			3	4

Section J — AU DATA

1. What was the total number of patient visits to this (emergency service area/clinic)

from _____ to _____?
(Refer to patient logs, registration lists, etc. Ask if necessary. DO NOT LEAVE TOTAL BLANK. BE AS COMPLETE AND ACCURATE AS POSSIBLE.)

NUMBER OF VISITS				
Week 1	Week 2	Week 3	Week 4	TOTAL

2. How many patient visit forms were filled out for this AU *(emergency service area/clinic)*?

NUMBER OF FORMS				
Week 1	Week 2	Week 3	Week 4	TOTAL

3. Were patient record forms filled out during or within an hour after the visit, more than 1 hour after the visit, or both?

1☐ During or within an hour after the visit
2☐ More than 1 hour after the visit
3☐ Both

4. Describe methods for completing forms. If possible attach a blank form if used as data source.

_____

_____

_____

_____

5. Did this ambulatory unit use the NHAMCS-103, Patient Log, or their own log?

1☐ NHAMCS-103 — *SKIP to section K, page 8*
2☐ Own log

6. Describe the ambulatory unit's patient log.

_____

_____

_____

_____

NOTES

COMPLETE FOR FIRST THREE REPORTING PERIODS ONLY

Section K — DEBRIEFING

Indicate who participated in the debriefing and what their role was in the study.

Date (a)	Participant (b)	Participant title (c)	Role in study (d)
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection
			1 ☐ Sampled patients 2 ☐ Filled out forms 3 ☐ Supervised data collection

NOTES

Section L — UPDATED CONTACT OR APPROVAL INFORMATION

1

Contact name | Shift

Title

Telephone | Area Code | Number | Extension

Comments

2

Contact name | Shift

Title

Telephone | Area Code | Number | Extension

Comments

3

Contact name | Shift

Title

Telephone | Area Code | Number | Extension

Comments

4

Contact name | Shift

Title

Telephone | Area Code | Number | Extension

Comments

OMB No. 0902-0278: Approval Expires 2/28/92 Sheet ______ of ______ sheets

FORM NHAMCS-103
(4-15-91)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
NATIONAL CENTER FOR
HEALTH STATISTICS
CENTERS FOR DISEASE CONTROL

PATIENT VISIT LOG

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

1. Clinic/Service Area Name

2. Sampling Take Every

3. Random Start Number

NOTE — Hospital is to retain log after completion of study. This log is for optional use. Put a check mark (✓) in column (f) "Sample" next to each patient selected for the sample of visits. Burden associated with this form is small and is counted as part of the burden associated with completion of the patient record form.

Line No. (a)	Date of visit (b)	Patient name (c)	Patient record/ identification number (d)	Remarks (e)	Sample *Mark (✓) for patient(s) selected for sample of visits.* (f)

UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census

NHAMCS-124

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

SAMPLING AND INFORMATION BOOKLET

EMERGENCY DEPARTMENT SAMPLING INSTRUCTIONS

Collect all NHAMCS-101(U)s, Ambulatory Unit Records, completed for the emergency service areas within the Emergency Department (ED). Then turn to page 2 of the NHAMCS-101(S), Sampling Record, and begin completing the Emergency Department Sampling Summary Form using the instructions provided below. (Remember to complete the heading items 1-5 at the top right-hand side of the page).

(1) **(b) Name of emergency service area**

Enter the name of each emergency service area for which an Ambulatory Unit Record was completed in column (b) of the ED summary form. If there are more than 10 emergency service areas, continue listing these areas using a Supplemental Emergency Department Sampling Form. Indicate the page number of this form and the total number of Summary Form pages in the space provided at the top right-hand corner of the Summary Form. (For example, if there were three Summary Forms completed and this is the first form filled, record as - Page 1 of 3 pages.) **All eligible emergency service areas in the ED are included in the sample. However, if the hospital does not have an Emergency Department which provides services 24 hours each day, but does staff emergency service areas that operate less than 24 hours each day, include these emergency service areas with the Outpatient Department and list them on the Outpatient Department Sampling Summary Form.**

(2) **(c) Expected number of visits**

In column (c), transcribe the expected number of visits for each emergency service area from Section A, item 4, of the NHAMCS-101(U), Ambulatory Unit Record. After recording the expected number of visits for all areas, sum the total of visits for the entire department and enter the total in the box provided at the bottom of column (c).

(3) **(d) Take every**

Enter the Take Every (TE) number for each service area in column (d). To determine the TE for each area, refer to page 6 of this booklet. MAKE SURE YOU REFER TO PAGE 6 - THIS IS THE PAGE CONTAINING THE **EMERGENCY DEPARTMENT** TAKE EVERY NUMBERS. Locate the number of total visits for the entire ED in the range of numbers running down the left-hand side of the page. (If you can not find the number of total visits in any of these ranges (i.e., this number exceeds all ranges), call the regional office supervisor immediately. After locating the number of total ED visits in one of the ranges, proceed to find the number of visits expected for the individual emergency service area in the row of ranges running across the top of the page. Move your finger across the row containing the number of visits for the entire ED until it intersects the column containing the number of visits for the individual service area. The number located in the cell where this column and row intersect is the Take Every number. Enter this number in column (d) and repeat the process for each service area listed.

(4) **(e) Start number**

Once a Take Every number has been determined for each service area, select the random start numbers. Refer to the label affixed to the front of the NHAMCS-101(S), Sampling Record. A table has been generated on this label consisting of a row or heading of TE numbers and a column or left margin of ten numbered rows. Random numbers (between 1 and the TE number) were generated in the table's cells. To determine the random start for the first service area listed, locate the area's TE (as provided in column (d)) in the table heading. Starting with row number 1, move your finger across the row until it intersects the column headed by the TE number. The number located in this cell is the Random Start number. Circle the number and enter it in column (e) next to the first service area listed. Proceed to select the random start for the next service area listed, this time using the TE determined for this area and row number 2. Continue the process until a random start has been selected for all areas in the ED. Should you have more than 10 service areas within the department, contact your regional office supervisor and provide him or her with the TE numbers of all remaining service areas. The supervisor will determine the random starts for all remaining units.

(5) Once you have completed the Emergency Department Sampling Form(s), complete CHECK ITEM B at the bottom of page 1 of the NHAMCS-101(S), Sampling Record.

OUTPATIENT DEPARTMENT SAMPLING INSTRUCTIONS

Collect all completed NHAMCS-101(U)s, Ambulatory Unit Records, for all clinics in the Outpatient Department (OPD). Then turn to page 3 of the NHAMCS-101(S), Sampling Record, and begin completing the Outpatient Department Sampling Summary Form using the instructions provided below. (Remember to complete the heading items 1 - 5 at the top right-hand side of the page).

SECTION I ORGANIZING NHAMCS-101(U)s, AMBULATORY UNIT RECORDS

(1) Divide the NHAMCS-101(U)s into the five specialty groups listed below. Refer to item 9 on page 2 of the NHAMCS-101(U), Ambulatory Unit Record, to determine in which of the five specialty groups each clinic belongs.

	Specialty Group	Code
(1)	General Medicine	GM
(2)	Surgical	S
(3)	Pediatrics	PED
(4)	Obstetrics/Gynecology	OB/GYN
(5)	Other	OT

(2) Within each specialty group, order the NHAMCS-101(U)s, Ambulatory Unit Records, by clinic size (i.e., expected number of visits) from smallest to largest. (The number of patient visits can be found in item 4 on the cover page of the NHAMCS-101(U), Ambulatory Unit Record).

(3) **(b) Name of clinic**

Beginning with the clinics in the General Medicine group and continuing in the order listed in instruction (1) above, list the name of each clinic in column (b). Remember, the clinics should be listed from smallest to largest within each specialty group. If any of the specialty groups are not represented in the hospital OPD, continue with the next specialty group represented. If there are more than 10 clinics, use Supplemental Outpatient Department Sampling Summary Forms. Indicate the page number of this form and the total pages of Summary Forms completed in the space provided at the top right-hand corner of the Summary Form.

(4) **(c) Specialty group**

Enter the specialty group code in column (c) for each clinic listed in column (b). (The codes for each specialty are listed in instruction (1) above).

(5) Count the number of clinics listed in column (b). The total should equal the number of NHAMCS-101(U)s completed for the Outpatient Department at this hospital. If not, reconcile before continuing.

(6) **(d) Expected No. of visits**

In column (d), transcribe the expected number of visits for each clinic from Section A, item 4, of the NHAMCS-101(U), Ambulatory Unit Record.

(7) **(e) SU No. and (f) Probability**

If 5 or fewer clinics are listed, number them sequentially from 1 to 5 (or number of clinics) in column (e), and in column (f) enter 1. Enter the total number of visits for the OPD (i.e., the sum of expected visits for all clinics) in the box provided at the bottom of column (d). Then continue with instruction 9.

(8) **(i) SU No. and (j) Estimated number of visits**

If there are more than 5 clinics listed for this Outpatient Department, call your regional office supervisor immediately for instructions.

(In most cases, the supervisor will instruct you to FAX the OPD Sampling Summary Form(s) to the regional office FAX number and to a designated FAX number at Census Bureau Headquarters in Washington (301-763-2703). If there are small clinics (i.e., clinics with fewer than 30 expected visits during the 4-week reporting period), these clinics will be merged with one or more other clinics into a sampling unit based on their size and specialty group. Most sampling units will consist of only one clinic. From the total list of sampling units, no more than 5 will be selected for the sample. Headquarters will determine the Take Every pattern and random start number for each of the clinics within the SUs chosen for the sample. This information will be returned to you by FAX or telephone, whichever is most convenient, no later than 3 days after you send the Summary Forms. In most cases this will not take more than 24 hours.)

Skip to instruction 11.

SECTION II SELECTING PATIENT VISITS

(9) **(g) Take every number**

The Take Every (TE) number for each clinic is entered in column (g). To determine the TE for each clinic, refer to page 7 of this booklet. MAKE SURE YOU REFER TO PAGE 7 - THIS IS THE PAGE CONTAINING THE **OUTPATIENT DEPARTMENT** TAKE EVERY NUMBERS. Locate the number of visits for the individual clinic in the row of number ranges running across the top of the table on page 7. After locating the number of visits for the individual clinic in one of these ranges, find the number of visits expected for the entire OPD in the column of ranges running down the left-hand side of the page. (If you can not find the number of visits in any of the ranges (i.e., this number exceeds all ranges), call the regional office supervisor immediately.) Move your finger across the row containing the number of visits for the entire OPD area until it intersects the column containing the number of individual clinic visits. The number located in the cell where this column and row intersect is the Take Every number. Enter this number in column (g) and repeat the process for each clinic listed.

(10) **(h) Start No.**

Once a Take Every number has been determined for each clinic, select the Random Start numbers. Refer to the label affixed to the front of the NHAMCS-101(S), Sampling Record. A table was generated on this label consisting of a row or heading of TE numbers and a column or left margin of ten numbered rows. Random numbers between 1 and the TE number were generated in the table's cells. To determine the Random Start for the first clinic listed, locate the clinic's TE (as provided in column (g)) in the table heading. Using the first row (or next available row if others were previously used), move your finger across this row until it intersects the column headed by your TE number. The number in this cell is the Random Start number. Circle the number and enter it in column (h) next to the first clinic listed. Proceed to select the random start for the next clinic listed, this time using the TE determined for this clinic and the next available (i.e., unused) row. Continue the process until a random start has been selected for all areas in the OPD. Should you run out of available rows, contact your regional office supervisor and provide him or her with the TE numbers of all remaining units. The supervisor will determine the remaining Random Starts.

(11) Once the Summary Form(s) has been completed for the Outpatient Department, arrange to meet with each ambulatory unit director and/or other official(s) at the selected clinics and emergency service areas, if any.

EMERGENCY DEPARTMENT (ED) TAKE EVERY CHART

Visits to the Total ED		Visits to the individual service area												
		1	60	90	120	150	180	210	240	270	300	450	600	over
		59	89	119	149	179	209	239	269	299	449	599	999	999
		Take Every												
1	99	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
99	149	1	2	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
150	199	1	2	3	3	3	3	NA	NA	NA	NA	NA	NA	NA
200	249	1	2	3	4	4	4	4	4	NA	NA	NA	NA	NA
250	299	1	2	3	4	5	5	5	5	5	NA	NA	NA	NA
300	349	1	2	3	4	5	6	6	6	6	6	NA	NA	NA
350	399	1	2	3	4	5	6	7	7	7	7	NA	NA	NA
400	449	1	2	3	4	5	6	7	8	8	8	NA	NA	NA
450	499	1	2	3	4	5	6	7	8	9	9	9	NA	NA
500	749	1	2	3	4	5	6	7	8	9	10	10	10	NA
750	999	1	2	3	4	5	6	7	8	9	10	15	15	15
1,000	9,999	1	2	3	4	5	6	7	8	9	10	15	20	20
10,000	12,499	1	2	3	4	5	6	7	8	9	10	15	20	25
12,500	14,999	1	2	3	4	5	6	7	8	9	10	15	20	30
15,000	17,199	1	2	3	4	5	6	7	8	9	10	15	20	35

OUTPATIENT DEPARTMENT (OPD) TAKE EVERY CHART

Visits to the Total OPD		Visits to the individual clinic												
		1	60	90	120	150	180	210	240	270	300	450	600	over
		59	89	119	149	179	209	239	269	299	449	599	999	999
		Take Every												
1	299	1	1	1	1	1	1	1	1	1	NA	NA	NA	NA
300	449	1	2	2	2	2	2	2	2	2	2	NA	NA	NA
450	599	1	2	3	3	3	3	3	3	3	3	3	NA	NA
600	749	1	2	3	4	4	4	4	4	4	4	4	4	NA
750	899	1	2	3	4	5	5	5	5	5	5	5	5	NA
900	1,049	1	2	3	4	5	6	6	6	6	6	6	6	NA
1,050	1,199	1	2	3	4	5	6	7	7	7	7	7	7	NA
1,200	1,349	1	2	3	4	5	6	7	8	8	8	8	8	NA
1,350	1,499	1	2	3	4	5	6	7	8	9	9	9	9	NA
1,500	2,249	1	2	3	4	5	6	7	8	9	10	10	10	10
2,250	2,999	1	2	3	4	5	6	7	8	9	10	15	15	15
3,000	9,999	1	2	3	4	5	6	7	8	9	10	15	20	20
10,000	12,499	1	2	3	4	5	6	7	8	9	10	15	20	25
12,500	14,999	1	2	3	4	5	6	7	8	9	10	15	20	30
15,000	17,199	1	2	3	4	5	6	7	8	9	10	15	20	35

Classification of Clinics

I GENERAL MEDICINE

AIDS
Allergy
Cardiology
Dermatology
Diabetes
Endocrinology
Family Practice
Gastroenterology
General Medicine
General Preventive Medicine
Geriatric
Hematology
Hypertension
Immunology
Infectious Diseases
Internal Medicine
Nephrology
Neurology
Oncology
Ophthalmology
Otolaryngology
Preventive Medicine
Pulmonary
Rheumatology
Walk-in and/or Screening

II SURGERY

Cardiothoracic
Colon and Rectal Surgery
General Surgery
Hand Surgery
Head and Neck Surgery
Neurologic Surgery
Ophthalmology Surgery
Orthopedic Surgery
Otolaryngology Surgery
Pediatric Surgery
Plastic Surgery
Pulmonary/Thoracic Surgery
Urological Surgery
Vascular Surgery

III PEDIATRICS

Adolescent Medicine
Neonatology
Pediatric Allergy
Pediatric Cardiology
Pediatric Dermatology
Pediatric Endocrinology
Pediatric Gastroenterology
Pediatric Hematology
Pediatric Infectious Diseases
Pediatric Nephrology
Pediatric Neurology
Pediatric Oncology
Pediatric Ophthalmology
Pediatric Pulmonary
Pediatric Rheumatology/Arthritis
Pediatrics
Well Child Care

IV OBSTETRICS/GYNECOLOGY

Abortion
Breast
Family Planning
Gynecology
Gynecologic Colposcopy
Gynecologic Oncology
Obstetrics
Obstetrics - Post Partum
Obstetrics - Prenatal
Reproductive Endocrinology

V OTHER

Adolescent Psychiatry
Adult Psychiatry
Alcohol Abuse
Child Psychiatry
Drug Abuse (excluding Methadone Maintenance)

DIRECTOR MEETING CHECKLIST

(1) Briefly state the purpose of the NHAMCS.

(2) Explain the ambulatory unit staff members involvement with the study. They will:

- ☛ List all eligible patient visits during the specified 4-week period.
- ☛ Sample only certain visits using the take every and random start numbers.
- ☛ Complete a brief 1-page form for each of the sampled visits. Each form should take a couple of minutes to complete, and at most, the unit should only have to complete 5 forms each day.

(3) Complete Sections C through G of the Ambulatory Unit Record.

(4) Ask the director to designate staff to assist with the data collection activities.

Make sure all hours and shifts are covered.

Person completing forms should be knowledgeable about medical care and services and should have access to the medical records or patient visits.

Person performing listing and sampling should have access to arrival log(s).

Assign one member of the staff as "data coordinator" to oversee patient visit sampling and completion of Patient Record forms.

(5) Arrange to meet with each designated staff member.

AMBULATORY UNIT INSTRUCTION CHECKLIST

(1) Verify patient list kept by ambulatory unit is usable for sampling. That is, all patient visits are listed and can be easily counted or numbered. (If not, provide a NHAMCS-103 Optional Patient Log).

(2) Who to List/Who not to List on Patient Log

List every eligible ambulatory patient visit to this unit during the 4-week reporting period.

Include patients doctor does not see but who receive care from a physician assistant, nurse, nurse practitioner, etc.

Exclude persons who visit for administrative reasons, such as to complete an insurance form or pay a bill.

Exclude patients who do not seek care or services, for example, they come to pick up a prescription or leave a specimen.

Exclude visits by persons currently admitted as inpatients to the sample hospital. **(Nursing home patients should be included, however).**

Exclude telephone contacts with patients.

(3) Explain sampling system.

Define the Random Start number and explain how it is used only once at the beginning of the reporting period to start patient visit sampling.

Discuss the Take Every Pattern and demonstrate an example of its use. **Emphasize the importance of sampling continuously from the patient list - never starting over at the beginning of a new day or shift.**

Show staff Section I of the appropriate department instruction booklet. Take Every and Random Start numbers are provided in C.2.

(4) Go over Patient Record Form items, paying careful attention to --

Emergency Department Patient Record Form

ITEM 9 - Indicate whether the visit is a first visit or follow-up for an injury or illness.

ITEM 10 - If the major reason for this visit was an injury, as indicated in boxes 1 and 2 of item 9, describe in detail the events and that preceded the injury, for example, the place and cause of this injury.

ITEM 11 - To be recorded in patient's own words. If the patient is unable to respond, record the reason as stated by the person accompanying the patient.

ITEM 12a - Diagnosis can be tentative, provisional or definitive. However, exclude "Rule Out" diagnoses. Should relate to the response recorded in item 10a.

ITEM 12b,c - Enter any other diagnoses, including those not necessarily associated with this visit.

ITEM 17 - Record all medications administered during the visit as well as all new or continued medications provided or ordered, using the same brand name or generic name entered on any prescription or the medical record. Include immunizations, allergy shots, etc.

Outpatient Department Patient Record Form

ITEM 9 - Indicate whether **this** visit was due to the advice or direction of a physician other than the one being visited.

ITEM 10 - To be recorded in patient's own words. If the patient is unable to respond, record the reason as stated by the person accompanying the patient.

ITEM 11a - Diagnosis can be tentative, provisional or definitive. However, exclude "Rule Out" diagnoses. Should relate to the response recorded in item 10a.

ITEM 11b,c - Enter any other diagnoses, including those not necessarily associated with this visit.

ITEM 12 - Indicate whether the patient has been seen in this clinic previously. Be sure to answer the subquestion underneath for each "Yes" response.

ITEM 13 - Record up to two ambulatory (outpatient) surgical procedures. For the visit on line a, check whether it was performed at this visit or scheduled to be done later. Also check the type of anesthesia that was used or is planned for use. Include minor procedures (e.g. wound care) as well as more complex procedures (e.g. lens extractions, vasectomies). Procedures that were performed should be listed before procedures that were scheduled. If reporting two that were performed. or two that were scheduled, list the more complex procedure first. If no procedures were scheduled or performed, the staff should enter "NONE" on line a.

ITEM 16 - Record all new or continued medications, using the same brand name or generic name entered on any prescription or medical record. Include immunizations, allergy shots, etc. Fill 17a for each medication listed.

(5) Instruct the hospital staff to refer to the item-by-item instructions in the Instruction Booklet if they are unsure of how to complete any item on the Patient Record form.

Remind the staff to tear off the top portion of the form containing the patient's name and identification number, before they are collected.

Explain that the staff should never borrow Patient Record forms from another participating ambulatory unit. Should they start running low, they should call you immediately.

(6) Explain that you will return at least once a week to collect completed forms, review the data collection activities, and assist in any other way needed.

QUALITY CONTROL VISIT CHECKLIST

(1) Verify patient visit log is complete, that is, all eligible patient visits are listed and all blocks of time the ambulatory unit is open are accounted for on the log.

(2) Ensure ambulatory unit is correctly sampling patient visits:

- ☛ Are ineligible visits being excluded from the list or the count of visits?
- ☛ Was the random start used to begin the sample selection? Was it used only at the beginning of the reporting period?
- ☛ Is the correct Take Every pattern being followed?
- ☛ Is the sample being selected continuously, i.e. from shift to shift and/or day to day?

(3) Review completed Patient Record Forms paying careful attention to ensure:

- ☛ Patient Record Forms are completed for all patient visits selected from the patient log
- ☛ All items on the Patient Record Forms have entries
- ☛ All entries are legible

(4) Check supply of Patient Record Forms to ensure there is an adequate supply remaining to complete the reporting period.

(5) If applicable, examine pad of Patient Visit Logs to ensure the unit has an adequate supply.

(6) Answer any questions or resolve any problems the staff might be experiencing.

FORM **NHAMCS-131** (6-7-91) U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

EDIT CHECKLIST

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

a. Hospital No.	b. Hospital name		
c. Field Rep. code	d. Assigned reporting period	FROM	TO
e. No. of clinics in OPD	f. No. of emergency service areas in ED		

INSTRUCTIONS

Fill this form as you edit each completed case. As you complete each task listed below, place an "X" or enter a "Yes" or "No" response, as appropriate, in the Field Representative Checklist column. (The "Office Checklist" column is for the RO editor's use.)

All editing marks on the Patient Record Forms (entering missing data, explanations, etc.) must be entered in GREEN PEN OR PENCIL.

Also, make notes of any errors or problems you discover during the weekly quality control visits immediately after you find them. DO NOT TRUST THIS INFORMATION TO MEMORY.

	Field Representative Checklist (a)	Office Checklist (b)
1. Check that all applicable questions are answered in each applicable section of the NHAMCS-101 questionnaire.		
a. Section I — TELEPHONE SCREENER		
b. Section II — INDUCTION INTERVIEW		
c. Section III — EMERGENCY DEPARTMENT DESCRIPTION		
d. Section IV — OUTPATIENT DEPARTMENT DESCRIPTION		
e. Section V — NONINTERVIEW		
f. Section VI — DISPOSITION AND SUMMARY		
(1) Are all sampled ambulatory units listed?		
(2) Are columns (b)—(g) completed for each unit?		
2. Check that all applicable items are completed in the NHAMCS-101/S, Sampling Record		
a. Page 2 — EMERGENCY DEPARTMENT SAMPLING SUMMARY FORM		
(1) Are columns (c)—(e) filled for all service areas listed?		
(2) Is the total visits box completed?		
b. Page 3 — OUTPATIENT DEPARTMENT SAMPLING SUMMARY FORM		
(1) Are columns (c)—(h) completed for each clinic listed?		
(2) If applicable, are columns (i)—(k) completed?		
c. Are all additional Sampling Summary forms attached to the NHAMCS-101/S?		

3. Check that all applicable items are completed in each applicable section of the NHAMCS-101/U, Ambulatory Unit Record.	Field Representative Checklist (a)	Office Checklist (b)
a. Section A — AMBULATORY UNIT INFORMATION		
b. Section B — INFORMATION FROM SAMPLING RECORD		
c. Section C — EMERGENCY SERVICES/OUTPATIENT INFORMATION AND LOGS		
d. Section D — VERIFICATION OF ESTIMATED VISITS		
e. Section E — CALCULATE NEW SAMPLING INTERVAL AND RANDOM START FOR THIS CLINIC		
f. Section F — DATA COORDINATOR AND KEY HOSPITAL STAFF		
g. Section G — PATIENT RECORD FORM INFORMATION		
h. Section H — TRAINING		
i. Section I — QC VISITS		
j. Section J — AU DATA *(Make any necessary effort to ensure you receive accurate entries for items 1 and 2.)*		
k. Section K — DEBRIEFING		
l. Section L — UPDATED CONTACT OR APPROVAL INFORMATION		
4. Were the Patient Lists kept by the ambulatory units complete? That is, were all days and blocks of time when the unit operated accounted for? *(For each unit, compare the days and hours of operation to those provided in Section C of the NHAMCS-101/U for that unit.)*		

MISSING INFORMATION CHART

Ambulatory unit name (a)	Not reported (b)		Reason (c)	Will staff provide information? (d)	Number of patients seen (e)
	DAYS	HOURS			

FORM NHAMCS-131 (6-7-91)

5a. Check for missing Patient Record Forms (e.g., if you collect Patient Record Forms 000001—000023 and 000027—000054, contact the ambulatory unit to find out what happened to records 000024—000026. You should also contact the unit if the Patient List kept by the unit indicates additional forms should have been filled.)

Refer to Section G of the NHAMCS-101/U to make sure the PRFs collected are the same as originally assigned to this clinic or service area.

(If Patient Record Forms are missing, record the 6-digit PRF number and indicate the unit they were missing from. If the PRFs completed for this unit are not the same as those originally assigned, record below and make special notes of this situation in the "NOTES" section of the corresponding NHAMCS-101 questionnaire.)

MISSING PATIENT RECORD FORMS

Ambulatory unit name (1)	6-digit PRF numbers (2)

b. Check that all items are answered on each Patient Record Form (items 3—18 on the OPD form and items 3—19 on the ED form).

(If any items are missing, list below and indicate the ambulatory unit to which they belong. Indicate in the "Comments" column whether the item was retrieved, and if not, why the item was not retrieved.)

Ambulatory unit name (1)	Patient record number (2)	Item numbers (3)	Comments (4)

6. Were any of the ambulatory units contacted for any reason during the edit process?

☐ YES — *Enter comments below* →

☐ NO

FIELD REPRESENTATIVE'S COMMENTS	OFFICE EDITOR'S COMMENTS

OMB No. 0920-0278: Approval Expires 02/28/92

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 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 15 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 Office., Attn: PRA: HHH Building, Rm. 721-B 200 Independence Ave., SW, Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0278); Washington, DC 20503.

FORM **NHAMCS-133**
(9-3-91)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
NATIONAL CENTER FOR HEALTH STATISTICS
CENTERS FOR DISEASE CONTROL

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

DEBRIEFING FORMS

A. Hospital name

B. Hospital number

C. Clinic/Emergency service area name

D. Staff member name

Position/Title

Study responsibilities

IMPORTANT — *To find out how well sampling and data collection procedures worked, we are asking each participating staff member to complete this form.* ***Hospital administrators are asked to complete question 5 only.*** *Thank you again for your participation on this important study.*

1. VISIT SAMPLING

a. Were there any problems determining which patient visit to sample?

1 ☐ Yes — Specify →
2 ☐ No

b. Did you miss any patient visits (i.e., were eligible patient visits excluded from the patient log)?

1 ☐ Yes — Specify →
2 ☐ No

c. Were any ineligible visits included on the log?

1 ☐ Yes — Specify →
2 ☐ No

d. How could these problems have been avoided?

2. DATA COLLECTION METHOD

a. When was PATIENT RECORD FORM recording done?

1 ☐ At time of visit
2 ☐ After visit
3 ☐ Both

b. Which data items did you record?

1 ☐ None
2 ☐ All

c. What procedures might improve the method of data collection that you used?

PLEASE CONTINUE ON REVERSE

3. DATA COMPLETENESS	
a. Was completeness of the data affected by —	
(1) completeness of the medical record?	1☐ Yes 2☐ No
(2) inaccessibility of the medical record?	1☐ Yes 2☐ No
(3) staff too busy to complete certain items?	1☐ Yes 2☐ No
b. Which data items were most affected by these problems?	
c. What procedures might correct these problems?	
4. BURDEN	1☐ None
a. What specific inconveniences or burdens to the staff did you observe?	
b. How might these staff burdens be reduced?	
c. Could substantially more forms have been completed without greatly increasing the burden?	1☐ Yes 2☐ No
d. Would you prefer a shorter time period, say 2 weeks instead of 4, with the same number of Patient Record Forms?	1☐ Yes 2☐ No
5. GENERAL COMMENTS	
a. How would you describe the amount of effort the study required for the hospital staff?	1☐ Large 2☐ Moderate 3☐ Small
b. How do you evaluate the value of the data to the health profession?	1☐ Very valuable 2☐ Somewhat valuable 3☐ Little value 4☐ No value
c. Would you participate again one year from now?	1☐ Yes 2☐ No
d. Other reaction to forms and procedures	

COMMENTS — *Use this space for any additional comments.*

FORM NHAMCS-131 (9-3-91)

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

OMB No. 0920-0278
Expires: 2/28/92
CDC 64.53

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-B; 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 EMERGENCY DEPARTMENT PATIENT RECORD

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
2 ☐ Not Hispanic

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

9. MAJOR REASON FOR THIS VISIT *(Check one)*
1 ☐ Injury, first visit
2 ☐ Injury, follow-up
3 ☐ Illness, first visit
4 ☐ Illness, follow-up
5 ☐ Other reason

10. CAUSE OF INJURY *(Complete if injury is marked in 9. Describe cause and place of injury.)*

11. 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:

12. PHYSICIAN'S DIAGNOSES
a. Principal diagnosis/ problem associated with item 11a.
b. Other:
c. Other:

13. URGENCY OF THIS VISIT *(Check only one)*
1 ☐ Urgent/Emergent
2 ☐ Non-urgent

14. IS PROBLEM ALCOHOL- OR DRUG-RELATED?
1 ☐ Neither
2 ☐ Alcohol-related
3 ☐ Drug-related
4 ☐ Both

15. DIAGNOSTIC/SCREENING SERVICES *(Check all ordered or provided.)*
1 ☐ None
2 ☐ Blood pressure check
3 ☐ Urinalysis
4 ☐ HIV serology
5 ☐ Other blood test
6 ☐ EKG
7 ☐ Mental status exam
7 ☐ Chest x-ray
9 ☐ Extremity x-ray
10 ☐ CT scan/MRI
11 ☐ Other diagnostic imaging
12 ☐ Other *(Specify)*

16. PROCEDURES *(Check all provided on this visit)*
1 ☐ None
2 ☐ Endotracheal intubation
3 ☐ CPR
4 ☐ IV fluids
5 ☐ NG tube/ gastric lavage
6 ☐ Wound care
7 ☐ Eye/ENT care
8 ☐ Orthopedic care
9 ☐ Bladder catheter
10 ☐ Lumbar puncture
11 ☐ Other(s) *(Specify)*

17. MEDICATION
(Record all new or continued medication ordered, administered, or provided at this visit. Use the same brand name or generic name entered on any Rx or medical record. Include immunizations and desensitizing agents.)
☐ None
1.
2.
3.
4.
5.

18. DISPOSITION THIS VISIT *(Check all that apply)*
1 ☐ Return to ED PRN
2 ☐ Return to ED - appointment
3 ☐ Return to referring physician
4 ☐ Refer to other physician/clinic
5 ☐ Admit to hospital
6 ☐ Transfer to other facility
7 ☐ DOA/died in ED
8 ☐ Left AMA
9 ☐ No follow-up planned
10 ☐ Other *(Specify)*

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

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

OMB No. 0920-0278
Expires: 2/28/92
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NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY
OUTPATIENT DEPARTMENT PATIENT RECORD

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
2 ☐ Not Hispanic

8. EXPECTED SOURCE(S) OF PAYMENT *(Check all that apply)*
1 ☐ Medicare
2 ☐ Medicaid
3 ☐ Other government
4 ☐ Private/ Commercial
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 10a.
b. Other:
c. Other:

12. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE?
1 ☐ Yes 2 ☐ No
If yes, for the condition in item 11a?
1 ☐ Yes 2 ☐ No

13. AMBULATORY SURGICAL PROCEDURE(S)
(Record any outpatient diagnostic or therapeutic procedure. For the first, check appropriate boxes.)
a.
1 ☐ Scheduled
2 ☐ Performed
3 ☐ Local anesthesia
4 ☐ Regional anesthesia
5 ☐ General anesthesia
b.

14. DIAGNOSTIC/SCREENING SERVICES
(Check all ordered or provided.)
1 ☐ None
2 ☐ Blood pressure
3 ☐ Urinalysis
4 ☐ EKG - resting
5 ☐ EKG - exercise
6 ☐ Mammogram
7 ☐ Chest x-ray
8 ☐ Other radiology
9 ☐ Allergy testing
10 ☐ Spirometry
11 ☐ Pap test
12 ☐ Strep throat test
13 ☐ HIV serology
14 ☐ Cholesterol measure
15 ☐ Other lab test
16 ☐ Hearing test
17 ☐ Visual acuity
18 ☐ Mental status exam
19 ☐ Other *(Specify)*

15. THERAPEUTIC SERVICES
(Check all ordered or provided. Exclude medication)
1 ☐ None

COUNSELING/EDUCATION:
2 ☐ Diet
3 ☐ Exercise
4 ☐ Cholesterol reduction
5 ☐ Weight reduction
6 ☐ Drug abuse
7 ☐ Alcohol abuse
8 ☐ Smoking cessation
9 ☐ Family/social
10 ☐ Growth/development
11 ☐ Family planning
12 ☐ Other counseling

OTHER THERAPY:
13 ☐ Psychotherapy
14 ☐ Corrective lenses
15 ☐ Hearing aid
16 ☐ Physiotherapy
17 ☐ Other therapy *(Specify)*

16. MEDICATION
(Record all new or continued medications ordered, administered, or provided on this visit. Use the same brand name or generic name on any Rx or medical record. Include immunizations and desensitizing agents.)

☐ None

NEW MEDICATION?

1. _____ 1 ☐ Yes 2 ☐ No
2. _____ 1 ☐ Yes 2 ☐ No
3. _____ 1 ☐ Yes 2 ☐ No
4. _____ 1 ☐ Yes 2 ☐ No
5. _____ 1 ☐ Yes 2 ☐ No

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

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

Appendix IV
Definitions of terms relating to the Patient Record forms

Age—The age calculated from date of birth is the age at last birthday on the date of visit.

Race—Hospital staff were instructed to record based on observation or the hospital's usual practice or knowledge. The following category definitions were provided:

- *White*—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
- *Black*—A person having origins in any of the black racial groups of Africa.
- *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.
- *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.

Ethnicity—Hospital staff were instructed to mark the appropriate category based on the hospital's usual practices.

- *Hispanic origin*—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- *Not Hispanic*—All other persons.

Expected source(s) of payment—Hospital staff were instructed to check the source(s) that would pay for this visit.

- *Medicare*—Charges paid in part or in full by a Medicare plan. Includes payments made directly to the hospital as well as payments reimbursed to the patient.
- *Medicaid*—Charges paid in part or in full by a Medicaid plan. Includes payments made directly to the hospital as well as payments reimbursed to the patient.
- *Other government*—Charges paid in part or in full by any other local, State, or Federal health care programs, such as workers compensation programs and Civilian Health and Medical Programs of Uniformed Services (CHAMPUS).
- *Private commercial*—Charges paid in part or in full by a private insurance company. Includes payments made directly to the hospital as well as payments reimbursed to the patient.
- *HMO/other prepaid*—Charges included under a prepayment plan. Includes health maintenance organizations (HMOs), independent practice associations (IPAs), preferred provider organizations (PPOs), etc.
- *Patient paid*—Charges paid in part or in full by the patient or the patient's family that will not be reimbursed by a third party. Includes "co-payments" and "insurance deductibles." Excludes prepaid plan visits for which no co-payment is charged.
- *No charge*—Visits for which no fee is charged.
- *Other*—Any other source of payment not covered in the categories above.

Major reason for this visit (ED)—Hospital staff were instructed to indicate whether this visit is the first visit or followup visit for an injury or illness.

- *Injury, first visit*—Self-explanatory.
- *Injury, followup*—Self-explanatory.
- *Illness, first visit*—Self-explanatory.
- *Illness, followup*—Self-explanatory.
- *Other reason*—Includes general health maintenance examinations, routine periodic examinations of presumably healthy persons—both children and adults—and malingering.

Cause of injury (ED)—Hospital staff were instructed to describe in detail the events and circumstances surrounding the injury, for example, the place and cause of injury.

Patient referred (OPD)—Referrals are any visits that are made at the advice or direction of the hospital staff other than the ones being visited. The interest is in referrals for the current visit and not in referrals for any prior visit.

Patient's complaint(s), symptom(s), or other reason(s) for this visit (in patient's own words)—The patient's problem, complaint, symptom, or other reason for this visit as expressed by the patient. Hospital staff were instructed to record key words or phrases verbatim to the extent possible. "Most important" refers to that problem which, in their judgment, is most responsible for the patient's visit.

Physician's diagnosis—The physician's best assessment of diagnosis of the patient's most important problem, complaint, or symptom. The term "principal" refers to the first-listed diagnosis. The diagnosis represents the hospital staff's best judgment at the time of the visit and may be tentative, provisional, or definitive.

Urgency of this visit (ED)—Hospital staff were instructed to check the category that best indicates the urgency of the visit.

- *Urgent/emergent*—Patient requires immediate attention for acute illness or injury that threatens life or function. Delay would be harmful to the patient.
- *Non-urgent*—Patient does not require attention immediately or within a few hours.

Alcohol- and/or drug-related (ED)—Patient's most important complaint or presenting problem is alcohol- and/or drug-related.

Seen in clinic before (OPD)—"Seen before" means provided care in that clinic at any time in the past. The second part of item 12 refers to the patient's current condition.

Ambulatory surgery (OPD)—Any surgical procedure performed in the clinic or ordered to be performed elsewhere on an outpatient basis, including suturing of wounds, reduction of fractures, application or removal of casts, incision and drainage of abscesses, application of supportive materials for fractures and sprains, irrigations, aspirations, dilations, and excisions.

Diagnostic/screening services—Hospital staff were instructed to mark all services and procedures that were ordered or provided during this visit for the purpose of screening or diagnosis.

- *Blood pressure check*—Self-explanatory.
- *Urinalysis*—Any physical, chemical, or microscopic examination of urine.
- *HIV serology*—The study of the human immunodeficiency virus (HIV) antigen-antibody reaction in vitro.
- *Cholesterol measure*—A blood test taken to measure the level of cholesterol in a patient's blood.
- *Other blood test (ED)*—Self-explanatory.
- *Pap test (OPD)*—Papanicolaou test.
- *Strep throat test (OPD)*—Rapid strep test or throat culture.
- *Other lab test (OPD)*—Self-explanatory.
- *EKG-resting*—Resting-electrocardiogram.
- *EKG-exercise (OPD)*—Exercise-electrocardiogram.
- *Mental status exam*—Any formal, clinical evaluation designed to assess the mental or emotional status of the patient.
- *Mammogram (OPD)*—X-ray of the breasts.
- *Chest x-ray*—Single or multiple x-rays of the chest for diagnostic or screening purposes. Excludes fluoroscopy and studies of ribs, bony thorax, and spine.
- *Extremity x-ray (ED)*—X-ray of the arms, legs, hands, or feet.
- *CT scan/MRI (ED)*—Computerized tomography scan/magnetic resonance imaging.
- *Other diagnostic imaging (ED)*—Self-explanatory.
- *Other radiology (OPD)*—Self-explanatory.
- *Hearing test (OPD)*—Self-explanatory.
- *Visual acuity (OPD)*—Self-explanatory.
- *Spirometry (OPD)*—Measurement of air capacity of the lungs.
- *Allergy testing (OPD)*—May include the direct introduction of antigen into the skin, allergen inhalation, or bronchial challenge tests.

Procedures (ED)—Hospital staff were instructed to mark all procedures provided this visit.

- *Endotracheal intubation*—A laryngoscope inserted into the mouth followed by a tube into the trachea.
- *CPR*—Cardiopulmonary resuscitation.
- *IV fluids*—Administration of intravenous fluids.
- *NG tube*—Insertion of nasogastric tube through the nose, down the esophagus, and into the stomach.
- *Gastric lavage*—Passage of a solution through the inflow tube into the nose, down the esophagus, and into the stomach where the gastric contents are irrigated and returned through an outflow tube.
- *Wound care*—Includes cleaning, debridement, and dressing of burns; repair of lacerations with skin tape or sutures; removal of foreign bodies; excisions; and incision and drainage.
- *Eye/ENT care*—Care provided to the eyes, ears, nose, and throat; includes measurement of intraocular pressure in the eyes, removal of ear wax, removal of foreign bodies, nasal packing, and laryngoscopy.
- *Orthopedic care*—Treatment of orthopedic injuries or conditions; includes casting, wrapping, splinting, and aspiration of fluid from joints.
- *Bladder catheter*—Any type of catheter used to catheterize the bladder, for example, Foley.
- *Lumbar puncture*—Insertion of a needle into the lumbar spine to extract spinal fluid for laboratory examination.
- *Other(s) specify*—Up to two other diagnostic and/or treatment procedures provided this visit were recorded.

Medication—Hospital staff were instructed to list, using brand or generic names, all medications ordered, injected, administered, or provided this visit including prescription and nonprescription drugs, immunizations, and desensitizing agents. Also included are drugs and medications ordered or provided prior to the visit that the patient was instructed to continue taking.

Disposition (ED)—Hospital staff were instructed to mark all categories that apply.

- *Return to ED PRN*—The patient is instructed to return to the ED as needed.
- *Return to ED-appointment*—The patient is told to schedule an appointment or is given an appointment to return to the ED at a particular time.
- *Return to referring physician*—The patient was referred to the ED by his or her personal physician or some other physician and is now instructed to consult again with the physician who made the referral.
- *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.
- *Admit to hospital*—The patient is instructed that further care or treatment will be provided as an inpatient in the hospital.
- *Transfer to other facility*—The patient is transferred to a facility other than a facility operated under the auspices of this hospital.
- *DOA/died in the ED*—If the patient is dead on arrival (DOA) or died in the ED, this patient is still included in the sample.

- *Left AMA*—If the patient was registered to be seen but left prior to being seen by a health care provider or left against medical advice (AMA), this patient is still included in the sample.
- *No followup planned*—No return visit or telephone contact is scheduled or planned for the patient's problem on this visit.
- *Other*—Any other disposition of the case not included in the categories above.

Disposition (OPD)—Hospital staff were instructed to mark all categories that apply.

- *Return to clinic PRN*—The patient is instructed to return to the clinic as needed.
- *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.
- *Telephone followup 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.
- *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.
- *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.
- *Admit to hospital*—The patient is instructed that further care or treatment will be provided as an inpatient in the hospital.
- *No followup planned*—No return visit or telephone contact is scheduled or planned for the patient's problem on this visit.
- *Other, specify*—Any other disposition of the case not included in the categories above.

Providers—Hospital staff were instructed to mark all providers seen by the patient during this visit.

- *Resident/intern*—Persons graduated from medical school and in training.
- *Staff physician*—Physician who is employed by the hospital or the university affiliated with the hospital and is a member of the hospital staff.
- *Other physician*—Consulting physicians and other part-time physicians who are not considered to be members of the hospital staff.
- *Physician assistant*—Certified health care professional who delivers health care services under the supervision of a licensed physician.
- *Nurse practitioner*—Registered nurse with advanced training who provides primary health care services. Supervision by a physician is required in some states.
- *Registered nurse*—Self-explanatory.
- *Licensed practical nurse*—Self-explanatory.
- *Nurse's aide*—Self-explanatory.

Appendix V
Introductory letter

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

National Center for Health Statistics
6525 Belcrest Road
Hyattsville, MD 20782

Date

Chief Executive Officer
Title
Hospital Name
Address
City, State, Zip

Dear (Chief Executive Officer):

As part of its continuing program to provide information on the health status of the American people, the National Center for Health Statistics (NCHS) of the Centers for Disease Control (CDC) is beginning an annual study of hospital-based outpatient care. This new study is the National Hospital Ambulatory Medical Care Survey (NHAMCS). The NHAMCS is an extension of the National Ambulatory Medical Care Survey (NAMCS), which collects ambulatory care data from physicians in office-based practices.

The purpose of this new study is to collect information about the large portion of ambulatory care that is provided by hospital outpatient departments and emergency departments. The data requested concern ambulatory patients, their health problems, and the resources needed for their care. The resulting information will help the hospital industry and the medical profession plan for more effective health services, determine health manpower needs, and improve medical education.

The enclosed "Advancedata" summary of the 1989 NAMCS provides an overview of the data that are available on office-based ambulatory care. As the enclosed letters of endorsement attest, comparable data on ambulatory care provided in hospital settings are essential to meet the needs of the hospital industry and the medical profession.

The NHAMCS is authorized by Title 42, United States Code, Section 242k. Participation is voluntary and there are no penalties for not participating. However the success of the study depends on the willingness of health professionals like yourself to provide current medical information. All information collected is confidential, including the identity of your hospital. Patient names and personal identifiers will not be recorded. Data collected will be used only to prepare statistical summaries.

Within a few days, a representative of the Bureau of the Census, which is acting as our data collection agent, will telephone your office to arrange a visit to discuss the details of your participation. We greatly appreciate your cooperation.

Sincerely Yours,

Manning Feinleib, M.D., Dr. P.H.
Director

Appendix VI
Endorsement letters

American College of Emergency Physicians

Post Office Box 619911
Dallas, Texas 75261-9911
214/550-0911
214/580-2816 (Fax Number)

Dear Emergency Department Director:

I am writing to urge your participation in the National Hospital Ambulatory Medical Care Survey. This survey is part of an ongoing project sponsored by the National Center for Health Statistics to gather data about medical care provided in outpatient and emergency facilities. The information gathered is used by medical educators, researchers, planners, and health administrators to assess health needs and resources and for planning and organizing health services.

The American College of Emergency Physicians has long recognized the need for national data describing emergency department visits. For this reason, the College has participated in the development of the survey forms and procedures.

I believe the data to be collected in this survey will be vital for researchers, planners, and decision makers addressing emergency medicine issues. I urge you to complete the survey.

Sincerely,

John C. Johnson, MD, FACEP
President

EMERGENCY
EMERGENCY
EMERGENCY
EMERGENCY
EMERGENCY
NURSES**A**SSOCIATION 230 East Ohio
Suite 600
Chicago, Illinois 60611-3297
Telephone 312/649-0297
Fax 312/649-9430

Dear Emergency Department Director:

The need and value of national data from ambulatory settings is clear from educational, planning, and assessment viewpoints. I am writing to urge your participation in the National Hospital Ambulatory Medical Care Survey which is part of an ongoing project to fill an informational gap in our area of health care.

The Emergency Nurses Association and the 22,000 emergency nurses it represents are pleased to support and encourage this effort. The information gathered will provide educators, researchers, planners, administrators, and managers with an additional tool to better understand the outpatient and emergency care areas.

Please help the National Center for Health Statistics collect this data by completing this survey. Your contribution will be a building block in establishing a data base which will be vital to future efforts in this area of health care.

Sincerely,

Lynne Gagnon

Lynne Gagnon, RN, BSN, CEN
President

American Hospital Association

AHA

840 North Lake Shore Drive
Chicago, Illinois 60611
Telephone 312.280.6000
Cable Address AMHOSP

April 1991

To: Chief Executive Officers

The National Center for Health Statistics is conducting a study to collect data on hospital-sponsored ambulatory care. Information from hospital ambulatory care programs and emergency departments will complement similar data obtained from private physicians in the National Ambulatory Medical Care Survey (NAMCS). NAMCS data are used by medical educators, reseachers, planners, and administrators to develop profiles of the patients treated in ambulatory settings, their health problems and clinical needs, and the health professionals providing services to meet these needs.

The American Hospital Association is keenly interested in these data and has been involved in developing the forms and procedures for this study. The data collected will fill important gaps regarding basic dimensions of hospital ambulatory care. Little or no basic patient socio-demographic information is available on a national basis for the ambulatory care industry. We believe that the survey design calls for a minimal amount of record-keeping and time on the part of your staff. All information collected will be kept confidential and will be reported only in summary form.

I am confident that the information obtained in this survey will be well worth the effort expended by your hospital staff.

Thank you for your help and cooperation.

Sincerely

Peter D. Kralovec

Peter D. Kralovec
Director
Hospital Data Center

Appendix VII
Thank you letters

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

National Center for Health Statistics
6525 Belcrest Road
Hyattsville, MD 20782

Chief Executive Officer
Title
Hospital Name
Address
City, State, Zip

Dear (Chief Executive Officer),

We wish to thank you for your participation in the National Hospital Ambulatory Medical Care Survey (NHAMCS). Please convey our sincere appreciation to your hospital staff for their invaluable help in completing the study in your hospital. Their efforts on our behalf are very much appreciated.

This new information on ambulatory care provided by hospital outpatient and emergency departments will be used to bridge the gap which currently exists in ambulatory care data. Data collection for the NHAMCS will be completed in January, 1993, and the initial report from the study will be published in late 1993. Upon its release, we will forward a copy of the report to you so that you can see the value of your participation. Again, our sincere thanks to you and your staff for your interest and cooperation.

Sincerely yours,

James E. DeLozier
Chief, Ambulatory Care
Statistics Branch
Division of Health Care
Statistics

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

National Center for Health Statistics
6525 Belcrest Road
Hyattsville, MD 20782

Thank You

We wish to thank you for your participation in the National Hospital Ambulatory Medical Care Survey (NHAMCS). Your efforts have been invaluable in completing the study in your hospital and are very much appreciated.

This new information on ambulatory care provided by hospital outpatient and emergency departments will be used to bridge the gap which currently exists in ambulatory care data. Data collection for the NHAMCS will be completed in January, 1993, and the initial report from the study will be published in late 1993. Upon its release, we will forward a copy of the report to your hospital so that you can see the value of your participation. If you would like to have an additional copy of the report sent to you or your office, please complete and return the form below.

Again, our sincere thanks to you for your interest and cooperation.

Sincerely yours,

James E. DeLozier
Chief, Ambulatory Care Statistics Branch
Division of Health Care Statistics

Please send the 1992 NHAMCS Summary Report to:

NAME: _____ (Last Name) _____ (First Name) _____ (MI)

TITLE OR DEPARTMENT: _____

_____

HOSPITAL NAME: _____

ADDRESS: _____ (Street Address)

_____ (City) _____ (State) _____ (ZIP code)

MAIL TO: Ambulatory Care Statistics Branch
Room 954
6525 Belcrest Road
Hyattsville, Maryland 20782

Appendix VIII
Patient Record forms used in the 1993–94 National Hospital Ambulatory Medical Care Survey

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

OMB No. 0920-0278
Expires: 6/30/94
CDC 64.53

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-B; 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
EMERGENCY 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. PLACE OF INJURY *(Check one, if visit is injury-related)*
1 ☐ Home
2 ☐ Work
3 ☐ School/Day care
4 ☐ Street/Highway
5 ☐ Other *(Specify)* _____

10. CAUSE OF INJURY *(Describe events that preceded injury, e.g., driver of motor vehicle, O.D. of cocaine, fell off swing.)*
_____
_____
_____

11. 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: _____

12. PHYSICIAN'S DIAGNOSES
a. Principal diagnosis / problem associated with item 11.a: _____
b. Other: _____
c. Other: _____

13. URGENCY OF THIS VISIT *(Check only one)*
1 ☐ Urgent/Emergent
2 ☐ Non-urgent

14. IS VISIT ALCOHOL- OR DRUG-RELATED?
1 ☐ Neither
2 ☐ Alcohol-related
3 ☐ Drug-related
4 ☐ Both
5 ☐ Unknown

15. DIAGNOSTIC/SCREENING SERVICES *(Check all ordered or provided)*
1 ☐ None
2 ☐ Blood pressure
3 ☐ Urinalysis
4 ☐ HIV serology
5 ☐ EKG
6 ☐ Chest x-ray
7 ☐ Extremity x-ray
8 ☐ Other diagnostic imaging
9 ☐ Other *(Specify)* _____

16. PROCEDURES *(Check all ordered or provided on this visit)*
1 ☐ None
2 ☐ Endotracheal intubation
3 ☐ CPR
4 ☐ IV fluids
5 ☐ NG tube/gastric lavage
6 ☐ Wound care
7 ☐ Eye/ENT care
8 ☐ Orthopedic care
9 ☐ Bladder catheter
10 ☐ Lumbar puncture
11 ☐ Other *(Specify)* _____

17. 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 ED PRN
3 ☐ Return to ED - appointment
4 ☐ Return to referring physician
5 ☐ Refer to other physician/clinic
6 ☐ Admit to hospital
7 ☐ Transfer to other facility
8 ☐ DOA/died in ED
9 ☐ Other *(Specify)* _____

19. 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)* _____

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

OMB No. 0920-0278
Expires: 6/30/94
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-B; 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 11a?
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 _____

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
3 ☐ Other physician
4 ☐ Physician assistant/ Nurse practitioner
5 ☐ Registered nurse
6 ☐ Licensed practical nurse
7 ☐ Nurse's aide
8 ☐ Other *(Specify)*

*U.S. Government Printing Office: 1994 — 301-019/00007

Vital and Health Statistics series descriptions

SERIES 1. **Programs and Collection Procedures**—These reports describe the data collection programs of the National Center for Health Statistics. They include descriptions of the methods used to collect and process the data, definitions, and other material necessary for understanding the data.

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SERIES 5. **International Vital and Health Statistics Reports**—These reports are analytical or descriptive reports that compare U.S. vital and health statistics with those of other countries or present other international data of relevance to the health statistics system of the United States.

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For answers to questions about this report or for a list of reports published in these series, contact:

Data Dissemination Branch
National Center for Health Statistics
Centers for Disease Control and Prevention
Public Health Service
6525 Belcrest Road, Room 1064
Hyattsville, MD 20782

(301) 436–8500

DEPARTMENT OF
HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782

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