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Plan and Operation of the National Survey of Ambulatory Surgery

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

Hyattsville, Maryland
October 1997
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Abstract

The National Survey of Ambulatory Surgery (NSAS), a national probability sample survey of ambulatory surgery visits in hospitals and freestanding ambulatory surgery centers, began operation in 1994. This report traces the development of the survey instruments and procedures, and presents the survey methodology for the NSAS.

Keywords: *National Survey of Ambulatory Surgery* • *procedures* • *outpatients* • *hospitals*

Plan and Operation of the National Survey of Ambulatory Surgery

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

Introduction

In April 1994, the National Center for Health Statistics (NCHS) initiated the National Survey of Ambulatory Surgery (NSAS) to gather and disseminate information about ambulatory surgery occurring in hospitals and freestanding ambulatory surgery centers. 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). This report summarizes the background and development of the NSAS and provides the survey's design and methodologies.

Background

Since 1965, NCHS has provided annual data on the Nation's use of inpatient medical and surgical care provided in non-Federal, short-stay hospitals. These data, collected through the National Hospital Discharge Survey (NHDS), have been extensively used in monitoring changes and analyzing the types of surgical treatment provided for hospital inpatients. However, advances in medical technology, such as endoscopic techniques and new anesthetic drugs that allow patients to regain consciousness more quickly following surgery, have increasingly enabled many procedures to be performed outside the hospital inpatient setting (1).

In addition, concern about rising health care costs led to changes in the Medicare program that encouraged the use of ambulatory surgery. In the early 1980's, the Medicare program was expanded to cover care in ambulatory surgery centers, and a prospective payment system based on diagnosis-related groups (DRG's) was adopted for hospital inpatient care that created strong financial incentives for hospitals to shift less complex surgery to outpatient settings. Many State Medicaid plans and private insurers followed the lead of the Medicare program and adopted similar policies (2).

In settings that provide ambulatory surgery, the patient enters the facility; receives care that includes at least one surgical, diagnostic, or therapeutic procedure; and (generally) leaves on the

This report describes the development and methods used in the 1994 National Survey of Ambulatory Surgery (NSAS). The design and execution of a large survey such as NSAS 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, Iris Shimizu (Mathematical Statistician, Survey Methods Staff, Office of Research and Methodology), Robert Pokras (Chief, Hospital Care Statistics Branch), and many others outside NCHS, participated in the development of the NSAS. A private contractor, the Center for Health Policy Studies, conducted the 1990 feasibility study. The Bureau of the Census conducted the pretest and data collection for the 1994 study. Lastly, we are indebted to the sampled facilities and their staffs without whose support and cooperation NSAS could not have been successfully completed. This report was peer reviewed by Mary Moien, edited by Klaudia Cox, and typeset by Annette F. Holman of the Publications Branch, Division of Data Services.

same day. Facilities providing this type of care can be hospitals or freestanding ambulatory surgery centers.

Ambulatory surgery settings provide a wide variety of surgical procedures including tonsillectomy, myringotomy, lens extraction (and insertion of an artificial lens), dilation and curettage of uterus, repair of hernia, laparoscopic tubal ligation, and arthroscopic surgery. Also included are diagnostic procedures including biopsy and endoscopic examinations and therapeutic procedures such as injection or infusion of cancer chemotherapeutic substances. As medical technology progresses, additional procedures will move to ambulatory surgery settings.

The growth of freestanding ambulatory surgery facilities has been dramatic. In 1983, there were 239 freestanding surgery centers performing approximately 377,000 surgical procedures (3). By 1993, there were 1,862 facilities performing more than 3.2 million procedures (4).

There has also been a rapid growth of ambulatory surgery in hospitals. Data from the SMG Marketing Group indicate that in 1993, U.S. hospitals performed about 12.4 million outpatient surgical procedures and that about 52 percent of all surgery in hospitals was ambulatory surgery (5). Together, these figures indicate that ambulatory surgery accounted for approximately 58 percent of all surgery in 1993.

The decline of selected procedures (e.g., cataract extraction) on an inpatient basis has been documented by the NHDS (6). However, the concurrent growth of ambulatory surgery has not been documented, resulting in a serious gap of information about surgical care.

Valid data about the medical and surgical care provided in hospitals and freestanding ambulatory surgery centers are necessary to make national and local decisions for the allocation of resources and training of medical manpower, to aid efforts to control medical costs, and to plan for the provision of future medical and surgical care. This need for more complete surgery data is accentuated by the rapidly aging population and the introduction of new medical technology. Therefore, the omission of ambulatory surgery from the surgical care database has left a significant gap in coverage and limits the utility of the current NHDS data. The NSAS was developed to fill this data gap and to respond to the increasing demand for more complete surgery data.

The NSAS is one of the NCHS establishment surveys, collectively called the National Health Care Survey (NHCS). The NHCS was designed to provide nationally representative data on the use of health care resources for the major sectors of the health care delivery system and to address the dramatic changes occurring in the health care delivery system during the 1980's. At the request of NCHS, the plan to develop the NHCS was evaluated by a panel of experts convened by the National Academy of Sciences and the Institute of Medicine. In the final report from the evaluation, *Toward a National Health Care Survey: A Data System for the 21st Century,* the panel stated that it ''endorses the center's plan to extend coverage of the health care provider surveys to include additional health care settings that have emerged in recent years.'' The original NHCS plan included the development of a survey of hospital-based and freestanding ambulatory surgery centers (7).

The plan for NHCS included a restructuring of its ''traditional'' surveys of health care providers and an expansion of coverage to other major sectors of the health care system. Under this plan, the ''traditional'' surveys—the NHDS, the National Ambulatory Medical Care Survey (NAMCS), the National Nursing Home Survey (NNHS), and the National Master Facility Inventory (NMFI)—were modified to form an integrated NHCS. Two new health care establishment surveys, in addition to the NSAS, were developed and fielded during the early 1990's. These surveys included the National Hospital Ambulatory Medical Care Survey (NHAMCS), which provides data on the utilization of services in hospital emergency and outpatient departments, and the National Home and Hospice Care Survey (NHHCS), which provides data on the services and staff of home health agencies and hospices and on the personal and health characteristics of current and discharged patients (8).

One of the first steps in developing the NHCS was to identify viable sampling frames or listings of health care providers and establishments. These listings could be based on available databases and/or developed based on the National Master Facility Inventory (NMFI) methodology. The NMFI methodology involved identifying available facility files, compiling listings by facility type, processing the lists to create an unduplicated file, and collecting additional information on each facility through a mail survey. In 1986, an evaluation of the coverage of the health facilities in the NMFI was conducted under contract with La Jolla Management Corporation (9). Results applicable to the development of the NSAS indicated that complete and accurate lists of ambulatory surgery facilities could be collected; however, the NMFI methodology could not be used exclusively for developing listings of these facility types. Use of both the NMFI methodology and data from the SMG Marketing Group was recommended for inventorying these facilities. Study findings also included a proposed definition of ''ambulatory surgery center'' and suggested criteria for differentiating ambulatory surgery facilities from private physician practices (10).

Feasibility Study

The development of the National Survey of Ambulatory Surgery began with a study initiated in 1989 under contract to the Center for Health Policy Studies to assess the feasibility of collecting ambulatory surgery data from hospitals and freestanding ambulatory surgery centers (11,12).

Purpose

With the NMFI evaluation study providing the foundation, the objectives of the feasibility study were to provide detailed recommendations concerning the design of a national survey of

ambulatory surgery, including the definitions of the universe of facilities and of surgical visits within facilities to be sampled, the data set to be collected, the methodology to be employed, and the estimated costs for a national survey. A principal focus of the study was to assess the extent to which the methods used for the National Hospital Discharge Survey (NHDS) could be adapted to a national survey of ambulatory surgery. Alternative methodologies were also investigated.

An expert advisory panel consisting of representatives of professional and trade associations provided advice on technical issues throughout the feasibility study. The panel reviewed the design and findings from the field test and assisted in formulating recommendations for a national survey. Members of the feasibility study technical advisory panel are listed in appendix II.

Design and Methods

The feasibility study was conducted in two phases. During Phase I, methods and practices for collecting data regarding ambulatory surgery and ambulatory surgery facilities were investigated. These activities included a comprehensive literature review; an evaluation of the number and characteristics of hospital-based and freestanding ambulatory surgery centers; an investigation of the definition of the universe of ambulatory surgical facilities (hospital-based and freestanding) and of potential sampling frames; an evaluation of the accessibility and cost of selecting samples and collecting data from these sites, including an investigation of the source, availability, and content of computerized files for ambulatory surgery centers; and an evaluation of the comprehensiveness, availability, and reliability of these data. A working definition for identifying types of ambulatory surgery visits to be included and/or excluded from the sampling frame within hospitals was also developed.

Based on this background research, it was hypothesized that a data collection methodology similar to the methodology employed in the National Hospital Discharge Survey (NHDS), a retrospective records review, could be used to conduct a national survey of ambulatory surgery. A preliminary dataset was identified and operational definitions were developed, sampling frames and definitions were developed, and the NHDS methodology was modified to fit the data collection needs of an ambulatory surgery survey. The data collection plan consisted of a detailed outline of the field test methodology that included all survey instruments, training materials, letters of introduction, protocols, and sampling methodologies.

During Phase II of the feasibility study, a field test was conducted. Because freestanding ambulatory surgery centers tended to be located primarily in medium-to-large cities, the field test was restricted to metropolitan statistical areas (MSA's). The selection of MSA's was made to provide geographic diversity, to provide a sufficient pool of ambulatory surgery centers, and to avoid MSA's in which the NHDS was being conducted. The field test included two types of facilities in which ambulatory surgery was performed: hospitals and freestanding ambulatory surgery centers (FSASC's). Out-of-scope and nonrespondent sample facilities were replaced in an attempt to include about 15 participating facilities, half hospitals and half FSASC's, in each of the MSA's. However, the smaller number of FSASC's available in these areas compared with the numbers of hospitals and the slightly higher refusal rate among FSASC's (particularly among small eye surgery centers) resulted in a final sample of 51 participating hospitals and 33 participating FSASC's. The number of facilities inducted was slightly larger, but several facilities inducted did not provide abstracts within the data collection time period, and several facilities visited for induction subsequently refused to participate.

The facility induction and data collection phase of the field test occurred in the first 6 months of 1991. Appendix III contains selected forms and letters used during this phase of the field test. Using the initial telephone call script, the contractor's staff telephoned each of the selected facilities to identify an appropriate contact as well as his/her mailing address and telephone number. After this initial contact, an information package was sent to each sampled facility that included a letter of introduction from NCHS, a description of the feasibility study, letters of endorsement from the Society for Ambulatory Anesthesia and the Federated Ambulatory Surgery Association, and an NCHS fact sheet. Approximately 10 days later, each facility was recontacted by telephone to verify that the facility met the criteria for inclusion in the feasibility study and to set up an appointment for an induction interview (see "Script for Second Phone Call to Facilities" in appendix III). Facilities identified during these screening calls that did not meet the eligibility criteria were excluded from the study. During the induction interview, contractor staff met with the appropriate facility contact(s) to explain the purpose of the study, to explain what facility participation involved, and to ask for the facility's cooperation. Once a facility agreed to participate, the remainder of the induction visit consisted of collecting information on the facility's ambulatory surgery activities, lists of surgical patients, and medical records contents.

Facilities that participated in the study were given the choice of having their staff sample and abstract medical records or having the contractor's staff perform these tasks. Because the feasibility study was testing the methodology for a national survey, extensive sampling and data abstraction were not required. The sampling was conducted for a continuous 2-month period and data were abstracted for one month of the sampled visits (approximately 20 visits). If facility staff chose to perform the sampling and abstracting, training was provided by contractor staff.

After data collection was completed, quality control visits (consisting of resampling and reabstracting all previously selected sampled visits) were conducted in 18 of the participating facilities. Debriefing visits occurred in an additional 13 participating facilities in an effort to

determine what worked well and what was problematic with the study methodology.

Recommendations

This study demonstrated the feasibility of collecting ambulatory surgery data from hospitals and freestanding ambulatory surgery centers using the NHDS methodology. In addition to providing experience in facility induction and data collection, the field test identified problem areas and provided insights into how well the proposed model would work in a national survey. These insights, as well as the advice of a technical advisory panel, were used to develop detailed recommendations to assist with the future design of a national survey. Among the major recommendations were the following:

The survey should include two facility components—hospitals and freestanding ambulatory surgery centers. Facilities licensed as hospitals offering outpatient surgery should represent the hospital portion of the universe. Ambulatory surgery centers licensed by States and/or certified as ambulatory surgery centers for Medicare reimbursement should represent the FSASC's portion of the universe.

The hospital sampling frame should include noninstitutional hospitals, exclusive of Federal, military, and Department of Veterans Affairs hospitals, located in the 50 states and the District of Columbia. Only short-stay hospitals (hospitals with an average length of stay for all patients of fewer than 30 days) or those whose specialty is general (medical or surgical) or children's general should be included. These hospitals should also have six beds or more staffed for patient use. This is the same sampling frame that is used for the NHDS. The sampling frame for the FSASC's should be compiled through a combination of two existing regularly updated machine-readable files: the Freestanding Outpatient Surgery Center Database (sold by the SMG Marketing Group) and the Health Care Financing Administration Provider of Services file. An annual update of the sampling frames was recommended.

Because of the need for a high participation rate, a number of methods should be used to encourage and enhance facility participation. Facilities should be given the option of conducting the sampling and abstracting themselves, or of having trained data abstractors do the sampling and abstracting for them. Facilities should be compensated for selecting the sample and completing the abstracts when facility personnel perform these tasks, and for the effort of pulling and refiling records when contract staff do the abstracting. Extensive efforts should be made to obtain letters of endorsement from organizations representing the facilities and the medical records profession.

Identification of ambulatory surgery visits within hospitals can be difficult, particularly since hospitals may use slightly different definitions of a surgical visit. Generally, but not always, hospitals base their definition of ambulatory surgery on the location where the procedure is performed. Use of a definition that captures all surgery visits performed in certain specified types of special procedure units and in operating suites is operationally easy to apply and will provide reliable national statistics.

The dataset used in the field test should be simplified. Some data elements should be deleted, others should be redefined, and data collector training should be revised to reflect field test findings. Table A shows the list of data elements that were field tested and recommended for implementation in the national survey. Two additional data items, ''Ethnicity'' and ''Total charges,'' although not recommended for the NSAS, were included in the pretest. Although both data items had very low response rates for the feasibility study (4 percent and 57 percent), they were included in the pretest dataset due to their importance for health care policy and research. The data elements that were field tested but not recommended for implementation included ''SSN absent/present,'' ''Marital status,'' ''Was surgery cancelled or terminated?,'' ''Place of service,'' ''Patient and visit types,'' ''Post-op anesthesia assessment,'' ''Assistants in surgery,'' ''Other services provided as indicated in the medical record,'' and ''Outcome followup.''

Table A. Data elements collected in the Feasibility Study field test and recommended for use in the national survey

Facility data and visit identification
Unique facility number
Separate unit (unique) number (if applicable)
Medical record ID number
Date of surgery
ZIP Code of patient's customary residence
Patient characteristics
Date of birth or age
Sex
Race
Expected source of payment
Status/disposition of patient
Surgical visit and medical data
Times (operating room, recovery room, and discharge)
Type of anesthesia
Anesthesia administered by (credentials)
ASA (American Society of Anesthesiologists) classification of patient (if an anesthesiologist is involved)
Surgical procedures performed
Diagnoses

The field test and the deliberations of the project's technical advisory panel provided the basis for recommending a number of refinements to the field test instruments and training materials. Because of these refinements, a pretest was recommended before implementing a national survey. The testing could be more limited than was attempted in the feasibility study, but simplified versions of the facility induction interview forms, simplified instructions for sampling in hospitals with multiple lists of surgical patients, and the recommended changes to shorten the dataset and abstract form needed to be tested before full survey implementation. These findings were also needed to provide updated estimates of time required to conduct sampling and abstracting, to prepare the full survey Office of Management and Budget (OMB) approval request, to support negotiations for reasonable facility reimbursement and Bureau of the Census (the proposed data collection agent for the national survey) interagency agreement funding levels, and to prepare data collector training materials.

Pretest

The pretest for a National Survey of Ambulatory Surgery was conducted in 1993 by the U.S. Bureau of the Census as the data collection agent. The purpose of the pretest was to test and finalize all procedures, manuals, forms, instructions, training, and data collection methods for the NSAS.

Sampling Frame and Sample Selection

The sample for the NSAS pretest consisted of 80 facilities in five primary sampling units (PSU's): 45 hospitals selected from the NHDS-eligible hospitals listed in the 1991 SMG Hospital Market Database (13) and 35 freestanding ambulatory surgery centers (FSASC's) selected from the 1991 SMG Freestanding Outpatient Surgery Center Database (14) and/or the Medicare-certified FSASC's listed in the HCFA Provider-of-Services (POS) file dated February 1992 (15).

The five PSU's were selected by the following criteria: (a) at least one PSU was selected from each of the four Census regions (Northeast, Midwest, South, and West); (b) selected PSU's had large numbers of FSASC's relative to other areas; and (c) to the extent possible, all current NHDS PSU's and areas used in the NSAS feasibility study were excluded.

FSASC's specializing in eye care were oversampled to investigate methods to improve participation rates in these facilities. Hospitals with higher ambulatory surgery volume were oversampled to maximize opportunities to test sampling procedures in facilities that had ambulatory surgery in more than one location. Additionally, to verify data contained in the sampling frame, all 60 nonsampled facilities in the five PSU's were contacted by telephone and asked to verify general information about the facility.

Data Collection Methods

Materials and methodologies that had been revised based on the feasibility study results were provided to the U.S. Bureau of the Census. Census staff designed and printed the various survey forms and questionnaires. Census staff also prepared the regional office instructions, the field representative manual, the facility manual, the field representative self-study, the induction flashcard, the sampling table, the training guide, the training aids, and the regional office checklist.

Six site visits to ambulatory surgery facilities in the Washington, D.C., area were conducted by NCHS and Census headquarters staff to help develop the data collection procedures. During the ''dry run'' training, all materials were reviewed and suggested changes were incorporated into the final training materials.

Field training for the pretest included a one-half day supervisors' conference, a 4-hour field representative self-study, and a 1½ day field representative classroom training session. During the supervisors' conference, the background of the NSAS was covered; the questionnaires, sample listing operation, and sampling and abstracting methods were reviewed; and the field and office procedures were discussed. Staff from NCHS and the U.S. Bureau of the Census attended the conference. The self-study covered information about the purposes and objectives of the pretest, defined ambulatory surgery, presented the NSAS forms, and discussed the composition of the sample. The classroom training included mock interviews to complete the Telephone Screener Call to Sampled Facilities and the Induction Questionnaire, sampling exercises, abstracting exercises, and role-playing situations where survey respondent questions and/or concerns about the pretest were addressed.

The initial contact with each facility was a telephone call made by a Census regional office clerk. Form NSAS-1(X), Initial Telephone Call To Sampled Facilities, contains the script used for this first call (see appendix IV). During this call, the clerk:

- Verified the name and address of the facility
- Gave a brief explanation of the survey
- Asked to whom an introductory letter and information package should be sent
- Asked if the facility was a hospital, a licensed and/or Medicare-certified FSASC

The regional office staff then mailed an introductory letter and information package to the designated official at the sample facility. This package included a letter from NCHS that provided legally required information to the facility and informed them that a U.S. Bureau of the Census representative would soon be contacting them, a fact sheet that gave additional information about the pretest, six endorsement letters signed by health-related organizations to encourage the facility's participation in the pretest, the NCHS Staff Manual on Confidentiality, and the National Center for Health Statistics Organization and Activities brochure.

The Census field representative's first contact with each facility was the telephone screener call to the facility. Form NSAS-2A(X), Telephone Screener Call To Sampled Facilities, contains the script used for this call (see appendix IV). During this call, the field representative:

- Verified receipt of the introductory letter and information package
- Determined whether the facility was in scope for the survey
- Explained what type of information would be collected during the induction visit
- Gave a brief explanation of the survey
- Requested an appointment for an induction interview

The only contact with the nonsampled facilities (see previous section, ''Sampling Frame and Sample Selection'') was the telephone call to the facility made by the field representative. Form NSAS-2B(X), Telephone Call To Non-Sampled Facilities, contains the script used for this call (see appendix IV). During this call, the field representative:

Verified the name and address of the facility

Gave a brief explanation of the survey

Determined whether the facility was in scope for the survey

Asked several questions about the facility including how many patients received ambulatory surgery during the past 12 months

The Induction Questionnaire, NSAS-3(X), is shown in appendix IV. During the induction interview, the field representative:

Completed an in-depth interview about the facility with the administrator or designated contact person

Obtained information for each log that contained the types of ambulatory surgery specified during the induction visit

Established the method of participation

If necessary, trained designated facility staff to sample and/or abstract data

Gave a Thank You Letter to the facility administrator

For each of the facilities that agreed to participate in the pretest, a 2-month sample (October–November 1992) of approximately 20–25 ambulatory surgery visits per month was selected and recorded onto NSAS-4(X) forms, and medical record data were abstracted onto NSAS-5(X) forms for the first month (October) of the sampled visits. Both forms are included in appendix IV. The Medical Abstract form, NSAS-5(X), included all data items recommended in the feasibility study. Two additional data items were included: ethnicity and total charges.

In the pretest, two methods of sampling surgery logs that contained both inpatient and ambulatory patients were tested. In one method, every visit was counted regardless of whether it was inpatient or ambulatory surgery. For selected surgical visits that were inpatient surgery, only the case number and inpatient status indicator were recorded on the Sample Listing Sheet, NSAS-4(X). No additional information was recorded that would allow the medical records to be pulled and data to be abstracted. In the other method, only ambulatory procedures were counted, that is, inpatients were skipped during the counting process.

There were two basic methods of facility participation: primary and alternate. In the primary method, facility staff pulled the medical records and abstracted medical record data for the 20–25 ambulatory surgery visits selected for October. For the facilities that had a single log or list of ambulatory surgery visits from which to sample, the facility staff also performed the sampling of approximately 20–25 ambulatory surgery visits per month for October and November of 1992. For facilities that had more than one log or list of ambulatory surgery visits from which to sample, the Census field representative conducted the sampling. Although the November sampled visits were not abstracted, 2-month sampling was necessary to test sampling methods across months. For the primary method, the field representative trained the designated facility staff to abstract and, if necessary, to sample the data. This training was conducted during the induction visit if possible. If not, the field representative scheduled an appointment to conduct the training when facility staff were available. For primary procedure facilities, the field representative returned to the facility after the abstracting was completed and edited the forms before leaving.

In the alternate method of participation, the Census field representative conducted the 2-month sampling and data abstracting for the October sampled visits. Using this method of participation, facility personnel were only responsible for pulling and refiling the medical records for the October sampled visits. If possible, the field representative selected the October sample during the induction visit so these sampled records could be pulled and available for data abstracting when they returned at the appointed day and time to conduct the sampling for November.

After sampling and abstracting were completed for each facility, a Post Data Collection Questionnaire was completed and returned to NCHS. Form NSAS-7A(X) was used by facility staff who performed the abstracting (and sampling, if applicable) in primary procedure facilities to evaluate the pretest. Form NSAS-7B(X) was completed by Census field representatives who did the sampling and abstracting in alternate procedure facilities or the sampling for primary facilities with multiple logs. These forms (see appendix IV) were useful in determining methods for maximizing participation rates for the national survey as well as providing an accurate indication of the response burden imposed on facility staff for participation in the pretest.

The field representatives notified their supervisors of any facilities that initially refused to participate in the pretest. The regional office supervisors attempted to persuade the facility to participate. Procedures were available to provide compensation for facility participation if they would not participate without reimbursement. Although none of the facilities requested reimbursement for their activities in the pretest, personnel at several facilities indicated that compensation would be necessary for participation in an ongoing national survey.

NCHS selected 12 participating facilities for quality control visits that were conducted by Census program supervisors. The quality control operation included contacting the facility to set up an appointment, resampling for October and November, and reabstracting 10 of the originally sampled medical records.

Although there was no formal edit of the NSAS forms in the regional office, their staff checked in and reviewed all completed materials, verified that they received the correct number of forms for each completed induction questionnaire, and checked for completion of a few specific items. The regional office staff sent shipments of completed induction forms to NCHS (in Hyattsville, Maryland) on a flow basis and sent completed sampling and abstracting forms to the NCHS data processing facility in Research Triangle

Park, North Carolina, where the data elements were coded and keyed.

A debriefing conference was held in May 1993 that was attended by regional office supervisors and staff from NCHS and Census headquarters. The agenda included discussions of the pretest training, data collection activities, and the forms used in the pretest. The experiences of the pretest and the debriefing discussions formed the basis of the recommendations for the national study.

Results

Of the 80 sample facilities, 5 were determined to be out of scope. Of the 75 in-scope facilities, 68 submitted abstract data, an overall response rate of 91 percent. Thirty-nine of the 42 in-scope hospitals participated for a 93 percent response rate; and 29 of the 33 in-scope FSASC's participated for a response rate of 88 percent. Of the 60 nonsampled facilities, 12 were determined to be out of scope. Of the 48 in-scope facilities, 46 provided data, a response rate of 96 percent.

Results of the field test of the two methods for sampling from logs that contained both inpatient and outpatient procedures were inconclusive. The Census field representatives did not indicate a preference for either method. Therefore, based on the expectation that the nonsampling error would be less, the method in which every visit was counted regardless of whether it was an inpatient or outpatient was recommended for the national survey.

No major changes were recommended as a result of the pretest for a National Survey of Ambulatory Surgery. Minor changes to the data collection instruments and to the procedures for the national survey were recommended. They include:

Increase the classroom training time by 1/2 day to allow more time for the sampling exercises

Allow the field representatives (instead of the regional office clerks) to make the initial contact with the facility

Include more instructions in the field representative manual regarding the determination of in-scope and out-of-scope facilities

Provide procedures for handling facilities that have merged or have been purchased

Create an Annual Update form that includes new ambulatory surgery locations, dropped ambulatory surgery locations, volume for all new locations, and a new name of the CEO and/or medical record contact person

Change item 4 in the Telephone Screener, NSAS-2A(X), to ''In this survey we are excluding facilities that are exclusively a family planning clinic, birthing center, podiatry center, dentistry center, or abortion clinic. Is (facility) exclusively one of these?'' Move the ''abortion clinic'' category to the middle or end of the response list

Revise the Induction Questionnaire, NSAS-3(X), to accommodate additional sets of section V for facilities that have multiple logs

Delete the items that request detailed information on Medicare certification and state licensure (items 5, 6, 8, 9, and 10) in the Induction Questionnaire, NSAS-3(X), because they were confusing and unnecessary. Also, clarify item 7, which requests the names, addresses, and telephone numbers of satellite or affiliated facilities to include only those facilities that perform ambulatory surgery

Use a log identifier, such as the alpha designation for each log from the induction questionnaire (item 11), to link the sample visits to a particular log. A log identifier (list used) field should be added to the Sample Listing Sheet, NSAS-4(X), and the Medical Abstract form, NSAS-5(X)

Add an ''other'' category to item 15, type of anesthesia, on the NSAS-5(X)

The Pretest for a National Survey of Ambulatory Surgery was completed in June 1993. No major methodological problems were encountered during the pretest. Based on the successful completion of the pretest, preparations were begun to finalize the design methodology and field the NSAS in 1994.

The 1994 National Survey of Ambulatory Surgery

The NSAS was first fielded as a national survey in 1994. It was anticipated that the design and data collection activities for this survey would remain constant for a number of years; therefore, as an example of these activities, the 1994 NSAS is described below.

Sample Design

The 1994 NSAS used a multistage probability design with samples of hospitals and freestanding ambulatory surgery centers selected at the first or second stage and surgical visits selected at the final stage. The NSAS was designed to provide estimates of ambulatory surgery based on the following priority of survey objectives: U.S., hospitals and freestanding ambulatory surgery centers, and region (16). The sampling frames and the sample design are described in the following text.

Sampling Frames

The universe of eligible facilities for the 1994 NSAS consisted of hospitals and freestanding ambulatory surgery centers (FSASC's). The determination of whether an ambulatory surgery facility was a hospital or a freestanding center was based on the sampling frame (SMG listing) from which a facility was selected. The hospital universe included all noninstitutional, non-Federal hospitals in the 50 states and the District of Columbia that were either short-stay (had an average length of stay for all patients of less than 30 days) or a general hospital (medical, surgical, or

Table B. Number of hospitals and freestanding ambulatory surgery centers by facility specialty and region: National Survey of Ambulatory Surgery, 1993

Facility specialty and region	Number in universe	Number in sample
Hospitals with Ambulatory Surgery		
All specialties:		
All regions	5,252	368
Northeast	794	73
Midwest	1,545	84
South	1,958	146
West	955	65
General:		
All regions	5,104	259
Northeast	763	48
Midwest	1,517	64
South	1,894	104
West	930	43
All other specialties[1]:		
All regions	148	109
Northeast	31	25
Midwest	28	20
South	64	42
West	25	22
Hospitals without ambulatory surgery[2]		
All regions	1,015	50
Northeast	125	6
Midwest	173	8
South	455	24
West	262	12
Freestanding ambulatory surgery centers		
All specialties:		
All regions	1,732	333
Northeast	170	61
Midwest	304	64
South	695	135
West	563	73
General and multispecialty:		
All regions	1,184	153
Northeast	101	29
Midwest	207	26
South	478	63
West	398	35
Ophthalmic:		
All regions	308	70
Northeast	49	15
Midwest	55	14
South	101	24
West	103	17
All other specialties[3]:		
All regions	240	110
Northeast	20	17
Midwest	42	24
South	116	48
West	62	21

[1]Includes alcohol and other chemical dependency; children's general; children's orthopedic; children's other specialty; children's psychiatric; children's rehabilitation; chronic disease; eye, ear, nose, and throat; institution for the mentally retarded; obstetrics and gynecology; orthopedic; other specialty; psychiatric; rehabilitation; and tuberculosis and other respiratory diseases.

[2]This sample accounts for hospitals that create ambulatory surgery units and that had incorrect sampling frame data.

[3]Includes ear, nose, and throat; gastrointestinal; gynecological; hernia repair; laparoscopy/endoscopy; neurosurgery; orthopedic; other; plastic; and urological.

children's) regardless of average length of stay. The hospital also had to have six or more beds staffed for inpatient use (see appendix V). The hospital eligibility definition is the same as that used in the National Hospital Discharge Survey and the National Hospital Ambulatory Medical Care Survey.

The sampling frame for the hospital universe was the April 1993 SMG Hospital Market Data Base (17). As shown in table B, the SMG Hospital Market Data Base contained 6,267 hospitals meeting the NSAS eligibility criteria. Of these hospitals, 5,252 (84 percent) indicated that ambulatory surgery was performed in the hospital and 1,015 (16 percent) indicated that no ambulatory surgery was performed in the facility. Hospitals were defined as performing ambulatory surgery if the hospital file indicated a nonzero number of ambulatory surgeries.

The universe of freestanding facilities consisted of freestanding ambulatory surgery centers (FSASC's) that were regulated by States or were certified for Medicare by the Health Care Financing Administration (HCFA). The sampling frame for the FSASC universe consisted of facilities listed in the 1993 SMG Freestanding Outpatient Surgery Center Database (18) and/or Medicare-certified facilities listed in HCFA's Provider-of-Services (POS) file (see appendix V) (19). Facilities specializing in dentistry, podiatry, pain block, abortion, family planning, or birthing were excluded. Duplicates in the combined list were removed prior to sampling. There were 1,732 eligible facilities on the FSASC sampling frame.

Each hospital was classified by its type of service or specialty. Each facility on the FSASC sampling frame was assigned a facility specialty based on the specialty data from the SMG or POS file. If only one specialty was listed, the facility was assigned that specialty. If two or more specialties were listed, the facility was designated as multispecialty. The 16 hospital types and 13 FSASC specialty groups in the 1994 NSAS are indicated in tables C and D, respectively. Ninety-eight percent of the NSAS-eligible hospitals were classified as general (including medical, surgical, or children's). Sixty-eight percent of the NSAS-eligible FSASC's were classified as general surgery or multispecialty and 18 percent were ophthalmic surgery (see table B).

Facility Selection

The NSAS facility sample was selected independently within two strata: hospitals with ambulatory surgery and

Table C. List of types of service used to classify hospitals in the 1994 National Survey of Ambulatory Surgery

Alcohol and other chemical dependency
Children's general
Children's orthopedic
Children's other specialty
Children's psychiatric
Children's rehabilitation
Chronic disease
Eye, ear, nose, and throat
General
Institution for the mentally retarded
Obstetrics and gynecology (maternity)
Orthopedic
Other specialty
Psychiatric
Rehabilitation
Tuberculosis and other respiratory diseases

Table D. List of specialties used to classify the freestanding ambulatory surgery centers in the 1994 National Survey of Ambulatory Surgery

Ear, nose, and throat surgery
Gastrointestinal surgery
General surgery
Gynecological surgery
Hernia repair
Laparoscopy/endoscopy
Multispecialty surgery
Neurosurgery
Ophthalmic surgery
Orthopedic surgery
Other surgery
Plastic surgery
Urological surgery

freestanding ambulatory surgery centers (FSASC's). Facilities with an extremely high volume of ambulatory surgeries were selected with certainty. As described below, the remaining sample was selected at either the first or second stage in each of four regions. The stage of selection for the noncertainty facilities in each region depended on the number of facilities in the specialty within region and the number of those facilities within primary sampling units (PSU's). The sample PSU's used for the NSAS were a probability subsample of the PSU's selected for the 1985–94 National Health Interview Survey (NHIS).

The NHIS PSU sample was selected from approximately 1,900 geographically defined PSU's 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 PSU's in New England), or a metropolitan statistical area (MSA). MSA's were defined by the U.S. Office of Management and Budget on the basis of the 1980 Census. The 1,900 PSU's 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 PSU's were selected with a probability proportional to size, the largest PSU's in the United States were selected with certainty. Fifty-two PSU's were selected and referred to as self-representing PSU's. The remaining PSU's, the nonself-representing PSU's, were combined into 73 strata and 2 PSU's 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 (20).

The sample PSU's used for the NSAS consisted of 112 of the 198 PSU's used in the 1985–94 NHIS. The NSAS PSU sample included with certainty the 26 NHIS PSU's with the largest populations, half of the next 26 largest PSU's, and one PSU from each of the 73 PSU strata formed from the remaining PSU's.

Within selected specialty-region groups, facilities were selected at the first stage with certainty or were selected using systematic random sampling with probability proportional to size where size was the number of ambulatory surgeries. Forty-five hospitals and 44 FSASC's were selected at this stage of sampling.

For the remaining specialty-region groups, facilities were selected at the second stage within the first stage sample of 112 PSU's used for the NSAS using systematic random sampling with probability proportional to size where size was the number of ambulatory surgeries. From noncertainty PSU's, 229 hospitals and 160 FSASC's were selected. From the certainty PSU's, 93 hospitals and 129 FSASC's were selected.

The number of facilities in the NSAS universe and sample by facility type and region are shown in table B; a fixed panel of 368 hospitals and 333 FSASC's was selected for the NSAS sample.

Additionally, a small sample of hospitals was selected from the stratum of hospitals that indicated no ambulatory surgery was performed at the facility (according to the sampling frame data). This sample was selected to permit complete and current estimates of the ambulatory surgery, thus accounting for hospitals that create ambulatory surgery units and for hospitals with incorrect sampling frame data. There were 1,015 hospitals with no indication of ambulatory surgery: 486 in NSAS PSU's and 529 outside NSAS PSU's. Hospitals in the NSAS PSU's in this stratum were arrayed by region, specialty, ownership, Census stratum, and number of beds. A systematic random sample of 50 hospitals was selected based on probability proportional to size where size was the PSU weight.

Ambulatory Surgery Visit Selection

A sample of ambulatory surgery visits was selected using systematic random sampling techniques. Within each facility, all locations where ambulatory surgery was performed were identified. All eligible locations were included, i.e., there was no subsampling of surgical locations. These locations included, but were not limited to, general or main operating room, satellite operating room, cystoscopy room, endoscopy room, cardiac catheterization laboratory, and laser procedures room. Eligibility criteria for the NSAS surgery locations included:

The location was dedicated to surgery or diagnostic procedures

A list of surgeries for the location existed or could be created

Ambulatory surgery, i.e., previously scheduled outpatient surgery, was performed

The location was not dedicated exclusively to dentistry, podiatry, abortion, pain block, or small procedures

The location was recognized as distinct from an outpatient department (in hospitals).

For each location eligible for the survey, a systematic random sample of ambulatory surgery visits was selected. A list or log that could be used for sampling that location's ambulatory surgery visits was identified. The list could be the operating room log for the location or another available list of surgery visits that included all the ambulatory surgery performed at that location. The list should also include the medical record number, date of surgery, inpatient or outpatient status (if necessary), and any other information required to locate the sample medical records.

A log could include the surgeries performed in more than one surgery location or each operating room could have a separate list. For example, one list of surgeries could be available for a suite of operating rooms instead of a separate list for each room.

For each facility, the approximate number of ambulatory surgery visits for a 12-month period for all survey-eligible locations was obtained from the facility staff. Based on this number, a single sampling interval was determined which, if the facility-provided estimate of annual ambulatory surgery volume was accurate, would yield a total sample of 20–25 ambulatory surgery visits per month for the entire facility. A random-start number less than or equal to the sampling interval was selected for the first month of sampling for each log or list and, along with the sampling interval, was used to select surgery visits from each designated log or list in the facility. Although visit sampling was done monthly, quarterly, or on some other periodic interval at each facility, the sampling was continued across time for each sampling list as though the entire sample from that list was selected at one sampling session. That is, the sampling interval across sampling sessions was identical and the count for each sampling session was continued from where the count ended in the prior session. This basic procedure was adapted, as necessary, to the record keeping systems of the particular facilities. In an effort to reduce the sampling error in surgery logs that contained both inpatient and ambulatory procedures, every visit was counted regardless of whether it was inpatient or ambulatory surgery. For the sampled surgery visits that were inpatient surgery, only the case number and inpatient status indicator were recorded on the Sample Listing Sheet, NSAS-4.

After all survey-eligible locations were identified and sampling was begun, there were three possible reasons for a visit to be designated out of scope for the NSAS:

The patient was originally admitted as a hospital inpatient

The patient was admitted through the emergency room

The patient was a ''no-show'' or left the facility prior to the receipt of anesthesia and/or the commencement of the procedure.

Auxiliary information (e.g., number of ambulatory surgery visits in the sampling frame for the month) needed for estimation purposes was also obtained from each sampling list. Data from the medical record was abstracted for each ambulatory surgery visit thus selected. During 1994, data for 117,861 sample visits were included in the final NSAS database.

Data Collection Procedures

The Bureau of the Census was the data collection agent for the 1994 NSAS. Census headquarters staff designed and printed the survey questionnaires and telephone call scripts, which are included in appendix VI. Census staff also prepared and printed the regional office instruction manual, the field representative self-study materials, the field representative manual, and the facility manual. In addition, Census headquarters staff prepared all training materials, including the training guide and all training aids.

Field Training

Training for the 1994 NSAS was conducted in March of 1994. During this month, the Census field representatives underwent extensive training in survey procedures, using self-study materials and classroom training. In addition, each field representative was given a manual that contained detailed instructions and information necessary to induct facilities into the survey, conduct the sampling and abstracting, and edit and transmit completed forms. In selecting field representatives for the NSAS, every effort was made to choose experienced staff who had also worked on the National Hospital Discharge Survey or the National Hospital Ambulatory Medical Care Survey. These field representatives were most familiar with working with medical professionals and had an understanding of medical terminology and procedures.

Training for the NSAS was conducted by the Census staff and consisted of a supervisor's conference, a self-study session, and a classroom training session. The 1-day supervisor's conference was held in Alexandria, Virginia, and attended by NSAS supervisors from the 12 Census regional offices. During the conference, NSAS procedures, sampling, and data abstracting were described in detail.

NSAS 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 NSAS concepts and to give a general overview of the NSAS forms and procedures. The 2-day classroom training, attended by field representatives and regional office clerks, was held in four locations: Seattle, Dallas, Atlanta, and Philadelphia. Each of these sessions was conducted by Census supervisors who had attended the supervisor's conference. To ensure uniformity of training, each supervisor followed a written script that was prepared by Census headquarters staff. The training

covered the following topics: inducting facilities; sampling procedures, including determination of the random start and ''take every'' numbers; data abstracting; training facility staff; and editing completed forms. In addition to providing a detailed explanation and illustration of the forms and procedures, a major focus of the training was on gaining facility cooperation. The training utilized many interactive techniques such as role playing, practice interviews, and discussion groups. NHDS field representatives attended many of the sessions to point out obstacles in dealing with medical staff and to make suggestions for overcoming them.

Facility Induction

Initial contact with the sample hospitals and freestanding ambulatory surgery centers was made through a telephone call, using the telephone number provided in the 1993 listing from SMG Marketing, Inc. (16,17) or HCFA's POS file (18). The call was made to identify to whom a letter about the study should be sent and to validate information used to sample the facility. The script for this initial telephone call appears in the NSAS-1 (see appendix VI).

Shortly after this initial telephone call, a letter from the National Center for Health Statistics was sent to the designated official of the facility. The letter (see appendix VII) introduced the study and indicated that the facility had been selected to participate in the NSAS. Included with the letter were a summary of NCHS activities, a general description of the study, and letters of endorsement for the study from the American Hospital Association, the American Academy of Ophthalmology, the American Health Information Management Association, the Federated Ambulatory Surgery Association, and the American College of Surgeons. The letters endorsing the NSAS are shown in appendix VIII.

Approximately 10 days after sending the letter, a telephone screener call was made to the recipient of the letter. The NSAS-2 contains the script for this call (see appendix VI). During this call, the field representative verified receipt of the introductory letter and information package, determined whether the facility was in scope, answered any general questions about the NSAS, and arranged an appointment for a facility induction interview.

The purposes of the induction interview were to:

- Explain the study and urge participation
- Establish the method of participation
- Determine the locations in the facility where ambulatory surgery was performed
- Implement an ambulatory surgery sampling plan
- Determine the location of medical records and other sources of needed data
- Train the facility staff, if necessary

The length of time needed for the induction interview varied by the size and complexity of the facility and whether it was necessary to train facility staff. It generally took from ½ to 1½ hours. Information about the sample facility obtained by the Census field representative was recorded on the induction questionnaire, NSAS-3 (see appendix VI). If, during the induction interview, it was determined that fewer than 50 ambulatory surgery procedures were conducted in the previous year, the facility was deemed to be ineligible for the 1994 NSAS.

During the induction process, the method of participation for each facility was determined. There were two methods of facility participation for the NSAS: primary and alternate. For the primary method, facility staff agreed to pull the medical records and abstract medical record data onto the medical abstract forms (NSAS-5, which is shown in appendix VI) for a sample of approximately 20–25 ambulatory surgery visits per month, and to refile the medical records. For facilities that had a single log or list of ambulatory surgery visits from which to sample, facility staff also performed the sampling. For facilities that had more than one log or list from which to sample, the Census field representative conducted the sampling because of the difficulty and need for special training to perform this task.

The primary method of participation was preferred for several reasons. First, the lack of standard medical record forms or formats across facilities and the individuality of the record keeping made field representative training difficult. Second, for confidentiality reasons some facilities did not want the field representatives to review surgical logs or see actual medical records. Third, facility staff knew the particular record-keeping systems of the facility and were familiar with medical terms and coding.

For the primary method facilities, the field representative trained the designated facility staff to abstract and, if necessary, to sample the data. This training was conducted during the induction visit if at all possible. If not, the field representative scheduled an appointment to conduct the training when facility staff were available. A Facility Manual containing detailed sampling and abstracting instructions similar to those in the Field Representative's Manual provided the basis for training facility staff and was left with the staff member(s) for future reference. The field representatives maintained communication with staff at primary facilities to ensure that data abstraction was on schedule and to answer any questions that arose.

The alternate method of participation was selected when facility staff were unwilling to perform the sampling and abstracting activities. For this method, the field representative selected the sample of 20–25 visits per month and performed the data abstracting activities, thus reducing facility staff responsibilities to pulling and refiling specified medical records. If possible, the field representative selected a 2-month sample of ambulatory surgery visits during the induction visit and made an appointment to return to the facility to perform the abstracting for these sampled visits. For alternate method facilities, the field representative attempted to visit the facility bimonthly, complete the abstract forms for the records selected during the previous visit, and select records for abstracting

at the next visit. This process, which has been used successfully for the NHDS for many years, allowed time for medical records to be completed and pulled from the medical records room prior to the visit.

Facilities still refusing to participate at this point in the induction process were offered monetary compensation for participation. If compensation proved necessary, the field representative completed a Memorandum of Agreement (NSAS-6, which is shown in appendix VI). This established the amount of reimbursement the facility or facility staff would receive for the method of participation selected. If the amount requested was higher than the field representative was authorized to approve, a call was placed to the Census regional office to request authorization from the NSAS supervisor. In 1994, approximately 40 percent of the sample facilities requested compensation.

The number and percent of in-scope and responding facilities in the 1994 NSAS are presented in table E. Of the 751 hospitals and freestanding ambulatory surgery centers in the 1994 sample, 134 were found to be out of scope (ineligible) because they went out of business, performed less than 50 ambulatory surgeries in the previous year, or otherwise failed to meet the criteria for the NSAS. Of the 617 in-scope (eligible) facilities, 494 responded to the survey. The response rate was 88 percent for the hospitals and 70 percent for the freestanding facilities.

Data Collection

To initiate the actual data collection process for the 1994 NSAS and, if necessary, to train facility staff, the field representative requested the facility's January 1994 log(s) or list(s) that were specified in item 7 of the NSAS-3, Induction Questionnaire (see appendix VI). The determination of locations and ambulatory surgery visits that were eligible for the NSAS have been discussed in a previous section of this report entitled ''Ambulatory Surgery Visit Selection.'' Within participating facilities, a systematic random sampling technique was used to select a sample of ambulatory surgery visits. Using the Sampling Table/Random Number Tables (see appendix VI) and the estimate of annual ambulatory surgery volume provided during the induction process, the field representative determined the sampling interval (''Take Every'') for the facility and selected a random ''Start With'' number for each NSAS-eligible January log.

The Sample Listing Sheet, (NSAS-4, which is shown in appendix VI) was used to list the monthly sample selected from each operating room log or other acceptable list. A separate NSAS-4 was used for each month sampled and for each log or list identified during the induction process (see NSAS-3, item 7).

A medical abstract form (NSAS-5, which is shown in appendix VI) was completed for each in-scope sample visit. Terms and definitions relating to the medical abstract form are shown in appendix IX. The NSAS medical abstract form is based on the medical abstract used in the National Hospital Discharge Survey, which is based on the Uniform Hospital Discharge Data Set, (UHDDS). Therefore, many of the variables in these surveys are similar or identical. Two of the UHDDS items (''principal expected source of payment'' and ''status/disposition of patient'') have been slightly revised to make them applicable to ambulatory surgery visits.

The remainder of the data items on the abstract form were strongly recommended for inclusion by the feasibility study technical advisory panel with the exception of ''total charges.'' Although this data item was not usually available in the medical record and the nonresponse rate for this item was high in the pretest (32 percent nonresponse), it was included in the NSAS because of its importance for health care policy issues. With the exception of ''total charges,'' all data items on the NSAS abstract form were successfully tested in the pretest with a response rate higher than 70 percent. One data item, ''ASA classification,'' which was recommended by the technical advisory panel, was excluded from the NSAS due to an exceedingly high (56 percent) nonresponse rate in the pretest. As a result of the pretest, minor revisions in the data items were recommended by the Bureau of the Census and were incorporated into the NSAS Medical Abstract form.

All completed Sample Listing Sheets and Medical Abstract forms were reviewed by the field representatives at the facility before being submitted on a flow basis to the regional offices. Attempts were made at that time to retrieve missing data or to correct inconsistent data. The NSAS-16, Transmittal Notice, (see appendix VI) was used by the field representatives for transmitting all completed work to the Census regional offices. All forms were reviewed for completeness at the regional office. Forms that failed this preliminary edit were returned to the field representative for additional information. All forms were transmitted on a flow basis to the NCHS data processing center in Research Triangle Park, North Carolina, for data entry, medical coding, and editing.

1995 Data Collection Activities

Prior to beginning the 1995 NSAS data collection, field representatives contacted all of the 1994 participating facilities to update information on the locations where ambulatory surgery was currently being performed to obtain estimated annual ambulatory surgery volumes of any new locations and to verify administrative information. The Annual Update Form (NSAS-7) was

Table E. Number of facilities in the 1994 National Survey of Ambulatory Surgery sample, number and percent of in-scope facilities, and response rates by type of facility

Type of facility	Sample	In scope	Percent	Respondents	Response rate
Hospitals[1]	368	333	90.5	293	88.0
Hospitals[2]	50	3	6.0	3	100.0
Freestanding ambulatory surgery centers	333	281	84.4	198	70.5

[1]Hospitals selected from the stratum of hospitals that the sampling frame data indicated performed ambulatory surgery.
[2]Hospitals selected from the stratum of hospitals that the sampling frame data indicated performed no ambulatory surgery.

used to record this information (see appendix VI). Due to the dynamic nature of ambulatory surgery, this process was essential to ensure accurate sampling of ambulatory surgery visits for the 1995 NSAS. In addition, facilities determined to be out of scope for the 1994 NSAS were contacted prior to beginning the 1995 NSAS data collection to determine whether they were still ineligible for the study. Attempts were made to induct and collect data from any of these facilities determined to be in scope for the 1995 NSAS as well as from those facilities that refused to participate in 1994.

Confidentiality

Assurance of confidentiality was provided to all facilities according to Section 308(d) of the Public Health Service Act (42 USC 242m), which states that:

"No information, if an establishment or person supplying the information or described in it is identifiable, obtained in the course of activities undertaken or supported under section . . . 306, . . . may be used for any purpose other than the purpose for which it was supplied unless such establishment or person has consented (as determined under regulations of the Secretary) to its use for such other purpose and (1) in the case of information obtained in the course of health statistical or epidemiological activities under section . . . 306, such information may not be published or released in other form if the particular establishment or person supplying the information or described in it is identifiable unless such establishment or person has consented (as determined under regulations of the Secretary) to its publication or release in other form, . . ."

Strict procedures were utilized to prevent disclosure of NSAS data. All information that could identify the facilities was confidential, was seen only by persons engaged in the NSAS, and was not disclosed or released to others for any other purpose. As the data collection agent for the NSAS, the Bureau of the Census agreed to comply with NCHS laws while engaged directly in survey activities.

Names or other identifying information for individual patients were not removed from the sample facility. To ensure patient confidentiality, the sampled facility kept the top copy of the completed 1994 Sample Listing Sheets, NSAS-4, which could have contained the names of the patients or other personal identifying information. Such information did not appear on the other copies of the NSAS-4's that were transmitted to NCHS.

Data Processing

Data from the NSAS medical abstract forms were coded by trained medical coding personnel from the Division of Data Processing at the NCHS Computer Facility in Research Triangle Park, North Carolina. The *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) was used to code the final diagnoses (item 17) and the surgical and diagnostic procedures (item 18) on the medical abstract form (21). A maximum of seven diagnostic codes and six surgical or nonsurgical procedure codes were assigned for each sample abstract.

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 medical abstract forms to reclassify or recode ''other'' entries, as well as revising entries on the sample listing sheets. Online keying edits for code ranges and inconsistencies were also performed.

All medical coding and keying operations were subject to quality control procedures. These procedures utilized a two-way 10 percent independent verification procedure in which abstracts were independently recoded by a second coder, with discrepancies resolved by the chief coder. Error rates for 1994 NSAS data were less than 5 percent for medical coding of diagnoses and procedures and less than 0.5 percent for the entry of the nonmedical data.

After medical coding and keying were completed, extensive computer editing was conducted to ensure that all responses were accurate, consistent, logical, and complete. When necessary, records were reviewed manually to resolve inconsistencies. Missing age and sex data were imputed using a hot deck procedure. This imputation was required for less than 2 percent of the 1994 NSAS records and all imputed data were identified as such on the data tapes to enable the analyst to distinguish between imputed and reported data.

Estimation Procedures

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

Statistics from the NSAS are derived by a multistage estimation procedure that produces essentially unbiased national estimates for hospitals and FSASC's. The weight includes three basic components: (a) inflation by reciprocals of the probabilities of selection, (b) adjustment for nonresponse, and (c) ratio adjustment to fixed totals (22). Each component is briefly described below.

Inflation by Reciprocals of Probabilities of Selection

Because the survey utilized a multistage sample design, there were several probabilities of selection. They were: (a) the probability of selecting the PSU, (b) the probability of selecting the facility, and (c) the probability of selecting the ambulatory surgery visit within the facility. The overall probability of selection was the product of the probabilities at each stage. The inverse of the overall selection probability was the basic inflation weight.

Adjustment for Nonresponse

Estimates from NSAS 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, adjustments were included for the month within log, log within facility-specialty strata, and facility within specialty strata. A final adjustment was included to account for sample facilities involved in mergers.

Ratio Adjustment

NSAS estimates included poststratification adjustments within 20 strata defined by five facility-specialty groups and four Census regions. The five groups, defined by facility type (hospital or freestanding surgery center) and the facility specialty (as designated on the sampling frame), are:

Hospitals specializing in children's care (general, orthopedic, psychiatric, rehabilitation, and other)

All other hospitals

Freestanding ambulatory surgery centers with a single specialty in plastic surgery

Freestanding ambulatory surgery centers with a single specialty in eye surgery

All other freestanding ambulatory surgery centers

The ratio adjustment was a multiplication factor whose numerator was the total of annual numbers of outpatient surgeries in the sampling frame facilities in each stratum and whose denominator was the estimated number of surgeries in that stratum based on the sample facilities. The numerator for the hospitals was based on figures from the SMG Hospital Market Database and the numerator for the freestanding ambulatory surgery centers was based on figures from the SMG Freestanding Outpatient Surgery Centers Database. These adjustment ratios are updated annually.

Smoothing of Weights

Procedures were used to reduce excessively large weights while maintaining the total visit estimates within each of the 20 post-stratification strata. In each strata the weights were inflated to account for the reductions in excess weights.

Reliability of Estimates

Because statistics from the NSAS 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 NSAS permits 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 NSAS, also reflects 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 in NCHS published data reports, an asterisk (*) indicates 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 2 1/2 times as large.

Estimation of Standard Errors

Estimates of sampling variability for the 1994 NSAS data presented in NCHS publications were computed using a first-order Taylor Series approximation of the deviation of estimates from their expected values. The SUDAAN software was used to compute the standard errors. A description of this software and the approach it uses has been published (23).

Standard Error Approximations

The SUDAAN procedure can be used to compute directly the standard errors for NSAS 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 NSAS estimates was developed.

Relative standard errors were computed for a range of estimates. Regression techniques were used to produce generalized variance equations from which a relative standard error for any estimate may be approximated. The parameters of the equations are presented in table F. Rules explaining the use of these equations are presented in the section below.

To derive error estimates that would be applicable to a wide variety of statistics and that 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.

Standard Error Applications

Estimates of Standard Errors for Aggregate Estimates

The approximate standard errors for estimates of the number of ambulatory surgery visits 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 F.

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

The approximate relative standard error, expressed as a percent, for the estimated number of ambulatory surgery visits with a particular characteristic, may be computed as follows:

$$\mathrm{RSE}\,(x) = 100\sqrt{a + b/x}$$

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 U.S. population or one or more of the age-sex-race groups of the total population is equivalent to the relative standard error

Table F. Parameters for use in the relative standard error formulae for the National Survey of Ambulatory Surgery by selected characteristics: United States, 1994

Selected characteristic	First-listed diagnoses		All-listed procedures		Hospital				Freestanding ambulatory surgery center			
					First-listed diagnoses		All-listed procedures		First-listed diagnoses		All-listed procedures	
	a	b	a	b	a	b	a	b	a	b	a	b
Total	0.002996	936.205191	0.003143	1042.899257	0.003650	937.293644	0.003981	979.807673	0.018124	246.302178	0.014197	756.815317
Sex												
Male	0.005839	243.411027	0.005227	374.804666	0.007031	259.440811	0.006342	400.073897	0.019727	148.897701	0.023878	111.243531
Female	0.003221	744.535434	0.003760	617.095495	0.003961	765.853727	0.004677	609.191764	0.018401	194.160869	0.011996	581.791449
Age												
Under 15 years	0.016112	65.117616	0.009705	221.957283	0.016933	94.811756	0.011514	232.068663	0.058636	9.701896	0.031078	86.170098
15–44 years	0.004651	422.786841	0.004022	650.559674	0.005294	467.627182	0.004410	733.863531	0.019479	148.963379	0.019803	208.035925
45–64 years	0.005557	376.824342	0.007491	168.934774	0.006899	395.110427	0.009749	118.058917	0.019775	133.575567	0.024660	131.182539
65 years and over	0.006409	406.831653	0.004337	572.576624	0.007944	425.446412	0.005884	577.976415	0.030411	111.597626	0.044043	1.418704
Region												
Northeast	0.013512	985.293492	0.013715	857.242241	0.016358	999.602588	0.018943	737.602043	0.078174	58.884015	0.068619	58.777503
Midwest	0.010638	644.607350	0.012862	551.969910	0.010397	653.985309	0.012367	593.605658	0.091502	165.353131	0.095489	216.628667
South	0.009821	404.799980	0.009781	527.582934	0.012810	346.621537	0.012582	522.614760	0.046815	90.105394	0.044594	114.414283
West	0.017904	457.195190	0.016911	649.373580	0.025218	411.895141	0.022593	618.081376	0.062637	174.678875	0.068295	256.659577
Source of payment												
Worker's Compensation	0.038544	31.834535	0.039479	32.664023	0.051251	26.389558	0.050903	25.226753	0.098051	6.783712	0.086114	8.341723
Medicare	0.009882	211.166190	0.009182	136.913855	0.012175	213.793529	0.011596	137.695464	0.033715	98.594817	0.047121	1.438590
Medicaid	0.013403	250.110798	0.010870	344.151585	0.015120	260.182032	0.012655	348.099706	0.071604	66.821585	0.079337	36.770793
Other government	0.049033	157.029327	0.039332	226.739743	0.056480	173.181171	0.051979	215.742100	0.215697	1.579989	0.159833	23.475489
Private insurance	0.003355	777.159166	0.003298	1127.335798	0.003948	835.302005	0.003895	1209.832213	0.013969	252.712881	0.010695	605.398623
Self-pay	0.028160	151.933029	0.020759	293.084515	0.036721	129.202040	0.027805	246.162675	0.100330	35.442751	0.109715	39.262511
No charge and/or other	0.077170	145.424550	0.073571	149.427354	0.088636	123.675106	0.083409	154.663601	0.256708	0.770684	0.222136	0.791779
Not stated	0.064640	318.862505	0.066747	381.219870	0.080030	325.472443	0.085397	297.598560	0.204803	56.398866	0.220737	115.011084

of the numerator that can be obtained using the relative standard error formula above and the appropriate coefficients from table F. The standard error is then given by:

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

The population figures used in computing annual rates for the NSAS are based on the July 1 estimates of the civilian population, including institutionalized persons, of the United States.

Estimates of Standard Errors of Percents Where Both the Numerator and Denominator are Estimated from the Same Sample and the Numerator Is a Subclass of the Denominator

The approximate relative standard errors, expressed as a percent, for estimates of percents 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, if both numerator and denominator are estimated from the same sample, approximate relative standard errors, expressed as a percent, for estimates of percents may be computed using the following formula, where p is the percent of interest and y is the denominator of the percent using the appropriate parameters.

$$RSE(p) = 100\sqrt{b(1-p)/py}$$

For standard errors, the appropriate formula is:

$$SE(p) = \sqrt{bp(1-p)/y}$$

The approximation of the absolute or relative standard error is valid if the relative standard error of the denominator is less than 0.05 (24) or if the relative standard errors of the numerator and denominator are both less than 0.10 (25).

Estimates of Ratios (r = x/y) Where the Numerator Is not a Subclass of the Denominator

The standard error for a ratio may be approximated by

$$SE\sim r\,! = r \cdot RSE(r)$$

where

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

This approximation is valid if the relative standard error of the denominator is less than 0.05 (24) or if the relative standard errors of the numerator and denominator are both less than 0.10 (25).

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.

Nonsampling Error

Estimates based on the 1994 NSAS 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 were performed. The steps taken to reduce bias in the data are discussed in the sections on data collection and data processing. Quality control procedures 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

This report presents a description of the NSAS through its first year of operation (1994). Summary data from the 1994 NSAS is available in an *Advance Data from Vital and Health Statistics* report entitled *Ambulatory Surgery in the United States, 1994* (26). *A Vital and Health Statistics* report that combines data on ambulatory surgery and surgery performed on hospital inpatients during 1994 is forthcoming. Additional 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 will also be presented in journal articles and in papers presented at professional meetings. As resources permit, special tabulations and analyses will beprovided to both public and private data requestors.

To obtain general information on published reports or to receive *The Catalog of Publications, Catalog of Electronic Data Products,* and *Catalog of Public-Use Data Tapes,* contact:

Data Dissemination Branch (DDB)
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 1064
Hyattsville, Maryland 20782
(301) 436–8500
E-mail: nchsquery@cdc.gov
Internet: http://www.cdc.gov/nchswww/nchshome.htm

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 1994 NSAS is currently available. There are also plans to release NSAS data on diskette and CD-ROM using the Statistical Export and

Tabulation System (SETS) database software. To purchase data tapes and other computer products, contact:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
(703) 487–4650

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Appendix I

Legislative Authorization

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

NATIONAL CENTER FOR HEALTH STATISTICS

Section 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 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 private 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

Members of the Technical Advisory Panel for the Feasibility Study of a National Survey of Ambulatory Surgery

Dr. James Aquavella
Clinical Director of Ophthalmology and Director of the Cornea Research Laboratory
University of Rochester Medical Center
Medical Director
Rochester Ophthalmic Associates
Ambulatory Surgery Center

Dr. Enzo DiGiacomo
President
Society for Ambulatory Care Professionals of the American Hospital Association
Past-President
Massachusetts Chapter of the American College of Emergency Physicians

Ms. Irene Fraser
Director
Division of Ambulatory Care and Emergency Services
American Hospital Association

Mr. George Greenberg
Program Analyst
Department of Health and Human Services
Office of the Assistant Secretary for Planning and Evaluation

Mr. Allen D. Hecht
Executive Vice President
Medical Management and Development Corporation

Dr. John Henley
President
Federated Ambulatory Surgery Association
Administrator
Fayetteville Ambulatory Services, Inc.

Dr. Marie-Louise Levy
Associate Professor of Anesthesia
Director of In-and-Out Anesthesia
George Washington University Hospital

Mr. Ted Matson[1]
Senior Staff Specialist
Division of Ambulatory Care and Emergency Services
American Hospital Association

Mr. Kurt Price[1]
Deputy Director
Maryland Health Services Cost Review Commission

Ms. Jane Ruseski
Associate Director of Methodology
Maryland Health Services Cost Review Commission

[1]Mr. Kurt Price and Mr. Ted Matson were replaced by Ms. Jane Ruseski and Ms. Irene Fraser, respectively, between the first and second TAP meetings.

Appendix III

Letters and Data Collection Instruments for the Feasibility Study of a National Survey of Ambulatory Surgery

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

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

Dear

Ambulatory surgery represents a fast growing and already significant portion of surgery in the United States. Yet, little is known about this important area of health services.

Recognizing this lack of information, the National Center for Health Statistics (NCHS) is planning a national survey of ambulatory surgery in hospitals and freestanding surgery centers. To assist in the development of a national survey, the Center for Health Policy Studies (CHPS), a research and consulting firm located in Columbia, Maryland has been contracted to perform a "Feasibility Study for a National Survey of Ambulatory Surgery Centers." The study is being carried out with the encouragement, participation, and advice of professional groups and associations involved in this field.

Your participation in the feasibility study will be of great value. The survey 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 is confidential, including the identify of your facility. Patient names and personal identifiers will not be recorded. We would like very much to discuss matters relating to the participation of your facility in the study. Within the next several days, a representative of CHPS will telephone you to arrange for an appointment. As additional background, please find enclosed a summary of NCHS activities, a summary description of the "Feasibility Study for a National Survey of Ambulatory Surgery Centers," and letters of endorsement for the study.

Your cooperation in this study will be very much appreciated.

Sincerely yours,

Robert Pokras
Chief, Hospital Care
Statistics Branch

Enclosures

OMB NO. 0920-0248: APPROVAL EXPIRES June 30, 1991

SCRIPT FOR INITIAL PHONE CALL TO CANDIDATE FACILITIES

FEASIBILITY STUDY OF A NATIONAL SURVEY OF AMBULATORY SURGERY

NOTE: A call will be placed by the contractor's staff to the facility contact's office (generally the CEO/administrator). The following describes the conversation that will take place:

"Hello, my name is _____(person making the call). Is this_____ _____(name of facility)? I am with the Center for Health Policy Studies in Columbia, Maryland and we are conducting the feasibility study for the National Center for Health Statistics. The study is to provide information for the design of a national survey of ambulatory surgery in freestanding ambulatory surgery centers and in hospitals. I am calling to find out to whom we should send a letter describing the study and asking _____(name of facility called) to participate."

Obtain name, title, mailing address, and phone number for subsequent followup.

Contact name: _____

Title: _____

Address: _____

_____

_____

Phone: _____

"May I also confirm that _____(name of facility) is a _____(hospital, licensed FSASC, and/or Medicare certified FSASC)?

"Thank you for your assistance."

OMB NO. 0920-0248: APPROVAL EXPIRES June 30, 1991

SCRIPT FOR SECOND CALL TO FACILITIES

FEASIBILITY STUDY OF A NATIONAL SURVEY OF AMBULATORY SURGERY

(A call will be placed by the contractor to the person who received the letter and supporting materials mailed 10 days earlier. The following describes the conversation that will take place.)

Hello, my name is _____ (person making the call). I am with the Center for Health Policy studies in Columbia, Maryland and we are conducting a feasibility study for the National Center for Health Statistics. The purpose of the study is to provide information for the design of a national survey of ambulatory surgery in freestanding ambulatory surgery centers and in hospitals. I am calling to make sure that you received the letter and package of information from the National Center for Health Statistics dated _____ (date of letter). As indicated in the letter your facility has been selected to participate in a Feasibility Study for a National Survey of Ambulatory Surgery being conducted by NCHS.

Has ambulatory surgery been performed in this facility since October, 1990? Yes__ No__

(If "Yes" continue with script)

(If "No"): In that case your facility cannot be used in this study. Thank you for your time.

It is important for us to determine whether or not your facility operates under the license or Provider of Service (POS) number of a parent facility.

Does _____ (name of facility) operate under its own POS number? Yes__No__
Does _____ (name of facility) operate under its own license? Yes__ No__

(If the answer to either of these questions is "Yes" continue with the script.)

(If the answer to both of these questions is "No"): Thank you for your time and assistance, but this facility is out of scope for this study.

Is _____ (name of facility) an:

Abortion clinic	Yes___ No___
Family planning clinic	Yes___ No___
Birthing center	Yes___ No___

Does this facility specialize in dentistry? Yes___ No__

(If the answer to any of the above questions is "Yes"): Thank you for your time and assistance, but this facility is out of scope for this study.

(Otherwise, continue with the script.)

At this time I would like to schedule a meeting with you at _____

(name of facility). This meeting should take approximately 1 to 2 hours, depending on the size and complexity of your facility.

The agenda for the meeting will include a briefing on the study purposes and plans, then I need to confirm or update the information regarding your facility that we have from a national data base. This includes volume and type of surgery, facility ownership, and Medicare Provider of Service (POS) number. After that I will need to review with you all locations in which outpatient surgery is performed and the location and content of operating room logs, patient lists and patient data for sampling and data collection. In addition, we have a number of questions regarding medical records. Will you be able to answer these questions? If not, could you also make arrangements for me to meet with a medical records person or an appropriate facility representative for approximately one-half hour during my visit?

When may I meet with you? _____ (date and time)

Thank you for your time, I look forward to meeting with you.

OMB NO. 0920-0248: APPROVAL EXPIRES JUNE 30, 1991

HOSPITAL ASC INTERVIEW QUESTIONNAIRE
FEASIBILITY STUDY FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

INITIAL CONTACT AND INDUCTION (Form C5)

(Note: If at any point during the induction visit the facility refuses to participate, go to the end of this form and complete Question D.)

A. ADMINISTRATIVE INFORMATION

(Items #1 and #2 are to be filled in prior to hospital visit.)

1. FACILITY NUMBER : _____

   NAME OF HOSPITAL: _____

   ADDRESS: _____

   _____

   _____

2. HOSPITAL CONTACTS

   a. NCHS letter sent to: _____ Date _____

   b. Name of CEO/Administrator: _____ Telephone number (_____)____-_____

   c. Designated study contact person (if other than CEO/administrator):

      _____

      Title & telephone number: _____ (_____) ____-_____

   d. Medical records contact: _____

      Title & Telephone number: _____ (_____)_____-_____

(Begin Interview. Insert time interview began: _____.)

As explained in the material sent to you earlier, this is a study to examine the feasibility of conducting a national survey of ambulatory surgical facilities. The purpose of this meeting is to obtain permission to collect information from your hospital on a sample of 20 ambulatory surgical visits. All information collected during the study concerning your hospital and about the sampled cases is strictly confidential, and is protected by Federal law; it will be used only to assist in evaluating the feasibility of a national survey.

In order for us to conduct the study in your facility, we need to obtain information about the facility and all locations where ambulatory surgery is performed, information about OR logs, and information about medical records for ambulatory surgery patients. Do you have any questions before we begin?

3. CONFIRM INFORMATION FROM NATIONAL DATA BASE

a. Is (read name and address of hospital from page 1) correct? Yes__ No__.

(If "No", record new name and/or address)

_____

b. Is (read the name and phone number of the CEO or administrator from page 1) correct? Yes ___ No ___.

(If "No", record new name and/or number)_____

c. Which of the following categories best describes the ownership of this hospital?

___ State or local government
___ Proprietary
___ Church related
___ Private nonprofit

(If one of the above is selected, go to #3.d., if not continue.)

If none of these categories is applicable, how do you describe the ownership? _____.

d. What best describes the ambulatory surgery performed here, is it primarily one specialty? Yes ___ No ___.

(If "Yes"): What is the specialty? _____

(If "No", check one): Is it general surgery? _____
or a mix of specialties? _____

e. Is this hospital Medicare certified? Yes ___ No ___.

(If "Yes"): Do any satellite/affiliated facilities use this hospital's Medicare Provider of Service (POS) Number for billing? Yes___ No___.

(If "Yes"): What are the names and addresses of these facilities?

_____
_____
_____

(If "No"): Are Medicare patients billed under the POS number of a parent facility or organization? Yes ___ No ___.

f. Is this hospital licensed by the state? Yes ___ No ___.

(If "Yes"): Does any satellite or affiliated facility operate under the same state license? Yes ___ No ___.

(If "Yes"): What are the names and addresses of these facilities?

_____
_____
_____

(If "No"): Does the hospital operate under the license of a parent facility or organization? Yes ___ No ___.

g. How many patients received ambulatory surgery in this hospital over the last 12 months? _____

4. DOES YOUR HOSPITAL CALCULATE THE COST OF PERFORMING A PROCEDURE? Yes ___ No ___.

(If "Yes"): How do you calculate the cost? _____
_____
_____

B. OPERATING AND SPECIAL PROCEDURE ROOM INFORMATION

1. I will read to you a list of types of rooms in which ambulatory surgical procedures may be performed. For each type of room, please tell me how many such rooms there are, and where they are located:

Room Type	Number	Location
Main Operating Room	_____	_____
Satellite Operating Room	_____	_____
Cystoscopy Room	_____	_____
Endoscopy Room	_____	
_____		
Cardiac Catheterization Lab	_____	_____
Laser Procedures Room	_____	
_____		
Podiatric Procedures Room	_____	_____
Pain Block Room	_____	_____

Are there any other types of rooms used for ambulatory surgical procedures? Yes ___ No ___.

(If "Yes"): What are these rooms? How many of each are there and where are they located?

Other Type(describe)	Number	Location
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

In order to select the sample, we need to work with a list of patients that have received ambulatory surgery during a given month. The list must include date of service and medical record number or other patient ID in order to retrieve the appropriate medical record.

2. Is there an accurate and comprehensive list of all patients and/or surgical procedures performed on an ambulatory basis throughout the hospital? Yes ___ No ___.

(If "Yes"): Where is this list available? _____
May I see this list?

(If "No"): May I see the surgery logs or lists for each separate location in which ambulatory surgery is performed?

(Item #3 is to be completed by the interviewer using the OR log(s) or list(s) provided by the interviewee. Items #3 through #8 should be completed for each log or list provided.)

3. OPERATING ROOM LOG OR OTHER LIST OF SURGICAL CASES

a. Facility ID: _____
Name of List: _____
Type list: _____
Location(s) covered: _____

b. Indicate which of the following data elements are included on this list or surgery log. Use the space labeled "comments" to provide additional detail, if appropriate.

Data Element	Included	Comments
Med Rec #/othr ID	_____	_____
Date of Service	_____	_____
If Amb Surg Case	_____	_____
Age	_____	_____
Sex	_____	_____
Diagnosis	_____	_____
Procedure	_____	_____
OR Time	_____	_____
Recovery Time	_____	_____
Other data included on list or log (specify)		
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Continue with the interview to obtain answers to questions 4 through 8.)

4. Where is this list kept? _____

How long is it kept here? _____
(If kept here for less than one year): Where is it located after it is moved?:
_____

Whom should be contacted to obtain access to this list for purposes of drawing the sample of ambulatory surgery patients?
_____.

5. Does the list or log reflect if a scheduled surgical procedure is not initiated? Yes ___ No ___.

   Does the log indicate if an initiated surgical procedure is not completed? Yes ___ No ___.

6. Are patients excluded from this list who were scheduled for ambulatory surgery but then admitted as inpatients after surgery? Yes___ No___ .

   (If "yes"): Where can a list of these unplanned admission patients be located? (specify) _____. How many ambulatory surgery patients were admitted after surgery in October 1990? (estimate) _____.

   (If "no"): Are they identifiable as ambulatory surg cases? Yes__ No__
   (If "yes"): Please explain how _____.

7. Are changes ever made to this list, other than spelling? Yes___ No___.
   (If "yes"): What kinds of changes are made?
   _____

8. What was the number of ambulatory surgical visits to the location covered by this list for the month of October 1990? (Record number) _____

   (NOTE: If this figure is unavailable, ask for the most recent annual estimate, divide by 12 and enter the result above. Check here if this procedure is used ____. Check here if neither a monthly figure nor annual estimate is available for this list in this facility ___. If neither is available, you will have to examine the list and either count the cases or estimate them. If you developed the estimate entered in item 6 above, describe the method used: _____
   _____.)

C. MEDICAL RECORD INFORMATION

These are the sampling and abstracting forms which will be used. (Give a copy of forms to the interviewee for his/her review) In order to use these, first we need to determine how we can locate medical records for the sample cases.

1. Does this hospital employ a unit record system? Yes ___ No ___.

   (If "Yes", go to question #2)

   (If "No"): Please describe the record keeping system used for ambulatory surgery patients (Record response):

   _____

2. Is the medical record number a permanent unit record number? Yes__ No__.

   (If "No"): Please describe the numbering system (Record response):

   _____

3. Are all active medical records for the hospital kept together in one location? Yes ___ No ___.

   (If "Yes"): Where are they filed? _____

   (If "No"): What locations are used to store these medical records?

   _____

4. After how long are medical records transferred to an inactive file or microfilmed? _____

5. Are abstracts of ambulatory surg. cases routinely prepared? Yes__ No__.

   (If "Yes"): May I have a copy of an abstract form?

6. Is computerization of medical records in effect or planned? Yes__ No__.

   (If "Yes"): Please describe the system: _____

   _____

7. Is a face sheet used for ambulatory surgical visits? Yes ___ No ___.

   (If "yes"): May I have a copy?

8. Please indicate if each of the items I will read to you are available on the face sheet or, if not there, please tell me where each such data element may be found in the medical record:

	On Facesheet? YES	NO	If "NO" - Where can this item be found?
Patient Ident. Number	____	____	_____
Date of Service	____	____	_____
Social Security Number	____	____	_____
Residence ZIP Code	____	____	_____
Date of Birth/Age	____	____	_____
Sex	____	____	_____
Race	____	____	_____
Ethnicity	____	____	_____
Marital Status	____	____	_____
Expected Payment Source(s)	____	____	_____
Status/Disposition of Pt	____	____	_____
Place of Service	____	____	_____
Patient and Visit Types	____	____	_____
Operating Room Time	____	____	_____
Recovery Room Time	____	____	_____
Discharge Time	____	____	_____
Reason for Cancelled Surg	____	____	_____
Type of Anesthesia	____	____	_____
Anesthesia Administered by	____	____	_____
ASA Classification	____	____	_____
Post-op Anesth Assessment	____	____	_____
Diagnoses	____	____	_____
Surgical Procedures	____	____	_____
Assistants in Surgery	____	____	_____
Other Services Provided	____	____	_____
Same/Next Day Followup	____	____	_____

Do you have any questions?

Would a member of your staff be willing to sample and abstract information for approximately 20 ambulatory surgical cases within the next two weeks? Yes ___ No ___ Undecided ___

(If "Yes", skip to question #9 below.)

(If "No" or undecided): As an alternative, would you allow a member of our staff to abstract data from medical records that we sample and your staff pulls and then refiles? Yes ___ No ___

(If "Yes"): When can we schedule the sampling and abstracting? _____ _____. (Skip to question 10 below.)

(If "No"): How can we gain your cooperation to collect these data? _____.

9. Please give me the name, title and phone number for each person who will perform sampling or abstracting.

Name	Title	Phone #

Would it be possible for me to spend a few minutes now providing the training in how to perform the sampling and abstracting? Yes__ No__.

(If "Yes", meet with the person(s) listed above, review steps, leave descriptive material, and go on to item #10.)

(If "No"): When may I meet with this person(s)? _____

10. Thank you very much. This completes the interview.

(Record time that the interviews and training were completed:_____.)

D. (TO BE COMPLETED ONLY IF THE FACILITY REFUSES TO PARTICIPATE)

Why is your facility unwilling to participate? _____
_____
_____

What could have been done to gain your cooperation? _____
_____
_____

(Record time that the interviews were completed: _____.)

OMB NO. 0920-0248: APPROVAL EXPIRES JUNE 30, 1991

FREESTANDING ASC INTERVIEW QUESTIONNAIRE
FEASIBILITY STUDY FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

INITIAL CONTACT AND INDUCTION (Form C4)

(Note: If at any point during the induction visit the facility refuses to participate, go to the end of this form and complete Question D.)

A. ADMINISTRATIVE INFORMATION

(Items #1 and #2 are to be filled in prior to ASC visit.)

1. FACILITY NUMBER : _____

   NAME OF FACILITY: _____

   ADDRESS: _____

   _____

   _____

2. FREESTANDING ASC CONTACTS

   Date

   a. NCHS letter sent to: _____ _____

   Telephone number

   b. Name of Administrator: _____ (_____)____-_____

   c. Designated study contact person (if other than administrator):

   _____

   Title & telephone number: _____ (_____) ____-_____

   d. Medical records contact: _____

   Title & Telephone number: _____ (_____)_____-_____

(Begin Interview. Insert time interview began: _____.)

As explained in the material sent to you earlier, this is a study to examine the feasibility of conducting a national survey of ambulatory surgical facilities. The purpose of this meeting is to obtain permission to collect information from your facility on a sample of 20 ambulatory surgical visits. All information collected during the study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law; it will be used only to assist in evaluating the feasibility of a national survey.

In order for us to conduct the study in your facility, we need to obtain information about the facility and all locations where ambulatory surgery is performed, information about OR logs, and information about medical records for ambulatory surgery patients. Do you have any questions before we begin?

3. CONFIRM INFORMATION FROM NATIONAL DATA BASE

a. Is (read name and address of the ASC from page 1) correct? Yes__ No__.

(If "No", record new name and/or address)

_____

b. Is (read the name and telephone number of the administrator from page 1) the correct name and telephone number of the administrator of this facility? Yes ___ No ___.

(If "No", record new name and/or number)_____

c. Which of the following categories best describes the ownership of this freestanding ASC?

___ Hospital owned (if selected, give name of hospital _____)
___ Multifacility chain (if selected, give name of corporation _____ _____)
___ Independent, not controlled by another facility
___ Physician owned

(If one of the above is selected, go to #3.d., if not, continue)

If none of these categories is applicable, how do you describe the ownership? _____.

d. What best describes the surgery performed here, is it primarily one specialty? Yes ___ No ___.

(If "Yes"): What is the specialty? _____

(If "No", check one): Is it general surgery? _____
or a mix of specialties? _____

e. Is this facility Medicare certified as an ASC? Yes ___ No ___.

(If "Yes"): Do any satellite or affiliated facilities use this ASC's Medicare Provider of Service Number for billing? Yes ___ No ___.

(If "Yes"): What are the names and addresses of these facilities?

_____

_____

(If "No"): Are Medicare patients billed under the POS number of a parent facility or organization? Yes ___ No ___.

f. Is this facility licensed by the state? Yes ___ No ___.

(If "Yes"): Does any satellite or affiliated facility operate under the same state license? Yes ___ No ___.

(If "Yes"): What are the names and addresses of these facilities? _____

(If "No"): Does the ASC operate under the license of a parent facility or organization? Yes ___ No ___.

g. How many patients received ambulatory surgery in this ASC over the last 12 months? _____

4. DOES YOUR ASC CALCULATE THE COST OF PERFORMING A PROCEDURE? Yes__ No__.
(If "Yes"): How do you calculate the cost? _____

_____

_____

B. OPERATING AND SPECIAL PROCEDURE ROOM INFORMATION

1. I will read to you a list of types of rooms in which surgical procedures may be performed. For each type of room, please tell me how many such rooms there are, and where they are located:

Room Type	Number	Location
ASC Main Operating Room	_____	_____
Satellite Operating Room	_____	_____
Cystoscopy Room	_____	_____
Endoscopy Room	_____	
Cardiac Catheterization Lab	_____	_____
Laser Procedures Room	_____	
Podiatric Procedures Room	_____	_____
Pain Block Room	_____	_____

Are there any other types of rooms used for surgical procedures? Yes__ No__.

(If "Yes"): What are these rooms? How many of each are there and where are they located?

Other Type (describe)	Number	Location

In order to select the sample, we need to work with a list of patients that have received surgery during a given month. The list must include date of service and medical record number or other patient ID in order to retrieve the appropriate medical record.

2. Is there an accurate and comprehensive list of all patients and/or surgical procedures performed throughout the facility? Yes ___ No ___.

(If "Yes"): Where is this list available? _____
May I see this list?

(If "No"): May I see the surgery logs or lists for each separate location in which ambulatory surgery is performed?

(Item #3 is to be completed by the interviewer using the OR log(s) or list(s) provided by the interviewee. Items #3 through #7 should be completed for each log or list provided.)

3. OPERATING ROOM LOG OR OTHER LIST OF SURGICAL CASES

a. Facility ID: _____
Name of List: _____
Type list: _____
Location(s) covered: _____

b. Indicate which of the following data elements are included on this list or surgery log. Use the space labeled "comments" to provide additional detail, if appropriate.

Data Element	Included	Comments
Med Rec #/othr ID	_____	_____
Date of Service	_____	_____
Age	_____	_____
Sex	_____	_____
Diagnosis	_____	_____
Procedure	_____	_____
OR Time	_____	_____
Recovery Time	_____	_____
Other data included on list or log (specify):		
_____	_____	_____
_____	_____	_____

(Continue with the interview to obtain answers to questions #4, #5, #6 and #7.)

4. Where is this list kept? _____

How long is it kept here? _____
(If kept here for less than one year): Where is it located after it is moved?: _____

Whom should be contacted to obtain access to this list for purposes of drawing the sample of ambulatory surg. patients? _____.

5. Does the list or log reflect if a scheduled surgical procedure is not initiated? Yes ___ No ___.

Does the log indicate if an initiated surgical procedure is not completed? Yes ___ No ___.

Does it indicate if an ambulatory surgery patient is transferred to a hospital for inpatient admission? Yes ___ No ___ .

6. Are changes ever made to this list, other than spelling? Yes___ No___.
   (If "yes"): What kinds of changes are made? _____

7. What was the number of ambulatory surgical visits to the location covered by this list for the month of October 1990? (Record Number) _____.

   (NOTE: If this figure is unavailable, ask for the most recent annual estimate, divide by 12 and enter the result above. Check here if this procedure is used ____. Check here if neither a monthly figure nor annual estimate is available for this list in this facility ___. If neither is available, you will have to examine the list and either count the cases or estimate them. If you developed the estimate entered in item 6 above, describe the method used: _____
   _____.)

C. MEDICAL RECORD INFORMATION

These are the sampling and abstracting forms which will be used. (Give a copy of forms to the interviewee for his/her review) In order to use these, first we need to determine how we can locate medical records for the sample cases.

1. Does this facility employ a unit record system? Yes ___ No ___.

   (If "Yes", go to question #2)

   (If "No"): Please describe the record keeping system used for ambulatory surgery patients (Record response): _____

2. Is the medical record number a permanent unit record number? Yes__ No__.

   (If "No"): Please describe the numbering system (Record response):

3. Are all active medical records for the entire ASC kept together in one location? Yes ___ No ___.

   (If "Yes"): Where are they filed? _____

   (If "No"): What locations are used to store these medical records?

4. After how long are medical records transferred to an inactive file or microfilmed? _____

5. Are abstracts of ambulatory surg. cases routinely prepared? Yes__ No__.

   (If "Yes"): May I have a copy of an abstract form?

6. Is computerization of medical records in effect or planned? Yes__ No__.

   (If "Yes"): Please describe the system:_____

7. Is a face sheet used for ASC surgical visits? Yes ___ No ___.

   (If "yes"): May I have a copy?

8. Please indicate if each of the items I will read to you are available on the face sheet or, if not there, please tell me where each such data element may be found in the medical record:

	On Facesheet? YES	NO	If "NO" - Where can this item be found?
Patient Ident. Number	____	____	_____
Date of Service	____	____	_____
Social Security Number	____	____	_____
Residence ZIP Code	____	____	_____
Date of Birth/Age	____	____	_____
Sex	____	____	_____
Race	____	____	_____
Ethnicity	____	____	_____
Marital Status	____	____	_____
Expected Payment Source(s)	____	____	_____
Disposition of Patient	____	____	_____
Place of Service	____	____	_____
Patient and Visit Types	____	____	_____
Operating Room Time	____	____	_____
Recovery Room Time	____	____	_____
Discharge Time	____	____	_____
Reason for Cancelled Surg	____	____	_____
Type of Anesthesia	____	____	_____
Anesthesia Administered by	____	____	_____
ASA Classification	____	____	_____
Post-op Anesth Assessment	____	____	_____
Diagnoses	____	____	_____
Surgical Procedures	____	____	_____
Assistants in Surgery	____	____	_____
Other Services Provided	____	____	_____
Same/Next Day Followup	____	____	_____

Do you have any questions?

Would a member of your staff be willing to sample and abstract information for approximately 20 ambulatory surgical cases within the next two weeks? Yes ___ No ___ Undecided ___.

(If "Yes", skip to question #9 below.)

(If "No" or undecided): As an alternative, would you allow a member of our staff to abstract data from medical records that we sample and your staff pulls and then refiles? Yes ___ No ___

(If "Yes"): When can we schedule the sampling and abstracting?_____ _____. (Skip to question 10 below.)

(If "No"): How can we gain your cooperation to collect these data? _____.

9. Please give me the name, title and phone number for each person who will perform sampling or abstracting.

Name	Title	Phone #

Would it be possible for me to spend a few minutes now providing the training in how to perform the sampling and abstracting? Yes__ No__.

(If "Yes", meet with the person(s) listed above, review steps, leave descriptive material, and go on to item #10.)

(If "No"): When may I meet with this person(s)? _____

10. Thank you very much. This completes the interview.

(Record time that the interviews and training were completed: _____.)

D. (TO BE COMPLETED ONLY IF FACILITY REFUSES TO PARTICIPATE)

Why is your facility unwilling to participate? _____

What could have been done to gain your cooperation? _____

(Record time that the interviews were completed: _____.)

OMB NO. 0920-0248: APPROVAL EXPIRES June 30, 1991

SAMPLE SELECTION INSTRUCTIONS AND WORKSHEETS

HOSPITAL AMBULATORY SURGERY

The National Center for Health Statistics (NCHS) is sponsoring a study to assess the feasibility of a national survey of ambulatory surgery. As part of this study we are collecting detailed data on a recent sample of ambulatory surgery cases from hospitals and freestanding ambulatory surgery centers.

Following the instructions provided, you will sample approximately 20 ambulatory surgical cases performed during the month of October 1990. For some hospitals there will be a single list of inpatient and outpatient surgical patients from which to select the 20 sample cases. The task of selecting the sample is simple to describe when the hospital has only one list of all surgical cases, although it is crucial that only those patients scheduled to be operated as outpatients be sampled. The sampling process is more demanding if the hospital has separate lists of cases for separate operating suites or special surgical procedures rooms (for example, a hospital which performs ambulatory surgery in the main operating room, a dedicated ambulatory surgery operating suite, and in the endoscopy room might have two separate OR logs and a separate list of patients who received endoscopic procedures). If there are separate lists, then the sample will come from all lists.

The "Sampling Instructions" contained on pages 2 and 3 of this folder specify which list(s) you will use. The Sampling Instructions also describe how to select a sample from each list and what information to record on each sample case. Note that if you are instructed to sample from two or more separate lists, separate Tables corresponding to each such list are provided for recording information.

Use the step by step instructions which follow. When you complete the sample, give this entire folder (including the Sampling Instructions and all Tables) to the person whose name appears in Step 8.

If you have any questions about following these instructions, you may call (collect) the Center for Health Policy Studies for clarification or other assistance. Call (area code 301) 381-4203. Indicate that you have a question on ambulatory surgery sampling and ask for _____.

SAMPLING DESIGN WORKSHEET

Name of Hospital: _____ Hospital Number _____

Name of person selecting sample: _____

Characteristics of list(s) of October 1990 surgery cases to be sampled:

Name/Location of List	Inpts & Outpts? Yes/No	Number of Surg. Cases	% Outpts	Number Outpts
_____	_____	_____	____	_____
_____	_____	_____	____	_____
_____	_____	_____	____	_____
_____	_____	_____	____	_____
_____	_____	_____	____	_____
_____	_____	_____	____	_____
	Totals	_____	____	_____

Complete the information above for each identified list which must be separately sampled. Using the exact counts or estimates of the number of ambulatory surgical cases, or the count/estimate for inpatient and outpatient surgical patients multiplied by the percent outpatients, sum the total number of outpatient surgical cases. Divide this number by 20 and round down (e.g., drop the numbers after the decimal). This is the **PROPORTIONAL SAMPLING NUMBER:**____.

Based on whether each list contains only outpatient surgical cases or both inpatient and outpatient cases, mark each for the corresponding set of instructions. Next, order the entries within sampling instruction type by the magnitude of the number of outpatient surgical cases contained on each list.

When all lists have been assigned to the appropriate set of sampling instructions and the order in which they are to be entered determined, fill out the following required information on the instruction page(s) for each sheet:

a. Name of hospital and NCHS hospital number
b. Name of person selected to perform the sampling
c. Name of each list and where it is located, entering the lists in the order of the magnitude of outpatient surgical cases each contains
d. Initial count to identify first sample case (obtain from random number table)
e. Proportional sampling number computed above
f. To whom the completed sample lists should be delivered

Also write the hospital number, list name, and case identification descriptors on each of the Tables (A through D) to be used within the sampling type.

SAMPLING INSTRUCTIONS - OUTPATIENT ONLY LISTS

Name of Hospital: *_____ Hospital Number *_____

Name of person selecting sample: *_____

List(s) of ambulatory surgery cases to be sampled:

Name and Location of List

A.* _____

B.* _____

C.* _____

D.* _____

Step 1 Obtain list "A", named above, of ambulatory surgery cases. Identify that portion of the list containing those surgical cases performed in October 1990. This is the only portion of the list which you will use.

Step 2* Start with the first listed case operated in October 1990 and count down _____ cases. This is the first sample case. Record in Table A (attached) the indicated patient identification information and the date of surgery.

Step 3* After selecting the first sample case (Step 2), you will select every _____ case. This is the **PROPORTIONAL SAMPLING NUMBER.** Count down _____ surgical cases, starting with the next case after the first sample case. The last case counted is the second sample. Record the patient identification information in Table A and, starting from the second sample case, again count down the list the **PROPORTIONAL SAMPLING NUMBER** to identify the next sample case. Proceed down the list selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER.** Record the identifying information for each sample case in Table A until you reach the end of those cases operated in October 1990 appearing on list A.

Step 4 If no list "B" is specified above, skip to Step 8 below.

If another list to be sampled is specified in "B" above, continue the count on list "B", and record each identified sample case from list B on Table B. For example: if you are to sample from lists A and B and were selecting every 37th case (e.g., the **PROPORTIONAL SAMPLE NUMBER** is 37) then whatever number you reach when you reach the end of October 1990 cases on list A, "16" for example, continue

* An asterisk indicates that information will be entered in the space provided by the CHPS representative at the time of the induction visit to the Hospital.

the count, "17" for this example, at the beginning of October surgical cases appearing on list B until "37" is reached --- the first sample case from list B.

Step 5 Proceed down list B selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER**. Record the identifying information for each sample case in Table B until you reach the end of those cases operated in October 1990 appearing on list B.

If no list "C" is specified above, skip to Step 8 below.

If another list to be sampled is specified in "C" above, continue the count on list "C", and record each identified sample case from list C on Table C. As described in Step 4 above, start list C counting from the last number counted on list B. Continue selecting cases based on the **PROPORTIONAL SAMPLING NUMBER**.

Step 6 Proceed down list C selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER**. Record the identifying information for each sample case in Table C until you reach the end of those cases operated in October 1990 appearing on list C.

If no list "D" is specified above, skip to Step 8 below.

If another list to be sampled is specified in "D" above, continue the count on list "D", and record each identified sample case from list D on Table D. As described in Step 4 above, start list D counting from the last number counted on list C. Continue selecting cases based on the **PROPORTIONAL SAMPLING NUMBER**.

Step 7 Proceed down list D selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER**. Record the identifying information for each sample case in Table D until you reach the end of those cases operated in October 1990 appearing on list D. At this point, proceed to Step 8 below.

Step 8* Now give the complete folder containing the Sampling Instructions and Tables A, B, C, and D to: _____.

(**Note**: If two or more lists are to be sampled, use separate Tables with the corresponding designation A, B, C, or D to record the sample case identification information for each. If sampling from more than one list, you will identify fewer than 20 sample cases from each list, but the total cases sampled from all lists combined should equal approximately 20.)

TABLE A

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		
26.		
27.		

TABLE B

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		

TABLE C

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

TABLE D

Hospital #:* _____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

SAMPLING INSTRUCTIONS - MIXED INPATIENT AND OUTPATIENT LISTS

Name of Hospital: *_____ Hospital Number *_____

Name of person selecting sample: *_____

List(s) of ambulatory surgery cases to be sampled:

Name and Location of List

A.* _____

B.* _____

C.* _____

D.* _____

Step 1 Obtain list "A", named above, of ambulatory surgery cases. Identify that portion of the list containing those surgical cases performed in October 1990. This is the only portion of the list which you will use.

Step 2* Examine the information presented on surgical cases in List A, familiarizing yourself with those data elements which differentiate between ambulatory and inpatient surgical cases. Ambulatory surgical patients can be identified by:
_____ on list A, by
_____ on list B,
_____ on list C, and by
_____ on list D. Read the instructions below before attempting to implement Steps 3 and 4.

Step 3* In this step you will sample outpatient surgical cases from list "A". Examine each case, beginning with the first listed surgical case for October 1990. Determine if each was an outpatient case at the time the patient entered the operating room, counting each such case. Continue to examine each case in sequence, keeping track of the number of outpatient surgical cases counted until you reach _____ outpatient cases. This is the first sample outpatient case. Record in Table A (attached) the indicated patient identification information and the date of surgery. Because the list contains both inpatients and outpatients, it will help you to keep track of the count of outpatient surgical cases by using a separate sheet of paper to check off the count. A description of how to facilitate keeping track of the count is provided in Step 4.

Step 4* After selecting the first outpatient surgical sample case (Step 3), you will select every _____ case. This is the **PROPORTIONAL SAMPLING NUMBER**. Count down _____ outpatient surgical cases,

* An asterisk indicates that information will be entered in the space provided by the CHPS representative at the time of the induction visit to the Hospital.

starting with the next case after the first sample case. The last ambulatory surgical case counted is the second sample case. Record the patient identification information in Table A and, starting from the second sample case, again count down the list the **PROPORTIONAL SAMPLING NUMBER** to identify the next sample case. Exhibit 1, attached, can be used to help you keep track of the count, or you may devise your own way of keeping track. To use Exhibit 1: you are selecting every _____ outpatient surgical case. Go through Exhibit 1 and circle number _____ in each column. Now, return to list A and proceed to examine each case, crossing off in sequence numbers from 1 to _____ on Exhibit 1 as you go through list A and encounter outpatient surgical cases. Each time you reach the circled number in a column, record the case identification information on Table A, then start a new column sequence, counting from 1 to _____ with the next outpatient surgical case in list A. Proceed down the list selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER**. Record the identifying information for each sample case in Table A until you reach the end of those outpatient cases operated in October 1990 appearing on list "A".

Step 5* If no list "B" is specified above, skip to Step 9 below.

If another list to be sampled is specified in B above, repeat Steps 1 and 2 for list "B". Then, continue the count of ambulatory surgery cases on list B, taking up the count with the next number after the last number counted on list A. For example, whatever number you have counted to when you reach the end of October 1990 cases on list A, "4" for example, continue the count, "5" for this example, at the beginning of October ambulatory surgical cases appearing on list B until _____ is reached (the **PROPORTIONAL SAMPLING NUMBER**). This is the first sample case from list B. Record the identification of each sample from list B on Table B.

Step 6 Proceed down list B selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER** of outpatient surgical cases. Record the identifying information for each sample case in Table B until you reach the end of those cases operated in October 1990 appearing on list B.

If no list "C" is specified above, skip to Step 9 below.

If another list to be sampled is specified in C above, repeat Steps 1 and 2 for list "C". Continue the count of ambulatory surgery cases from list B to those appearing on list C, and record each identified sample case from list C on Table C. Follow the same procedure for continuing the count from list B to list C as described in Step 5 above when going from list A to list B. Start list C counting outpatient surgical cases from the last number counted on list B. Continue selecting cases based on the **PROPORTIONAL SAMPLING NUMBER**.

Step 7 Proceed down list C identifying and counting ambulatory surgery cases, selecting sample cases separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER** of outpatient surgical cases. Record the identifying information for each sample case in Table C until you reach the end of those outpatient cases operated in October 1990 appearing on list C.

If no list "D" is specified above, skip to step 9 below.

If another list to be sampled is specified in D above, repeat Steps 1 and 2 for list "D". Continue the count of ambulatory surgery cases from list C to those appearing on list D, and record each identified sample case from list D on Table D. Follow the same procedure for continuing the count from list B to list C as described in Step 5 above when going from list A to list B. Start list D counting outpatient surgical cases from the last number counted on list C. Continue selecting cases based on the **PROPORTIONAL SAMPLING NUMBER**.

Step 8 Proceed down list D selecting each case separated from the previous case by the **PROPORTIONAL SAMPLING NUMBER** of ambulatory surgical cases. Record the identifying information for each sample case in Table D until you reach the end of those cases operated in October 1990 appearing on list D. At this point proceed to Step 9.

Step 9 Now give the complete folder containing the Sampling Instructions and Tables A, B, C, and D to: _____ .

(**Note**: If two or more lists are to be sampled, use separate Tables with the corresponding designation A, B, C, or D to record the sample case identification information for each. If sampling from more than one list, you will identify fewer than 20 sample cases from each list, but the total cases sampled from all lists combined should equal approximately 20.)

TABLE A

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
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19.		
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23.		
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26.		
27.		

TABLE B

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
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16.		
17.		
18.		
19.		
20.		
21.		

TABLE C

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
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16.		
17.		
18.		
19.		
20.		

TABLE D

Hospital #:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
7.		
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15.		
16.		
17.		
18.		
19.		
20.		

EXHIBIT 1

1.	1.	1.	1.	1.	1.	1.	1.	1.
2.	2.	2.	2.	2.	2.	2.	2.	2.
3.	3.	3.	3.	3.	3.	3.	3.	3.
4.	4.	4.	4.	4.	4.	4.	4.	4.
5.	5.	5.	5.	5.	5.	5.	5.	5.
6.	6.	6.	6.	6.	6.	6.	6.	6.
7.	7.	7.	7.	7.	7.	7.	7.	7.
8.	8.	8.	8.	8.	8.	8.	8.	8.
9.	9.	9.	9.	9.	9.	9.	9.	9.
10.	10.	10.	10.	10.	10.	10.	10.	10.
11.	11.	11.	11.	11.	11.	11.	11.	11.
12.	12.	12.	12.	12.	12.	12.	12.	12.
13.	13.	13.	13.	13.	13.	13.	13.	13.
14.	14.	14.	14.	14.	14.	14.	14.	14.
15.	15.	15.	15.	15.	15.	15.	15.	15.
16.	16.	16.	16.	16.	16.	16.	16.	16.
17.	17.	17.	17.	17.	17.	17.	17.	17.
18.	18.	18.	18.	18.	18.	18.	18.	18.
19.	19.	19.	19.	19.	19.	19.	19.	19.
20.	20.	20.	20.	20.	20.	20.	20.	20.
21.	21.	21.	21.	21.	21.	21.	21.	21.
22.	22.	22.	22.	22.	22.	22.	22.	22.
23.	23.	23.	23.	23.	23.	23.	23.	23.
24.	24.	24.	24.	24.	24.	24.	24.	24.
25.	25.	25.	25.	25.	25.	25.	25.	25.
26.	26.	26.	26.	26.	26.	26.	26.	26.
27.	27.	27.	27.	27.	27.	27.	27.	27.
28.	28.	28.	28.	28.	28.	28.	28.	28.
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34.	34.	34.	34.	34.	34.	34.	34.	34.
35.	35.	35.	35.	35.	35.	35.	35.	35.
36.	36.	36.	36.	36.	36.	36.	36.	36.
37.	37.	37.	37.	37.	37.	37.	37.	37.
38.	38.	38.	38.	38.	38.	38.	38.	38.
39.	39.	39.	39.	39.	39.	39.	39.	39.
40.	40.	40.	40.	40.	40.	40.	40.	40.
41.	41.	41.	41.	41.	41.	41.	41.	41.
42.	42.	42.	42.	42.	42.	42.	42.	42.
43.	43.	43.	43.	43.	43.	43.	43.	43.
44.	44.	44.	44.	44.	44.	44.	44.	44.
45.	45.	45.	45.	45.	45.	45.	45.	45.
46.	46.	46.	46.	46.	46.	46.	46.	46.
47.	47.	47.	47.	47.	47.	47.	47.	47.
48.	48.	48.	48.	48.	48.	48.	48.	48.
49.	49.	49.	49.	49.	49.	49.	49.	49.
50.	50.	50.	50.	50.	50.	50.	50.	50.
51.	51.	51.	51.	51.	51.	51.	51.	51.
52.	52.	52.	52.	52.	52.	52.	52.	52.

OMB NO. 0920-0248: APPROVAL EXPIRES June 30, 1991

CONFIDENTIAL -- All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose.

Public reporting burden for this collection of information is estimated to average 30 minutes per response. Send comments for this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer; Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0248; Washington, DC 20503).

SAMPLE SELECTION INSTRUCTIONS AND WORKSHEETS

FREESTANDING AMBULATORY SURGERY CENTER

The National Center for Health Statistics (NCHS) is sponsoring a study to assess the feasibility of a national survey of ambulatory surgery. As part of this study we are collecting detailed data on a recent sample of ambulatory surgery cases from hospitals and freestanding ambulatory surgery centers.

Following the instructions provided, you will sample approximately 20 ambulatory surgical cases performed during the month of October 1990. For most ambulatory surgery centers (ASCs) there will be a single list of surgical patients from which to select the 20 sample cases. The task of selecting the sample is simple to describe when the ASC has only one list of all ambulatory surgical cases. The sampling process is more demanding if the ASC has separate lists of cases for separate operating rooms (ORs) or special procedures rooms (for example, an ASC with a general purpose operating room and a separate dedicated endoscopy room might have an OR log and a separate list of patients with endoscopic procedures). If there are separate lists, then the sample will come from all lists.

The "Sampling Instructions" contained on pages 2 and 3 of this folder specify which list(s) you will use. The Sampling Instructions also describe how to select a sample from each list and what information to record on each sample case. Note that if you are instructed to sample from two or more separate lists, separate Tables corresponding to each such list are provided for recording information.

Use the step by step instructions which follow. When you complete the sample, give this entire folder (including the Sampling Instructions and Tables A through D) to the person whose name appears in Step 8.

If you have any questions about following these instructions, you may call (collect) the Center for Health Policy Studies for clarification or other assistance. Call (area code 301) 381-4203. Indicate that you have a question on ambulatory surgery sampling and ask for _____.

SAMPLING INSTRUCTIONS

Name of ASC: *_____ ASC Number *_____

Name of person selecting sample: *_____

List(s) of ambulatory surgery cases to be sampled:

Name and Location of List	Numb. of Oct., 1990 Surg. Cases
A.* _____	_____
B.* _____	_____
C.* _____	_____
D.* _____	_____
Totals	_____

Step 1 Complete the information above for each identified list. Sum the total number of surgical cases in all locations through out the facility. Divide this total by 20 and round the quotient to the nearest whole number (up if the quotient is 5 or greater and down if the quotient is less than 5). This is the **PROPORTIONAL SAMPLING NUMBER:**_____.

Step 2* Start with the first listed case operated in October 1990 and count down _____ cases. This is the first sample case. Record in Table A (attached) the indicated patient identification information and the date of surgery.

Step 3* After selecting the first sample case (Step 2), you will select every _____ case. This is the **PROPORTIONAL SAMPLING NUMBER.** Count down _____ surgical cases, starting with the next case after the first sample case. The last case counted is the second sample. Record the patient identification information in Table A and, starting from the second sample case, again count down the list the **PROPORTIONAL SAMPLING NUMBER** to identify the next sample case. Proceed down the list selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER.** Record the identifying information for each sample case in Table A until you reach the end of those cases operated in October 1990 appearing on list A.

Step 4 If no list "B" is specified above, skip to Step 8 below.

If another list to be sampled is specified in "B" above, continue the count on list "B", and record each identified sample case from list B on Table B. For example: if you are to sample from lists A and B and were selecting every 37th case (e.g., the **PROPORTIONAL SAMPLE NUMBER** is 37) then whatever number you reach when you reach the end of October 1990 cases on list A, "16" for example, continue the count, "17" for this example, at the beginning of October surgical cases appearing on list B until "37" is reached -- the first sample case from list B.

Step 5 Proceed down list B selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER.** Record the identifying information for each sample case in Table B until

* An asterisk indicates that information will be entered in the space provided by the CHPS representative at the time of the induction visit to the ASC.

you reach the end of those cases operated in October 1990 appearing on list B.

If no list "C" is specified above, skip to Step 8 below.

If another list to be sampled is specified in "C" above, continue the count on list "C", and record each identified sample case from list C on Table C. As described in Step 4 above, start list C counting from the last number counted on list B. Continue selecting cases based on the **PROPORTIONAL SAMPLING NUMBER**.

Step 6 Proceed down list C selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER**. Record the identifying information for each sample case in Table C until you reach the end of those cases operated in October 1990 appearing on list C.

If no list "D" is specified above, skip to Step 8 below.

If another list to be sampled is specified in "D" above, continue the count on list "D", and record each identified sample case from list D on Table D. As described in Step 4 above, start list D counting from the last number counted on list C. Continue selecting cases based on the **PROPORTIONAL SAMPLING NUMBER**.

Step 7 Proceed down list D selecting each case separated from the previous sample case by the **PROPORTIONAL SAMPLING NUMBER**. Record the identifying information for each sample case in Table D until you reach the end of those cases operated in October 1990 appearing on list D. At this point, proceed to Step 8 below.

Step 8* Now give the complete folder containing the Sampling Instructions and Tables A, B, C, and D to: _____.

(**Note**: If two or more lists are to be sampled, use separate Tables with the corresponding designation A, B, C, or D to record the sample case identification information for each. If sampling from more than one list, you will identify fewer than 20 sample cases from each list, but the total cases sampled from all lists combined should equal approximately 20.)

TABLE A

ASC Number:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
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27.		

TABLE B

ASC Number:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
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18.		
19.		
20.		
21.		

TABLE C

ASC Number:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
6.		
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16.		
17.		
18.		
19.		
20.		

TABLE D

ASC Number:* ____. Sample cases from (name of list A):* _____

Enter in column (2) for each sample case the * _____ (specify medical record number or other patient identifier) to permit retrieving the medical record or other file for this patient. Write the date of surgery in column (3) to identify the sampled surgery episode if this patient was operated on more than once during October 1990.

(1) Sample Case	(2) Patient/Case Identifier (see above)	(3) Date of Surgery
1.		
2.		
3.		
4.		
5.		
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Public reporting burden for this collection of information is estimated to average 12 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Attn: PRA: Hubert H. Humphrey Building; Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0248); Washington, DC 20503.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
NATIONAL CENTER FOR HEALTH STATISTICS

MEDICAL ABSTRACT - FEASIBILITY STUDY OF AMBULATORY SURGERY

A. PATIENT IDENTIFICATION

1. Hospital/FSASC Number..... □□□□
2. Satellite or Separate Unit Number..... □□
3. Medical record number _____

4. Date of Surgery ..... Month □□ - Day □□ - Year □□
5. SSN Absent □ Present □
6. Residence ZIP code ... □□□□□

B. PATIENT CHARACTERISTICS

7. Date of birth Month □□ - Day □□ - Year □□□□

8. Age (complete only if date of birth not given)..... Units □□□
1 □ Years
2 □ Months
3 □ Days

9. Sex (Mark (X) one)
1 □ Male 2 □ Female 3 □ Not Stated

10. Race
1 □ White 3 □ American Indian/Eskimo/Aleut 5 □ Other (Specify) _____
2 □ Black 4 □ Asian/Pacific Islander 6 □ Not Stated

11. Ethnicity (Mark (X) one)
1 □ Hispanic Origin 2 □ Non-Hispanic 3 □ Not Stated

12. Marital Status (Mark (X) one)
1 □ Married 3 □ Widowed 5 □ Separated
2 □ Single 4 □ Divorced 6 □ Not Stated

13. Expected source(s) of payment

		Principal (Mark one only)	Other addition sources (Mark accordingly)
Government Sources	1. Workmen's Compensation	□	□
	2. Medicare	□	□
	3. Medicaid	□	□
	4. Other government payments	□	□
Private Sources	5. Blue Cross	□	□
	6. Other private or commercial insurance	□	□
	7. HMO/PPO	□	□
Other Sources	8. Self Pay	□	□
	9. No charge	□	□
	10. Other (Specify) _____	□	□

□ No source of payment indicated

14. Status/Disposition of Patient (Mark (X) appropriate box(es)
1. Routine discharge to home □
2. Transfer/admission to hospital for inpatient stay □
3. Status/disposition not stated □
4. Other (Specify) _____ □

C. SURGICAL VISIT DATA

	YES	NO
15. Was surgery cancelled or terminated?	☐	☐

If yes, was it:
- Cancelled during patient preparation, but before entering the OR ☐
- Cancelled as anesthesia was administered before surgery ☐
- Cancelled during surgery, surgery incomplete ☐
- Cancelled/terminated, not stated when ☐

16. Place of service — Mark those applicable

1. OR dedicated for ambulatory surgery ☐
2. Special procedure room in OR suite ☐
3. OR used for both inpatient and outpatient procedures ☐
4. Special procedure room not part of OR suite ☐
5. Satellite facility ☐
6. Not stated ☐

17. Patient and visit types

1. Scheduled outpatient surgery ☐
2. Non-scheduled outpatient surgery ☐
3. Patient scheduled as inpatient but converted to outpatient ☐
4. Patient scheduled for outpatient surgery, but converted to inpatient ☐
5. Not stated as to whether or not a scheduled surgery ☐

18. Time

	Arrive Hrs.	Arrive Mins.	Depart Hrs.	Depart Mins.	Not Available
1. Pre-op time	☐☐ :	☐☐	☐☐ :	☐☐	☐
2. Operating room time	☐☐ :	☐☐	☐☐ :	☐☐	☐
3. Recovery room time	☐☐ :	☐☐	☐☐ :	☐☐	☐
4. Discharge time			☐☐ :	☐☐	☐

	Yes	No
19. Are total charges for this surgical visit available?	☐	☐

If yes, total charge is $ ☐☐, ☐☐☐. ☐☐

Check all items which you can determine to be included in the total charge?

1. Pre-op tests ☐
2. Lab tests on day of surgery ☐
3. Radiology tests, day of surgery ☐
4. Pharmacy charges ☐
5. Physician charges ☐
6. CRNA charges ☐
7. Other (specify) ☐ _____

D. MEDICAL DATA

20. Type of anesthesia:

- 1. IV Sedation ☐
- 2. Local ☐
- 3. Regional ☐
  - 3.a Epidural ☐
  - 3 b. Spinal ☐
  - 3.c Block ☐
- 4. General ☐
- 5. None ☐
- 6. Not Stated ☐

21. Anesthesia administered by:

- 1. Anesthesiologist ☐
- 2. CRNA w/supervision ☐
- 3. CRNA w/o supervision ☐
- 4. Surgeon ☐
- 5. Not Stated ☐

22. ASA Classification

- 1 - ☐
- 2 - ☐ (Check one)
- 3 - ☐
- 4. Not Stated ☐

23. Post-op Anesthesia Assessment

☐ Poor ☐ Fair ☐ Good

Not Stated ☐

24. Diagnosis (Give narrative and ICD-9-CM code, if available)

	Narrative Description	ICD-9-CM CODE
Principal Diagnosis:	_____	☐☐☐.☐☐
Other Diagnoses:	_____	☐☐☐.☐☐
	_____	☐☐☐.☐☐
	_____	☐☐☐.☐☐
	_____	☐☐☐.☐☐

25. Surgical procedures (Give narrative, ICD-9-CM, and CPT-4 code, if available)

	Narrative Description	ICD-9-CM CODE	CPT-4-CODE
Principal Procedure	_____	☐☐.☐☐	☐☐☐☐☐
Secondary Procedure	_____	☐☐.☐☐	☐☐☐☐☐
Other Procedure	_____	☐☐.☐☐	☐☐☐☐☐
Other Procedure	_____	☐☐.☐☐	☐☐☐☐☐
Other Procedure	_____	☐☐.☐☐	☐☐☐☐☐

26. Assistants in surgery

How many physicians were on the case in addition to the primary surgeon? ☐☐ ☐ Unknown

27. Other services provided as indicated in the medical record.

	Yes	Not Stated
Laboratory services	☐	☐
Radiology services	☐	☐
Other testing/services	☐	☐

If Yes, list _____

28. Outcome followup

	Yes	No	Unknown
Was the patient contacted within 48 hours after discharge?	☐	☐	☐

If yes, when?

- 1. Evening after discharge..... ☐
- 2. Next day..... ☐
- 3. Two days later..... ☐

OMB NO. 0920-0248: APPROVAL EXPIRES June 30, 1991

POST DATA COLLECTION INTERVIEW GUIDE

FEASIBILITY STUDY OF A NATIONAL SURVEY OF AMBULATORY SURGERY

(Use separate sheet for each ASC interview)

Interviewer: _____ Date: _____

Person interviewed: _____ Facility #: _____

Position/Title: _____

1. Data Collection Methods

a. How much staff time did it take to complete the following (this question is only for those facilities which used their own staff for sampling/abstracting):

Sampling (all locations): _____

Abstracting of the sampled records: _____

b. You have seen or had described to you how ambulatory surgery cases were sampled, and what data elements were collected for each case from which sources within your facility. Do you know of an easier way/source in which these same data could have been obtained? No___ Yes___ If yes, please explain: _____
_____

c. If you were to participate in an ongoing national survey involving sampling and abstracting of about 400 cases per year would you prefer having your facility personnel sample and abstract the data or an NCHS representative sample and abstract the data?

Facility personnel ___ NCHS representative___

Please explain your choice: _____
_____

2. Barriers to Participation and Techniques to Overcome Them

a. Please comment on how you were approached to participate in this feasibility study. Although you agreed to participate, not all facilities did. How can we do a better job in overcoming reluctance to participate? Please tell us:

What motivated you to agree to participate? _____

_____

Did the letters of endorsement help? Yes___ No___ If "yes", which organizations' endorsements are most important to obtaining you facility's participation? _____

_____

What were your greatest concerns before agreeing to participate? _____

_____

What would you personally want to see come out of a national survey of ambulatory surgery? _____

_____

Would regular (annual) feedback of your facility's ambulatory surgery sample data with national comparisons be a strong incentive to participate? Yes___ No___ If not, what would be? _____

_____

b. Some facilities may be concerned about specific data elements. Please comment on whether inclusion of each of the following data elements are likely to raise participation problems:

Patient's Social Security Number: _____

Total Charges: _____

Termination of Surgery after it was Initiated: _____

Disposition: _____

Other (specify): _____

Appendix IV

Letters and Data Collection Instruments for the Pretest of the National Survey of Ambulatory Surgery

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

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

As you are aware, ambulatory surgery represents a fast growing and significant portion of surgery in the United States. In 1990 ambulatory surgery accounted for about 56 percent of all surgery in the U.S. and, as medical technology progresses, an even greater proportion of surgery performed in ambulatory settings is anticipated. Unfortunately, there is a large gap in detailed patient information with respect to outpatient procedures. Valid data about medical and surgical care provided in ambulatory surgery centers are necessary to make national and local decisions for the allocation of resources and training of medical manpower.

Recognizing this lack of vital information, the National Center for Health Statistics (NCHS), Centers for Disease Control, is planning a National Survey of Ambulatory Surgery. The study has received the endorsement, participation and advice of professional groups and associations involved in this field. As a final test of all data collection procedures, forms and instructions, NCHS is conducting a Pretest for the National Survey of Ambulatory Surgery.

The purpose of this letter is to request your participation in the Pretest for a National Survey of Ambulatory Surgery. The survey is authorized by Title 42, United States Code, Section 242k. Your participation in the pretest is voluntary and there are no penalties for refusing. All information collected, including the identity of your facility, is confidential.

We would like to discuss the participation of your facility in the pretest. Therefore, within the next several days, a representative of the Bureau of the Census, acting as an agent of the NCHS, will telephone you to arrange for an appointment. We have enclosed a packet of materials that includes a description of the pretest, endorsement letters, and summaries of NCHS data systems and confidentiality regulations.

Your cooperation in this pretest will be very much appreciated.

Sincerely yours,

Robert Pokras
Chief, Hospital Care Statistics Branch

Enclosures

Facility Name: _____

Facility No.: _____

Status Code:
In Scope [ ]
Out of Scope [ ]
Refused [ ]

NSAS-1(X)
12/3/92

OMB No. 0920-0305: APPROVAL EXPIRES June 30, 1993

INITIAL TELEPHONE CALL TO SAMPLED FACILITIES

Instructions: *Telephone the facility's office and ask the following:*

1. **Hello, my name is _____. Is this _____** *(name of facility)*?	_____ Yes → *Skip to item 2b.* _____ No → *Continue with item 2a.*
2. a. **Has your facility ever been called _____** *(name of facility)*?	_____ Yes → **What is the new name of your facility?** *Continue with item 2b.* _____ _____ No → *(End Interview)* **Thank you.**
b. **I am with the Bureau of the Census and we are conducting a pretest for the National Center for Health Statistics. The purpose of the pretest is to obtain information for the design of a national survey of ambulatory surgery in freestanding ambulatory surgery centers and in hospitals. I am calling to find out to whom we should send a letter describing the pretest and asking _____** *(name of facility)* **to participate.**	*Enter the following information:* Contact Name: _____ Title: _____ Address: _____ _____ _____ _____ Contact Person's Phone Number: (___)_____-_____
3. **Is _____** *(name of facility)* **a:** *(read each category)*	*(Mark (X) all that apply)* ___ **hospital** ___ **licensed Freestanding Ambulatory Surgery Center** ___ **Medicare certified Freestanding Ambulatory Surgery Center**

THANK YOU FOR YOUR ASSISTANCE.

Facility Name: _____

Facility No.: _____

Status Code:
In Scope [ ]
Out of Scope [ ]
Refusal [ ]

NSAS-2A(X)
12/3/92

OMB No. 0920-0305: APPROVAL EXPIRES June 30, 1993

NOTICE - All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 4 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0305); Washington, DC 20503.

TELEPHONE SCREENER CALL TO SAMPLED FACILITIES

Instructions: *Contact the facility and speak to the administrator or medical personnel who received the letter and supporting materials. (Refer to item 2b on NSAS-1(X) for contact person.) Say the following:*

1. **Hello, my name is _____. I am with the Bureau of the Census and we are conducting a pretest for the National Center for Health Statistics. The purpose of the pretest is to obtain information for the design of a national survey of ambulatory surgery.** **Did you receive the letter and package of information from the National Center for Health Statistics?**	Yes _____ → **As indicated in the letter, the National Center for Health Statistics has selected your facility to participate in a pretest for a National Survey of Ambulatory Surgery.** No _____ → **Although your participation in the pretest is voluntary, we would appreciate your responding to a few questions. All information collected is kept confidential, including the identity of your facility.** *(send another packet of letters to facility)*
2. **I would like to ask you a few questions about _____ *(name of facility)*.** **Has ambulatory surgery been performed in this facility between October 1, 1992 and today?**	Yes_____ → *Go to item 3.* No _____ → **In that case your facility cannot be used in this pretest. Thank you for your time.**
3. **It is important for us to determine whether or not your facility operates under the License or Provider of Services (POS) number of a parent facility.** a. **Does _____ *(name of facility)* operate under its own license?** b. **Does _____ *(name of facility)* operate under its own Provider of Services (POS) number?**	 Yes_____ No _____ Yes_____ No _____

Check Item A: *Refer to items 3a and 3b, page 1.* *Is "Yes" marked in either of these items?*	Yes____ → *Go to item 4.* No ____ → *(End Interview)* **Thank you for your time and assistance, but this facility is out-of-scope for this pretest.**
NOTE: *Do NOT ask item 4 if facility is an eye surgery center.* 4. **Is** _____ *(name of facility)* **exclusively an:** *(ask all categories until you get a "Yes" response)*	**Abortion clinic** Yes____ No____ **Family planning clinic** Yes____ No____ **Birthing Center** Yes____ No____ **Podiatry Center** Yes____ No____ **Dentistry Center** Yes____ No____
Check Item B: *Refer to item 4 above.* *Is "Yes" marked in any of the categories?*	Yes____ → *(End Interview)* **Thank your for your time and assistance, but this facility is out of scope for this pretest.** No ____ → *Go to item 5.*
5. **I would like to schedule a meeting with you at** _____ *(name of facility)*. **This meeting should take approximately 1 to 2 hours, depending on the size and complexity of your facility.** **During the meeting I will explain the purposes and plans for the pretest, then I will collect information regarding your facility. This includes the volume and type of surgery your center performs. I will ask you about all locations in which your facility performs outpatient surgery and the location and content of operating room logs or lists.** **I will also ask you about your medical records. If there is a member of the staff who is more familiar with the medical records, could you also make arrangements for me to meet with them for approximately one-half hour during my visit?** **When may I meet with you?**	____/____/93 _____ a.m. p.m. (Date) (Time) _____ (Other individual(s) who may be present) _____ _____ (Title(s)) _____ (____)_____-_____ (Telephone Number(s)) (____)_____-_____

THANK YOU FOR YOUR TIME, I LOOK FORWARD TO MEETING WITH YOU.

Facility Name: _____

Facility No.: _____

NSAS-2B(X)

OMB No. 0920-0305: APPROVAL EXPIRES June 30, 1993

NOTICE - All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 5 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer; Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0305); Washington, DC 20503.

TELEPHONE CALL TO NON-SAMPLED FACILITIES

Instructions: *Contact the facility. Complete the following:*

1. **Hello, my name is _____. I am with the Bureau of the Census and we are conducting a pretest for the National Center for Health Statistics of the U.S. Public Health Service. The purpose of the pretest is to obtain information for the design of a national survey of ambulatory surgery in freestanding ambulatory surgery centers and in hospitals. Although your participation is voluntary, we would appreciate your responding to a few questions about your facility. All information collected is kept confidential.** **Is the _____** *(name of facility)* **in _____** *(city, state)*?	Yes____ → *Go to item 3* No ____ → *Make corrections below –*
2. Facility_____ City_____ State _____Zip code_____	
3. **Is _____** *(name of facility)* **exclusively an:** ***(ask all categories until you get a "Yes" response)***	**Abortion clinic** Yes ____ No____ **Family planning clinic** Yes ____ No____ **Birthing Center** Yes ____ No____ **Podiatry Center** Yes ____ No____ **Dentistry Center** Yes ____ No____

Facility Name: _____

Facility No.: _____

Check Item A: *Refer to item 3 on page 1.* *Is "Yes" marked in any of the categories?*	Yes____ → *(End Interview)* **Thank you for your time and assistance.** No ____ → *Go to item 4.*
4. **Has ambulatory surgery been performed in this facility between October 1st, 1992 and today?**	Yes____ → *Go to item 5.* No ____ → *(End Interview)* **Thank you for your time and assistance.**
5. **Is the ambulatory surgery performed here primarily one specialty?**	Yes____ → *Go to item 6.* No ____ → *Go to item 7.*
6. **What is the specialty?**	*(Enter Specialty)* _____ _____
7. **It is important for us to determine whether or not your facility operates under the License or Provider of Services (POS) number of a parent facility.** a. **Does** _____ *(name of facility)* **operate under its own License?** b. **Does** _____ *(name of facility)* **operate under its own Provider of Services (POS) number?**	Yes____ No ____ Yes____ No ____
Check Item B: *Refer to items 7a and 7b above.* *Is "Yes" marked in <u>either</u> of these items?*	Yes____ → *Go to item 8.* No ____ → *(End Interview)* **Thank you for your time and assistance.**
8. **About how many patients received ambulatory surgery in this facility in the past 12 months? This number should include outpatient general surgery as well as outpatient procedures such as cystoscopy, endoscopy, cardiac catheterization, and laser procedures.**	Number of Patients_____

THANK YOU FOR YOUR TIME AND ASSISTANCE.

OMB No. 0920-0305: Approval Expires 06/30/93

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 1 hour and 54 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Atten: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paper Reduction Project (0920-0305), Washington, DC 20503.

FORM **NSAS-3(X)**
(12-10-92)

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

INDUCTION QUESTIONNAIRE

PRETEST FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

A. Date of interview Month / Day / Year [ ][ ] / [ ][ ] / [9][3]	**B.** Start time of interview a.m. p.m.	**C.** End time of interview a.m. p.m.	**D.** Total interview time in minutes	**E.** Start time of facility personnel training a.m. p.m.

F. End time of facility personnel training a.m. p.m.	**G.** Total training time in minutes	**H.** Status code 1 ☐ Primary – Facility selects sample 2 ☐ Primary – Census selects sample 3 ☐ Alternate 4 ☐ Refusal

Comments

_____

_____

_____

I. RO code	**J.** Signature of field representative

Section I – ADMINISTRATIVE INFORMATION

(If necessary, correct facility name and address in item 1. Complete item 2 prior to the facility visit.)

1a. Facility number [0][ ][ ][ ]	**b.** Name of facility		
c. Address *(Number and street name)*	City	State	ZIP Code

2. FACILITY CONTACTS

a. NCHS letter sent to –	Date
b. Name of CEO/Administrator	Telephone number ( )
c. Designated study contact person *(If other than CEO/Administrator)*	Title / Telephone number ( )
d. Medical records contact	Title / Telephone number ( )

Section II – CONFIRMING GENERAL INFORMATION

(Note – If at any point during the induction visit the facility refuses to participate, complete the Refusal Items in Section VII.)

INTRODUCE YOURSELF AND SHOW YOUR BADGE.

As explained in the material sent to you earlier, this is a pretest for a national survey of ambulatory surgery. We are representing the National Center for Health Statistics. All information collected during the study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law; it will be used only to field test all procedures, manuals, forms, instructions, and data collection methods developed for a national survey.

In order for us to conduct the study in your facility, we need to obtain information about the facility. I would like to begin by verifying our records.

3a. Is the following name and address of this facility correct? *(Read name and address of facility from item 1 on the cover page.)*

1 □ Yes
2 □ No – **May I have the correct name and address of this facility?**

(Record new name and/or address) ➶

Name of facility

Address *(Number and street)* | City | State | ZIP Code

b. Is the following name and telephone number of the CEO or administrator for this facility correct? *(Read name and telephone number of the CEO/Administrator from item 2b on the cover page.)*

1 □ Yes
2 □ No – **May I have the correct name and telephone number of the CEO/Administrator?**

(Record new name and/or number) ➶

Name of CEO/Administrator | Telephone number ( )

4. Is the ambulatory surgery performed here primarily one specialty?

1 □ Yes – **What is the specialty?** ➶

_____

2 □ No

5. Is this facility (hospital) **currently Medicare certified?**

1 □ Yes
2 □ No – *Skip to item 8*

6. Does this facility (hospital) **have the same Medicare Provider of Services (POS) number as –**

a. A parent facility or organization?

1 □ Yes – **What is the name of your parent facility?** ➶

_____

_____

2 □ No

b. Satellite or affiliated facilities?

1 □ Yes
2 □ No – *Skip to item 8*

Section II – CONFIRMING GENERAL INFORMATION – Continued

7. What are the names, addresses, and telephone numbers of the satellite or affiliated facilities?

a. Name of satellite or affiliated facility — Telephone number ( )

Address *(Number and street)* — City — State — ZIP Code

b. Name of satellite or affiliated facility — Telephone number ( )

Address *(Number and street)* — City — State — ZIP Code

c. Name of satellite or affiliated facility — Telephone number ( )

Address *(Number and street)* — City — State — ZIP Code

8. Is this facility (hospital) **currently licensed by the state?**

1 □ Yes
2 □ No – *Skip to Section III*

9. Does this facility (hospital) **operate under the same state license as –**

a. A parent facility or organization?

1 □ Yes – **What is the name of your parent facility?**

_____

_____

2 □ No

b. Satellite or affiliated facilities?

1 □ Yes
2 □ No – *Skip to Section III*

10. What are the names, addresses, and telephone numbers of the satellite or affiliated facilities?

a. Name of satellite or affiliated facility — Telephone number ( )

Address *(Number and street)* — City — State — ZIP Code

b. Name of satellite or affiliated facility — Telephone number ( )

Address *(Number and street)* — City — State — ZIP Code

c. Name of satellite or affiliated facility — Telephone number ( )

Address *(Number and street)* — City — State — ZIP Code

Section III – GENERAL OPERATING ROOM LOG/LIST INFORMATION

In order to select a sample of medical records, we need to work with an operating room log or list of patients that have received ambulatory surgery during a given month.

We are interested in collecting data on ambulatory surgery, which is scheduled outpatient surgery performed in any or all of the following locations –

- General or main operating room
- Satellite operating room
- Cystoscopy room
- Endoscopy room
- Cardiac Catheterization lab
- Laser procedures room

SHOW FLASHCARD.

Do not include locations dedicated exclusively to dentistry, podiatry, abortion, pain block, or small procedures (i.e., lump and bump procedure rooms).

11. Which OR logs or lists are necessary to include all of the ambulatory surgery patients for all of the locations we described? The log(s) must include date of service and medical record number or other patient identification in order to retrieve the appropriate medical record.

Name of log	Location of log	Contact person and phone No.
A.		
B.		
C.		
D.		
E.		
F.		
G.		
H.		

12a. Do you know approximately how many ambulatory surgery cases (FOR HOSPITALS ONLY: **as opposed to inpatients) are in this log (these logs) for a 12 month period?**

1 ☐ Yes
2 ☐ No – *Skip to item 13a*
3 ☐ Speak with

_____

_____

Skip to Section IV

b. How many cases?

_____ Number of cases – *Skip to Section IV*

13a. Do you know how many ambulatory surgery cases are in this (these) log(s) for any period of time (e.g. week, month)**?**

1 ☐ Yes
2 ☐ No – *Skip to Section IV*

b. How many cases?

_____ Number of cases

c. What period of time does this cover?

_____ Period of time

Section IV – PARTICIPATION INFORMATION

This is the abstracting form which will be used to collect data. *(Give a copy of the NSAS-5(X) to the interviewee for his/her review.)*

NOTE – Refer to item 11 to determine if the facility is a single list or multiple list for sampling.

(FOR SINGLE LIST FACILITIES ONLY.)

14. Would a member of your staff be willing to select a sample of approximately 25 records per month from last October and November and, using the abstract form I just gave you, abstract data from the October ambulatory surgery cases by April 30, 1993?

I will provide instructions about how your staff should do this. The training will take approximately 30 minutes.

1 ☐ Yes – *Skip to item 18*
2 ☐ No – *Skip to item 16*
3 ☐ Undecided – *Skip to item 16*

(FOR MULTIPLE LIST FACILITIES ONLY.)

15. Using the abstract form I just gave you, within the next six weeks would a member of your staff be willing to abstract data for approximately 25 ambulatory surgery cases from last October? I will select the sample of cases using the logs (lists) we have discussed.

I will provide instructions about how your staff should complete the abstract form. This training will take approximately 30 minutes.

1 ☐ Yes – *Skip to item 19*
2 ☐ No
3 ☐ Undecided

16. As an alternative, would you allow me to abstract data from medical records that I sample? Your staff simply would pull and then refile the records.

1 ☐ Yes – *Skip to item 22*
2 ☐ No

17. How can we gain your cooperation to collect these data?

(Attempt to work out an agreement with the facility using reimbursement if necessary)

(If facility staff does the sampling and abstracting, go to item 18)

(If facility staff does the abstracting, skip to item 19)

(If Census personnel does the sampling and abstracting, skip to item 22)

(If the facility refuses to participate, complete refusal items in Section VII)

18. Please give me the name, location and telephone number for the person who will perform the sampling. ☞

Name

Location | Telephone number

19. Please give me the name, location and telephone number for the person who will perform the abstracting. ☞

Name

Location | Telephone number

Section IV – PARTICIPATION INFORMATION – Continued

20. After completing this interview, would it be possible for me to spend a few minutes today providing the training?

1 ☐ Yes – *Skip to item 22*
2 ☐ No

21. When may I meet with (this/these) person(s)?

ABSTRACTING

Time _____ a.m. p.m.

_____ Day

SAMPLING *(If necessary)*

Time _____ a.m. p.m.

_____ Day

22. The rest of my questions concern the specific log(s) or list(s) we have discussed and your medical records and record keeping practices. I can go over these now with you or with any persons you wish to designate. Which would you prefer? *(Specify name, if applicable)*

_____

_____

(If leaving, thank the facility representative for his/her cooperation – Go to Section V.)

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION

(Using additional copies if needed, complete this section for each log or list specified in item 11.)

23a. Facility number (from item 1a) – 0 | | | |

b. Name of list (from item 11) – _____ List name

c. Location of list (from item 11) – _____ Location

d. Contact person (from item 11) – _____ Contact person

(Read if necessary) **Your facility has been selected to participate in a pretest for a national survey of ambulatory surgery. I am with the Bureau of the Census which is conducting the pretest for the National Center for Health Statistics. The purpose of the pretest is to collect information from your facility (and about 60 others across the United States) on a sample of approximately 25 ambulatory surgery cases from last October. All information collected during this study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. It will be used only to field test all procedures, forms, instructions and data collection methods developed for the national survey.**

24. In order for us to determine the sampling frame for the study, we need some specific information regarding this log(list).

a. How long is this log or list kept here, less than one year or one year or more?

1 ☐ Less than one year
2 ☐ One year or more – *Skip to item 25a if applicable*

b. Where is the log or list located after it is moved?

_____ Location

(FOR HOSPITALS ONLY)

25a. Does this log only contain information for ambulatory surgery patients?

1 ☐ Yes – *Skip to item 26*
2 ☐ No

(FOR HOSPITALS ONLY)

b. How are ambulatory surgery patients identified on this log or list? *(Please explain)*

26. Where are your medical records for this log or list kept? *(Room number, building number, etc.)*

Section V – SPECIFIC OR LOG/LIST INFORMATION – Continued

(Ask items 27 and 28 ONLY IF there is no estimate of ambulatory surgeries per year in item 12b or 13b.)

27a. Do you know approximately how many ambulatory surgery cases (FOR HOSPITALS ONLY: **as opposed to inpatients) are in this log for a 12 month period?**

1 ☐ Yes
2 ☐ No – *Skip to item 28a*

b. How many cases?

_____ Number of cases –
Skip to Instructions at the end of this section

28a. Do you know how many ambulatory surgery cases are in this log or list for any period of time (e.g. week, month)**?**

1 ☐ Yes
2 ☐ No – *Ask facility contact if you can count the ambulatory surgery for a one month period. Skip to Instructions at the end of this section*

b. How many cases?

_____ Number of cases

c. What period of time does this cover?

_____ Period of time

(Complete items 23a–28c for the next listing in item 11. If this is the last list, go to item 29.)

(If leaving, thank the facility representative for his/her cooperation. If you are performing the sampling, inform the facility representative that you will be back to select a sample of cases from last October.)

Notes

Section VI – MEDICAL RECORD INFORMATION

(Read if necessary) **Your facility has been selected to participate in a pretest for a national survey of ambulatory surgery. I am with the Bureau of the Census which is conducting the pretest for the National Center for Health Statistics. The purpose of the pretest is to collect information from your facility (and about 60 others across the United States) on a sample of approximately 25 ambulatory surgery cases from last October. All information collected during this study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. It will be used only to field test all procedures, forms, instructions and data collection methods developed for the national survey.**

29. This is the medical abstract form which will be used to collect data *(SHOW NSAS-5X, if necessary)* **on approximately 25 sampled ambulatory surgery cases from last October. First we need to determine how we can locate the medical records.**

Are patient medical records transferred to an inactive file or microfilmed?

1 ☐ Yes
2 ☐ No – *Skip to item 31*

30. After how long are medical records for October 1992 transferred to an inactive file or microfilmed?

(Enter number next to the appropriate time unit)

_____ Week(s)

_____ Month(s)

_____ Year(s)

31. Is computerization of patient medical records in effect or planned?

1 ☐ Yes
2 ☐ No – *END INTERVIEW*

32. Which items on this medical abstract form would be retrievable from your computerized system for specified ambulatory surgery cases? *Please specify* ✍

_____

_____

THANK YOU FOR YOUR COOPERATION

If appropriate, meet with any persons listed in items 18 and 19 to provide the necessary training, manuals, and pretest forms.

Section VII – REFUSAL ITEMS

(TO BE COMPLETED ONLY IF FACILITY REFUSES TO PARTICIPATE)

A. Why is your facility unwilling to participate? ✍

_____

_____

B. What could we have done to gain your cooperation? ✍

_____

_____

(ON THE COVER PAGE, RECORD THE TIME THAT THE INTERVIEW WAS COMPLETED AND MARK THE "STATUS CODE" BOX)

SHEET _____ OF _____

OMB No. 0920-0305: Approval Expires 06/30/93

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is included in the 12 minutes per response estimated for the Abstract Form. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Atten: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paper Reduction Project (0920-0305), Washington, DC 20503.

FORM **NSAS-4(X)**
(11-24-92)

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

SAMPLING LISTING SHEET

PRETEST FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

A. FACILITY

1. Facility name

2. Facility number 0

3. List used

B. MONTHLY STATISTICAL DATA

1. Total ambulatory surgery cases

2. Total surgery cases

3. Month

C. SAMPLING

1. Start with

2. Take every

3. End count

3. Sample selected by *(Name and title)*

4. Date

5. In-scope cases in sample

Case number (a)	Mark (X) if inpatient (b)	FOR AMBULATORY CASES ONLY Medical record number (c)	Date of surgery (d)	Other identification (if needed) (e)	Date abstracted (or comments) (f)
	□		/ /		
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Copy distribution: WHITE – Facility **YELLOW** – Regional Office **PINK/GOLDENROD** – NCHS

OMB No. 0920-0305: Approval Expires 06/30/93

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 12 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Atten: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paper Reduction Project (0920-0305), Washington, DC 20503.

FORM **NSAS-5(X)**
(12-3-92)

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

MEDICAL ABSTRACT

PRETEST FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

A. PATIENT IDENTIFICATION

1. Facility number: 0 ☐☐☐

2. Case number: ☐☐☐☐

3. Medical record number

4. Date of surgery: Month ☐☐ Day ☐☐ Year 9 2

5. Residence ZIP Code: ☐☐☐☐☐ – ☐☐☐☐

B. PATIENT CHARACTERISTICS

6. Date of birth: Month ☐☐ Day ☐☐ Year ☐☐☐☐

7. Age *(Complete only if date of birth not given)*: Units ☐☐☐ 1 ☐ Years 2 ☐ Months 3 ☐ Days

8. Sex *(Mark (X) one)*
1 ☐ Male
2 ☐ Female
3 ☐ Not stated

9. Race
1 ☐ White
2 ☐ Black
3 ☐ American Indian/ Eskimo/Aleut
4 ☐ Asian/Pacific Islander
5 ☐ Other – *Specify* _____
6 ☐ Not stated

10. Ethnicity *(Mark (X) one)*
1 ☐ Hispanic origin
2 ☐ Non-Hispanic
3 ☐ Not stated

11. Status/Disposition of patient *(Mark (X) appropriate box)*
1 ☐ Routine discharge to customary residence
2 ☐ Discharge to observation status
3 ☐ Discharge to recovery care center
4 ☐ Admitted to hospital as inpatient
5 ☐ Surgery canceled or terminated
6 ☐ Other – *Specify* _____
7 ☐ Status/Disposition not stated

C. PAYMENT DATA

12. Expected source(s) of payment

		Principal *(Mark (X) one only)*	Other additional sources *(Mark (X) all that apply)*
Government sources	**a.** Worker's compensation	☐	☐
	b. Medicare	☐	☐
	c. Medicaid	☐	☐
	d. CHAMPUS	☐	☐
	e. Other government payments	☐	☐
Private sources	**f.** Blue Cross/Blue Shield	☐	☐
	g. HMO/PPO	☐	☐
	h. Other private or commercial insurance	☐	☐
Other sources	**i.** Self-pay	☐	☐
	j. No charge	☐	☐
	k. Other – *Specify* _____	☐	☐

☐ No source of payment indicated

13a. Billing number *(If necessary)*

13b. TOTAL charges: $ _____ . 00 ☐ Not available

D. SURGICAL VISIT DATA

14. Time

		Not available
a. Time in to operating room	a.m. p.m.	☐
b. Time surgery began	a.m. p.m.	☐
c. Time surgery ended	a.m. p.m.	☐
d. Time out of operating room	a.m. p.m.	☐
e. Time in to postoperative care	a.m. p.m.	☐
f. Time out of postoperative care	a.m. p.m.	☐

g. If clock time is unavailable, please specify other time ↙

15. Type of anesthesia *(Mark (X) all that apply)*

- **a.** IV sedation . . . . . ☐
- **b.** General . . . . . ☐
- **c.** MAC . . . . . ☐
- **d.** Local . . . . . ☐
- **e.** Regional –
  - **(1)** Epidural . . . . . ☐
  - **(2)** Spinal . . . . . ☐
  - **(3)** Retrobulbar block . . ☐
  - **(4)** Peribulbar block . . . ☐
  - **(5)** Block . . . . . ☐
- **f.** None – *Skip to Part E* . . ☐
- **g.** Not stated . . . . . ☐

16. Anesthesia administered by – *(Mark (X) all that apply)*

1 ☐ Anesthesiologist
2 ☐ CRNA
3 ☐ Surgeon
4 ☐ Not stated

17. ASA classification

1 ☐ Patient rated as ASA 1
2 ☐ Patient rated as ASA 2
3 ☐ Patient rated as ASA 3
4 ☐ Patient rated as ASA 4
5 ☐ Not stated

E. MEDICAL DATA

18. Surgical and diagnostic procedures – Narrative description

		Optional – CPT-4 Nos.	Optional – ICD-9-CM Nos.
Principal	1.		
Other/ Additional	2.		
	3.		
	4.		
	5.		
	6.		

19. Final diagnoses (including E- code diagnoses) – Narrative description

		Optional – ICD-9-CM Nos.
Principal	1.	
Other/ Additional	2.	
	3.	
	4.	
	5.	
	6.	
	7.	

Completed by	Date	OFFICE USE ONLY	FR code

OMB No. 0920-0305: Approval Expires 06/30/93

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 5 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0305); Washington, DC 20503.

FORM **NSAS-7A(X)**
(11-10-92)

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

POST DATA COLLECTION QUESTIONNAIRE FOR FACILITY PERSONNEL

PRETEST FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

a. Facility number: 0 ☐☐☐

b. Completed by ____ Date ____

c. Position/Title ____

Section I – DATA COLLECTION METHODS

1. How much staff time did it take to complete the following?

a. Sampling *(If applicable)*
Hours ☐☐ Minutes ☐☐

b. Pulling and refiling records
Minutes ☐☐

c. Abstracting the sampled records
Hours ☐☐ Minutes ☐☐

2. You have seen or had described to you how ambulatory surgery cases were sampled, and what data elements were collected. Do you know of an easier way or source in which these same data could have been obtained?

1☐ Yes – *If yes, please explain* ➶ 2☐ No

3. Did you encounter problems with specific data items on the abstract form?

1☐ Yes – *If yes, please explain* ➶ 2☐ No

4. If you were to participate in an ongoing national survey involving sampling and abstracting of about 250 ambulatory surgery cases per year, would you prefer having your facility personnel sample and abstract the data or a Census Bureau representative sample and abstract the data?

1☐ Facility 2☐ Census Bureau 3☐ Other – *Specify* ➶

Section II – BARRIERS TO PARTICIPATION AND TECHNIQUES TO OVERCOME THEM

5. If possible, please comment on how you were approached to participate in this pretest. Although you agreed to participate, not all facilities did. How can we do a better job in overcoming reluctance to participate?

6. What motivated you to agree to participate?

7. Did the letters of endorsement help?

1☐ Yes – *If yes, which organizations' endorsement(s) are most important to obtaining your facility's participation?*

2☐ No

8. What, if any, were your greatest concerns before agreeing to participate?

FORM **NSAS-7B(X)**
(12-10-92)

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

POST DATA COLLECTION QUESTIONNAIRE FOR CENSUS REPRESENTATIVES

PRETEST FOR A NATIONAL SURVEY OF AMBULATORY SURGERY

a. Facility number [0][ ][ ][ ]

b. Facility name

c. FR code | Date

Section I – DATA COLLECTION METHODS

1. How much time did it take to complete the following?

a. Sampling

Hours [ ][ ] Minutes [ ][ ]

b. Abstracting the sampled records *(If applicable)*

Hours [ ][ ] Minutes [ ][ ]

2. After sampling the ambulatory surgery cases for this facility, do you know of an easier way or source in which these same data could have been obtained?

1 ☐ Yes – *If yes, please explain* ↙ 2 ☐ No

3. Did this facility receive compensation to participate?

1 ☐ Yes 2 ☐ No

4. What, if any, concerns did the facility personnel have during participation?
Specify problem and the title of the facility staff. ↙

Section II – LOCATION OF DATA ITEMS AND PROBLEMS
For each item listed below, please specify where it was generally found in the medical records and any problems encountered.

Item No. (a)	Item (b)	Location in medical record (c)	Problems (d)
3	Medical record number		
4	Date of surgery		
5	Residence ZIP Code		
6	Date of birth		
7	Age		
8	Sex		
9	Race		
10	Ethnicity		
11	Status/ Disposition of patient		
12	Expected source(s) of payment		
13a	Billing No. *(Only if necessary)*		
13b	Total charges		
14	Time		
15	Type of anesthesia		
16	Anesthesia administered by		
17	ASA classification		
18	Surgical and diagnostic procedures		
19	Final diagnoses		

FORM NSAS-7B(X) (12-10-92)

NATIONAL CENTER FOR HEALTH STATISTICS nchs

Thank You

. . . for agreeing to participate in the pretest for a National Survey of Ambulatory Surgery.

Because of your participation, we will be able to conduct a final test of the procedures, forms and instructions for the national survey. This survey will collect valuable data on care provided in ambulatory surgery settings. Ultimately, data from the national survey will assist researchers, hospital administrators, ambulatory surgery center administrators and public health officials in their mission to monitor and improve the use of health care in the United States.

As a check on the quality of the data collected for the pretest, a senior Census Bureau staff member will return to some of the participating facilities after the original data abstraction has been completed. This person will repeat the sampling and abstracting to ensure that the instructions, forms and procedures result in accurate information. If we need to revisit your facility, you will be contacted by Census Bureau personnel to set up an appointment after April 1, 1993. All information collected in this quality check is confidential.

Once again, thank you for your cooperation.

Sincerely yours,

Robert Pokras

Robert Pokras
Chief, Hospital Care Statistics Branch
Division of Health Care Statistics

Appendix V

Definitions of Terms Used in the Survey

Ambulatory surgery—Previously scheduled surgical and nonsurgical procedures performed on an outpatient basis in a hospital or freestanding ambulatory surgery center.

> ***In scope***—Ambulatory surgery conducted in general or main operating rooms, satellite operating rooms, cystoscopy rooms, endoscopy rooms, cardiac catheterization labs, and laser procedure rooms.
>
> ***Out of scope***—Ambulatory surgery conducted in locations dedicated exclusively to dentistry, podiatry, abortion, pain block, or small procedures (i.e., lump and bump procedure rooms).

Hospital—A hospital with an average length of stay for all patients of less than 30 days (short stay) or a hospital whose specialty is general (medical or surgical) or children's general, except Federal hospitals and hospital units of institutions and hospitals with less than six beds staffed for patient use.

> ***Out of scope***—Hospitals where less than 50 ambulatory surgery procedures were conducted in the previous year.

Freestanding Ambulatory Surgery Center—A freestanding ambulatory surgery facility that was regulated by a State or was certified for Medicare by the Health Care Financing Administration (HCFA). For the 1994 NSAS, a facility listed in the 1993 SMG Freestanding Outpatient Surgery Center Database and/or a Medicare-certified facility included in the Health Care Financing Administration's Provider of Services (POS) file.

> ***Out of scope***—Facilities where less than 50 ambulatory surgery procedures were conducted in the previous year as well as facilities specializing in dentistry, podiatry, pain block, abortion, family planning, or birthing.

Ambulatory surgery visit—A visit by a person to a hospital or freestanding ambulatory surgery center to receive previously scheduled surgical or nonsurgical procedures on an outpatient basis. Each appearance of an outpatient to a surgical location constitutes one visit regardless of the number of procedures the patient receives.

Procedures—All surgical procedures (such as tonsillectomy), diagnostic procedures (such as cystoscopy), and other therapeutic procedures (such as injection or infusion of cancer chemotherapeutic substance) reported on the patient's medical record are included in the NSAS. A maximum of six procedures per ambulatory surgery visit are coded.

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

Appendix VI

Data Collection Forms Used in the 1994 NSAS

OMB No. 0920-0334: Approval Expires 12/31/96

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 2 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW, Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0334); Washington, DC 20503.

FORM **NSAS-1** (12-14-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

NATIONAL SURVEY OF AMBULATORY SURGERY

INITIAL TELEPHONE CALL TO SAMPLED FACILITIES

1. Facility name

2. Facility number

3. Status code

□ In scope □ Out of scope □ Refusal

INSTRUCTIONS – *Telephone the facility and ask the following:*

4. Hello, my name is _____.

Is this _____ *(Name of facility)***?**

□ Yes – *Skip to item 5b.*

□ No – *Continue with item 5a.*

5a. Has your facility ever been called _____ *(Name of facility)***?**

□ Yes – **What is the new name of your facility?**

_____

Continue with item 5b.

□ No – *(End interview)* **Thank you.**

b. I am with the Bureau of the Census and we are conducting a study for the National Center for Health Statistics to obtain information on ambulatory surgery in freestanding ambulatory surgery centers and in hospitals. I am calling to find out the name of the administrator of your facility so that we can send a letter describing the study and asking _____ *(Name of facility)* **to participate.**

Enter the following information:

Administrator's name _____

Title _____

Address _____

_____

_____

Telephone number (____) _____

6. Is _____ *(Name of facility)*
a: *(Read each category)*

□ **Hospital?**

□ **Freestanding Ambulatory Surgery Center?**

THANK YOU FOR YOUR ASSISTANCE.

Record of calls

_____

_____

OMB No. 0920-0334: Approval Expires 12/31/96

NOTICE – All information which would permit identification of an individual or of an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 4 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW, Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0334); Washington, DC 20503.

FORM **NSAS-2**
(12-14-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

NATIONAL SURVEY OF AMBULATORY SURGERY

TELEPHONE SCREENER CALL TO SAMPLED FACILITIES

1. Facility name

2. Facility number

3. Status code

□ In scope □ Out of scope □ Refusal

INSTRUCTIONS – *Contact the facility and speak to the administrator who received the letter and supporting materials. (Refer to item 5b on NSAS-1 for contact person.) Say the following:*

4. Hello, my name is _____. I am with the Bureau of the Census and we are conducting the National Survey of Ambulatory Surgery for the National Center for Health Statistics.

Did you receive the letter and package of information from the National Center for Health Statistics?

□ Yes – **As indicated in the letter, the National Center for Health Statistics has selected your facility to participate in the National Survey of Ambulatory Surgery**

□ No – **I'll be happy to send you those materials. Although your participation in the study is voluntary, we would appreciate your responding to a few questions. All information collected is kept confidential, including the identity of your facility.** *(Send another packet of letters to facility)*

5. I would like to ask you a few questions about

_____*(Name of facility).*

Is ambulatory surgery or ambulatory diagnostic procedures currently performed in this facility?

□ Yes – *Skip to item 6.*

□ No – **In that case your facility cannot be used in this study. Thank you for your time.** *(End Interview)*

6. It is important for us to determine whether or not your facility operates under the License or Provider of Services (POS) number of a parent facility.

a. Does _____ *(Name of facility)* **operate under its own license?**

□ Yes
□ No

b. Does _____ *(Name of facility)* **operate under is own Provider of Services (POS) number?**

□ Yes
□ No

CHECK ITEM A

Refer to items 6a and 6b.

Is "Yes" marked in EITHER of these items?

□ Yes – *Skip to item 7.*

□ No – **What is the name and address of your parent facility?**

_____

_____

_____

Thank you for your time and assistance. We may contact you again in a few days regarding participation in this study. *(End interview. Contact Regional Office.)*

NOTE: *Do not ask item 7 if facility is an eye surgery center or hospital.*

In this study we are excluding facilities that are exclusively family planning clinics, birthing centers, abortion clinics, podiatry centers or dentistry centers.

7. Is _____ *(Name of facility)* **exclusively one of these?**

☐ Yes – *(End interview)* **Thank you for your time and assistance, but this facility is out-of-scope for this study.**

☐ No – *Continue with item 8.*

8. I would like to schedule a meeting with you at

_____ *(Name of facility).* **This meeting should take approximately one-half hour, depending on the size and complexity of your facility.**

During the meeting I will explain the purposes and plans for the study, then I will collect information regarding your facility. This includes the volume and type of surgery your facility performs. I will ask you about all locations in which your facility performs outpatient surgery and the location and content of operating room logs or lists.

I will also ask you about your medical records. If there is a member of the staff who is more familiar with the medical records, could you also make arrangements for me to meet with them for approximately one hour during my visit?

When may I meet with you?

Date			Time
Month	Day	Year	a. m. p. m.

Other individual(s) who may be present

_____

Title(s)

_____

Telephone	Area code	Number	Extension
→			

THANK YOU FOR YOUR TIME, I LOOK FORWARD TO MEETING WITH YOU.

Record of calls

_____

_____

_____

Comments

_____

_____

_____

_____

_____

_____

_____

OMB No. 0920-0334: Approval Expires 12/31/96

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 30 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: ATTN: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0334), Washington, DC 20503.

FORM **NSAS-3**
(1-11-94)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

NATIONAL SURVEY OF AMBULATORY SURGERY

INDUCTION QUESTIONNAIRE

A. Date of interview
Month Day Year

B. Status code
1 ☐ Primary – Facility selects sample
2 ☐ Primary – Census selects sample
3 ☐ Alternate
4 ☐ Refusal

Comments

Record of calls

C. RO code

D. Signature of field representative

Section I – ADMINISTRATIVE INFORMATION

(If necessary, correct facility name and address in item 1. Complete item 2 prior to the facility visit.)

1a. Facility number

b. Name of facility

c. Address *(Number and street name)* | City | State | ZIP Code

2. FACILITY CONTACTS

a. NCHS letter sent on *(Date)* Month Day Year

b. Name of CEO/Administrator | Telephone number ( )

c. Designated study contact person *(If other than CEO/Administrator)* | Title | Telephone number ( )

d. Medical records contact | Title | Telephone number ( )

Section II – CONFIRMING GENERAL INFORMATION

(Note – If at any point during the induction visit the facility refuses to participate, complete the Refusal Items in Section VII.)

INTRODUCE YOURSELF AND SHOW YOUR BADGE.

As explained in the material sent to you earlier, we are conducting the National Survey of Ambulatory Surgery. We are representing the National Center for Health Statistics. All information collected during the study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. This voluntary study involves the collection of a limited amount of information from the medical records of a sample of patients who have received ambulatory surgery.

In order for us to conduct the study in your facility, we need to obtain information about the facility. I would like to begin by verifying our records.

3. Is the following name and address of this facility correct? *(Read name and address of facility from item 1 on the cover page.)*

1 ☐ Yes
2 ☐ No – **May I have the correct name and address of this facility?**

(Record new name and/or address) ↙

Name of facility

Address *(Number and street)* | City | State | ZIP Code

4. Is the ambulatory surgery performed here primarily one specialty?

1 ☐ Yes – **What is the specialty?** ↙

2 ☐ No

5. Is this facility (hospital) **currently licensed by the state?**

1 ☐ Yes
2 ☐ No

6a. Does this facility have any satellite facilities which perform ambulatory surgery?

1 ☐ Yes – *Continue with item 6b*
2 ☐ No – *Skip to item 7*

b. What are the names, addresses, and telephone numbers of the satellite facilities? ↙

(1) Name of satellite facility | Telephone number ( )

Address *(Number and street)* | City | State | ZIP Code

(2) Name of satellite facility | Telephone number ( )

Address *(Number and street)* | City | State | ZIP Code

(3) Name of satellite facility | Telephone number ( )

Address *(Number and street)* | City | State | ZIP Code

Section III – GENERAL OPERATING ROOM LOG/LIST INFORMATION

In order to select a sample of medical records, we need to work with an operating room log or list of patients that have received ambulatory surgery during a given month.

We are interested in collecting data on ambulatory surgery, which is scheduled outpatient surgery performed in any or all of the following locations –

SHOW FLASHCARD.

- General or main operating room
- Satellite operating room
- Cystoscopy room
- Endoscopy room
- Cardiac Catheterization lab
- Laser procedures room

We are not interested in locations dedicated exclusively to dentistry, podiatry, abortion, pain block, or small procedures (i.e., lump and bump procedure rooms).

7. Which OR logs or lists are necessary to include all of the ambulatory surgery patients for all of the locations listed on this card? The log(s) must include date of surgery and medical record number or other patient identification in order to retrieve the appropriate medical record.

Name of log	Location of log	Contact person and phone no.
A.		
B.		
C.		
D.		
E.		
F.		
G.		
H.		

8a. Do you know approximately how many ambulatory surgery cases (FOR HOSPITALS ONLY: **as opposed to inpatients) are in this log (these logs) for a 12 month period?**

1 ☐ Yes
2 ☐ No – *Skip to item 9a*
3 ☐ Speak with ↙

_____

_____

Skip to Section IV

b. How many cases?

_____ Number of cases – *Skip to Section IV*

9a. Do you know how many ambulatory surgery cases are in this (these) log(s) for any period of time (e.g. week, month)**?**

1 ☐ Yes
2 ☐ No – *Skip to Section IV*

b. How many cases?

_____ Number of cases

c. What period of time does this cover?

_____ Period of time

Section IV – PARTICIPATION INFORMATION

This is the abstracting form which will be used to collect data. *(Give a copy of the NSAS-5 to the interviewee for his/her review.)*

NOTE – Refer to item 7 to determine if the facility is a single list or multiple list for sampling.

(FOR SINGLE LIST FACILITIES ONLY.)

10. Would a member of your staff be willing to select a sample of approximately 25 records per month and, using the abstract form I just gave you, abstract data?

I will provide instructions about how your staff should do this. The training will take approximately 1 hour.

1 ☐ Yes – *Skip to item 14*
2 ☐ No – *Skip to item 12*
3 ☐ Undecided – *Skip to item 12*

(FOR MULTIPLE LIST FACILITIES ONLY.)

11. Using the abstract form I just gave you, would a member of your staff be willing to abstract data for approximately 25 ambulatory surgery cases per month? I will select the sample of cases using the logs (lists) we have discussed.

I will provide instructions about how your staff should complete the abstract form. This training will take approximately 30 minutes.

1 ☐ Yes – *Skip to item 15*
2 ☐ No
3 ☐ Undecided

12. As an alternative, would you allow me to abstract data from medical records that I sample? Your staff simply would pull and then refile the records.

1 ☐ Yes – *Skip to item 18*
2 ☐ No

13. How can we gain your cooperation to collect these data?

(Attempt to work out an agreement with the facility using reimbursement if necessary)

(If facility staff does the sampling and abstracting, go to item 14)

(If facility staff does the abstracting, skip to item 15)

(If Census personnel does the sampling and abstracting, skip to item 18)

(If the facility refuses to participate, complete refusal items in Section VII)

14. Please give me the name, location and telephone number for the person who will perform the sampling. ↙

Name

Location | Telephone number

15. Please give me the name, location and telephone number for the person who will perform the abstracting. ↙

Name

Location | Telephone number

Section IV – PARTICIPATION INFORMATION – Continued

16. After completing this interview, would it be possible for me to spend a few minutes today providing the training?

1 ☐ Yes – *Skip to item 18*
2 ☐ No

17. When may I meet with (this/these) person(s)?

ABSTRACTING

Time _____ a.m. p.m.

_____ Day

SAMPLING *(If necessary)*

Time _____ a.m. p.m.

_____ Day

18. The rest of my questions concern the specific log(s) or list(s) we have discussed and your medical records and record keeping practices. I can go over these now with you or with any persons you wish to designate. Which would you prefer? *(Specify name, if applicable)*

_____

_____

(If leaving, thank the facility representative for his/her cooperation – Go to Section V.)

Notes

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION

(Using additional copies if needed, complete this section for each log or list specified in item 7.)

19a. Facility number (from item 1a) – ☐☐☐☐

b. Name of list (from item 7) – _____ List name

c. Location of list (from item 7) – _____ Location

d. Contact person (from item 7) – _____ Contact person

(Read if necessary) **Your facility has been selected to participate in the National Survey of Ambulatory Surgery. I am with the Bureau of the Census which is conducting the study for the National Center for Health Statistics. All information collected during this study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. The study involves the collection of a limited amount of information from the medical records of a sample of patients who have received ambulatory surgery.**

20. In order for us to determine the sampling frame for the study, we need some specific information regarding this log(list).

a. How long is this log or list kept here, less than one year or one year or more?

1 ☐ Less than one year
2 ☐ One year or more – *Skip to item 21a if applicable*

b. Where is the log or list located after it is moved?

_____ Location

(FOR HOSPITALS ONLY)

21a. Does this log only contain information for ambulatory surgery patients?

1 ☐ Yes – *Skip to item 22*
2 ☐ No

(FOR HOSPITALS ONLY)

b. How are ambulatory surgery patients distinguished from inpatients on this log or list? *(Please explain)*

22. Where are your medical records for this log or list kept? *(Room number, building number, etc.)*

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION – Continued

(Ask items 23 and 24 ONLY IF there is no estimate of ambulatory surgeries per year in item 8b or 9b.)

23a. Do you know approximately how many ambulatory surgery cases (FOR HOSPITALS ONLY: **as opposed to inpatients) are in this log for a 12 month period?**

1 ☐ Yes
2 ☐ No – *Skip to item 24a*

b. How many cases?

_____ Number of cases – *Skip to Instructions after item 24c.*

24a. Do you know how many ambulatory surgery cases are in this log or list for any period of time (e.g. week, month)**?**

1 ☐ Yes
2 ☐ No – *Ask facility contact if you can count the ambulatory surgery for a one month period. Skip to Instructions after item 24c.*

b. How many cases?

_____ Number of cases

c. What period of time does this cover?

_____ Period of time

(Complete items 19a–24c for the next listing in item 7. If this is the last list, go to the top of page 12.)
(If leaving, thank the facility representative for his/her cooperation. If you are performing the sampling, inform the facility representative that you will be back to select a sample of cases.)

Notes

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION – Continued

(Using additional copies if needed, complete this section for each log or list specified in item 7.)

19a. Facility number (from item 1a) – ☐☐☐☐

b. Name of list (from item 7) – _____ List name

c. Location of list (from item 7) – _____ Location

d. Contact person (from item 7) – _____ Contact person

(Read if necessary) **Your facility has been selected to participate in the National Survey of Ambulatory Surgery. I am with the Bureau of the Census which is conducting the study for the National Center for Health Statistics. All information collected during this study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. The study involves the collection of a limited amount of information from the medical records of a sample of patients who have received ambulatory surgery.**

20. In order for us to determine the sampling frame for the study, we need some specific information regarding this log(list).

a. How long is this log or list kept here, less than one year or one year or more?

1 ☐ Less than one year
2 ☐ One year or more – *Skip to item 21a if applicable*

b. Where is the log or list located after it is moved?

_____ Location

(FOR HOSPITALS ONLY)

21a. Does this log only contain information for ambulatory surgery patients?

1 ☐ Yes – *Skip to item 22*
2 ☐ No

(FOR HOSPITALS ONLY)

b. How are ambulatory surgery patients distinguished from inpatients on this log or list? *(Please explain)*

22. Where are your medical records for this log or list kept? *(Room number, building number, etc.)*

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION – Continued

(Ask items 23 and 24 ONLY IF there is no estimate of ambulatory surgeries per year in item 8b or 9b.)

23a. Do you know approximately how many ambulatory surgery cases (FOR HOSPITALS ONLY: **as opposed to inpatients) are in this log for a 12 month period?**	1 ☐ Yes 2 ☐ No – *Skip to item 24a*
b. How many cases?	_____ Number of cases – *Skip to Instructions after item 24c*
24a. Do you know how many ambulatory surgery cases are in this log or list for any period of time (e.g. week, month)**?**	1 ☐ Yes 2 ☐ No – *Ask facility contact if you can count the ambulatory surgery for a one month period. Skip to Instructions after item 24c*
b. How many cases?	_____ Number of cases
c. What period of time does this cover?	_____ Period of time

(Complete items 19a–24c for the next listing in item 7. If this is the last list, go to the top of page 12.)
(If leaving, thank the facility representative for his/her cooperation. If you are performing the sampling, inform the facility representative that you will be back to select a sample of cases.)

Notes

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION – Continued

(Using additional copies if needed, complete this section for each log or list specified in item 7.)

19a. Facility number (from item 1a) – ☐☐☐☐

b. Name of list (from item 7) – _____ List name

c. Location of list (from item 7) – _____ Location

d. Contact person (from item 7) – _____ Contact person

(Read if necessary) **Your facility has been selected to participate in the National Survey of Ambulatory Surgery. I am with the Bureau of the Census which is conducting the study for the National Center for Health Statistics. All information collected during this study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. The study involves the collection of a limited amount of information from the medical records of a sample of patients who have received ambulatory surgery.**

20. In order for us to determine the sampling frame for the study, we need some specific information regarding this log(list).

a. How long is this log or list kept here, less than one year or one year or more?

1 ☐ Less than one year
2 ☐ One year or more – *Skip to item 21a if applicable*

b. Where is the log or list located after it is moved? _____ Location

(FOR HOSPITALS ONLY)

21a. Does this log only contain information for ambulatory surgery patients?

1 ☐ Yes – *Skip to item 22*
2 ☐ No

(FOR HOSPITALS ONLY)

b. How are ambulatory surgery patients distinguished from inpatients on this log or list? *(Please explain)*

_____

_____

_____

_____

22. Where are your medical records for this log or list kept? *(Room number, building number, etc.)*

_____

_____

_____

Section V – SPECIFIC OPERATING ROOM LOG/LIST INFORMATION – Continued

(Ask items 23 and 24 ONLY IF there is no estimate of ambulatory surgeries per year in item 8b or 9b.)

23a. Do you know approximately how many ambulatory surgery cases (FOR HOSPITALS ONLY: **as opposed to inpatients) are in this log for a 12 month period?**	1 ☐ Yes 2 ☐ No – *Skip to item 24a*
b. How many cases?	_____ Number of cases – *Skip to Instructions after item 24c*
24a. Do you know how many ambulatory surgery cases are in this log or list for any period of time (e.g. week, month)**?**	1 ☐ Yes 2 ☐ No – *Ask facility contact if you can count the ambulatory surgery for a one month period. Skip to Instructions after item 24c*
b. How many cases?	_____ Number of cases
c. What period of time does this cover?	_____ Period of time

(Complete items 19a–24c for the next listing in item 7. If this is the last list, go to the top of page 12.)
(If leaving, thank the facility representative for his/her cooperation. If you are performing the sampling, inform the facility representative that you will be back to select a sample of cases.)

Notes

Section VI – MEDICAL RECORD INFORMATION

(Read if necessary) **Your facility has been selected to participate in the National Survey of Ambulatory Surgery. I am with the Bureau of the Census which is conducting the study for the National Center for Health Statistics. All information collected during this study concerning your facility and about the sampled cases is strictly confidential, and is protected by Federal law. This study involves the collection of a limited amount of information from the medical records of a sample of patients who have received ambulatory surgery.**

25. This is the medical abstract form which will be used to collect data *(SHOW NSAS-5, if necessary)* **on approximately 25 sampled ambulatory surgery cases per month. First we need to determine how we can locate the medical records.**

Are patient medical records transferred to an inactive file or microfilmed?

1 ☐ Yes
2 ☐ No – *Skip to item 27*

26. After how long are medical records transferred to an inactive file or microfilmed?

(Enter number next to the appropriate time unit)

_____ Week(s)

_____ Month(s)

_____ Year(s)

27. Is computerization of patient medical records in effect or planned?

1 ☐ Yes
2 ☐ No – *END INTERVIEW*

28. Which items on this medical abstract form would not be retrievable from your computerized system for specified ambulatory surgery cases? *Please specify* ↙

_____

_____

THANK YOU FOR YOUR COOPERATION

If appropriate, meet with any persons listed in items 14 and 15 to provide the necessary training, manuals, and forms.

Section VII – REFUSAL ITEMS

(TO BE COMPLETED ONLY IF FACILITY REFUSES TO PARTICIPATE)

A. Why is your facility unwilling to participate? ↙

_____

_____

B. What could we have done to gain your cooperation? ↙

_____

_____

(ON THE COVER PAGE, MARK THE "STATUS CODE" BOX)

☆U.S. GOVERNMENT PRINTING OFFICE: 1994 - 550-089/80242

SHEET _____ OF _____

OMB No. 0920-0334: Approval Expires 12/31/96

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 30 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Atten: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paper Reduction Project (0920-0334), Washington, DC 20503.

FORM **NSAS-4**
(12-14-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

NATIONAL SURVEY OF AMBULATORY SURGERY

SAMPLE LISTING SHEET

A. FACILITY

1. Facility name

2. Facility number ☐☐☐☐

3. List used *(Identifier and name)* ☐

B. MONTHLY STATISTICAL DATA

1. Total surgery cases	**2.** Total ambulatory surgery cases	**3.** Month

C. SAMPLING

1. Take every	**2.** End count

3. Sample selected by *(Name and title)*

4. Date	**5.** In-scope cases in sample

NSAS number (a)	Mark (X) if inpatient (b)	FOR AMBULATORY CASES ONLY: Medical record number (c)	Date of surgery (d)	Other identification (if needed) (e)	Date abstracted (or out-of-scope reason) (f)
	☐		/ /		
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OMB No. 0920-0334: Approval Expires 12/31/96

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 12 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Atten: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paper Reduction Project (0920-0334), Washington, DC 20503.

FORM **NSAS-5**
(12-14-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

NATIONAL SURVEY OF AMBULATORY SURGERY
MEDICAL ABSTRACT

A. PATIENT IDENTIFICATION

1. Facility number ☐☐☐☐

2. NSAS number and list used ☐☐☐☐ ☐

3. Medical record number

4. Date of surgery
Month ☐☐ Day ☐☐ Year ☐☐

5. Residence ZIP Code ☐☐☐☐☐ – ☐☐☐☐

B. PATIENT CHARACTERISTICS

6. Date of birth
Month ☐☐ Day ☐☐ Year ☐☐☐☐

7. Age *(Complete only if date of birth not given)*
Units ☐☐☐ { 1 ☐ Years 2 ☐ Months 3 ☐ Days

8. Sex *(Mark (X) one)*
1 ☐ Male
2 ☐ Female
3 ☐ Not stated

9. Race
1 ☐ White
2 ☐ Black
3 ☐ American Indian/ Eskimo/Aleut
4 ☐ Asian/Pacific Islander
5 ☐ Other – *Specify* _____
6 ☐ Not stated

10. Ethnicity *(Mark (X) one)*
1 ☐ Hispanic origin
2 ☐ Non-Hispanic
3 ☐ Not stated

11. Status/Disposition of patient *(Mark (X) appropriate box)*
1 ☐ Routine discharge to customary residence
2 ☐ Discharge to observation status
3 ☐ Discharge to recovery care center
4 ☐ Admitted to hospital as inpatient
5 ☐ Surgery canceled or terminated
6 ☐ Other – *Specify* _____
7 ☐ Status/Disposition not stated

C. PAYMENT DATA

12. Expected source(s) of payment

		Principal *(Mark (X) one only)*	Other additional sources *(Mark (X) all that apply)*
Government sources	**a.** Worker's compensation	☐	☐
	b. Medicare	☐	☐
	c. Medicaid	☐	☐
	d. CHAMPUS	☐	☐
	e. Other government payments	☐	☐
Private sources	**f.** Blue Cross/Blue Shield	☐	☐
	g. HMO/PPO	☐	☐
	h. Other private or commercial insurance	☐	☐
Other sources	**i.** Self-pay	☐	☐
	j. No charge	☐	☐
	k. Other – *Specify* _____	☐	☐

☐ No source of payment indicated

13a. Billing number *(If necessary)*

13b. Total charges:
$ _____ . 00 ☐ Not available

D. SURGICAL VISIT DATA

14. Time

		Not available
a. Time in to operating room	a.m. p.m.	☐
b. Time surgery began	a.m. p.m.	☐
c. Time surgery ended	a.m. p.m.	☐
d. Time out of operating room	a.m. p.m.	☐
e. Time in to postoperative care	a.m. p.m.	☐
f. Time out of postoperative care	a.m. p.m.	☐

15. Type of anesthesia

(Mark (X) all that apply)

- **a.** Topical/local . . . . . ☐
- **b.** IV sedation . . . . . ☐
- **c.** MAC (Monitored Anesthesia Care) . . . . . ☐
- **d.** Regional
  - **(1)** Epidural . . . . . ☐
  - **(2)** Spinal . . . . . ☐
  - **(3)** Retrobulbar block . . . . . ☐
  - **(4)** Peribulbar block . . . . . ☐
  - **(5)** Block . . . . . ☐
- **e.** General . . . . . ☐
- **f.** Other – *Specify* _____ . . . . . ☐
- **g.** None specified . . . . . ☐

16. Anesthesia administered by – *(Mark (X) all that apply)*

1 ☐ Anesthesiologist
2 ☐ CRNA (Certified Registered Nurse Anesthetist)
3 ☐ Surgeon/Other physician
4 ☐ Not stated/Not specified

E. MEDICAL DATA

17. Final diagnoses (including E- code diagnoses) – Narrative description

Optional – ICD-9-CM Nos.

Principal 1. _____
Other/ Additional 2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

18. Surgical and diagnostic procedures – Narrative description

Optional – CPT-4 Nos. | Optional – ICD-9-CM Nos.

Principal 1. _____
Other/ Additional 2. _____
3. _____
4. _____
5. _____
6. _____

☐ None

Completed by	Date	OFFICE USE ONLY	FR code

FORM NSAS-5 (12-14-93)
*U.S.GPO:1994-550-060/80377

OMB No. 0920-0334: Approval Expires 12/31/96

FORM **NSAS-6**
(9-10-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

MEMORANDUM OF AGREEMENT FOR SERVICES IN CONNECTION WITH SELECTING AND ABSTRACTING FACILITY RECORDS

NATIONAL SURVEY OF AMBULATORY SURGERY

CONFIDENTIAL – All information which would permit identification of an individual or of an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey and will not be disclosed or released to other persons or used for any other purposes. Both the Bureau of the Census and the National Center for Health Statistics physically safeguard the data and are bound by statutory confidentiality restrictions of 42 USC 242m.

A. EXACT INFORMATION TO APPEAR ON VOUCHER AND CHECK

1. Facility number | **2.** Name of payee

Address *(Number and street)*

City | State | ZIP Code

3. Employer identification number | **4.** Social Security number

OR

B. SERVICE TO BE PROVIDED

☐ Primary – The facility abstracts required data from a sample of outpatient surgeries for the National Center for Health Statistics.

☐ Alternate – The facility makes available to the National Center for Health Statistics a listing of outpatient surgeries from which a representative will select a sample of case records and abstract the required data.

☐ Other – *Specify in detail* _____

C. REIMBURSEMENT OF COST

☐ Payment will be made to the payee at the rate of $ _____ per abstracted record.

☐ Other – *Specify* _____

D. SCHEDULE OF PAYMENT

☐ Payment is to be made at the end of the fiscal year (September 30).

☐ Payment is to be made after the end of each quarter.

E. AUTHORIZATIONS

1. Signature of authorized facility representative | Date

2. Signature of authorized NCHS representative | Date

Copy distribution: **WHITE** – Regional Office **YELLOW** – Facility **PINK** – NCHS **GOLDENROD** – Facility folder

OMB No. 0920-0334: Approval Expires 12/31/96

NOTICE – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden for this collection of information is estimated to average 5 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer: Attn: PRA: Hubert H. Humphrey Building, Room 721-B; 200 Independence Avenue, SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0334); Washington, DC 20503.

FORM **NSAS-7**
(12-14-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

NATIONAL SURVEY OF AMBULATORY SURGERY

ANNUAL UPDATE FORM

a. Facility number

b. Name of contact person

c. Date

(Complete items 1, 2, and 3 prior to visit/phone call.)

Hello, my name is _____. I am with the Bureau of the Census and we are conducting the National Survey of Ambulatory Surgery which your facility has been participating in over the past year. At this time, we need to update our records and ensure that we are appropriately sampling all ambulatory surgery locations at your facility.

1. First of all, is the following name and address of this facility correct?

_____
_____
_____

☐ Yes
☐ No – **May I have the correct name and address?** *(Record new name and/or address)* ↙

_____
_____
_____

2. Is _____ still the administrator of this facility?

☐ Yes
☐ No – **May I have the name of the new administrator?** ↙

_____

3. We are collecting data on ambulatory surgery, which is scheduled outpatient surgery performed in any or all of the following locations: general or main operating rooms; satellite operating rooms; cystoscopy rooms; endoscopy rooms; cardiac cath labs; and laser procedure rooms. We do not include locations dedicated exclusively to dentistry, podiatry, abortion, pain block, or small procedures. Over the past year we have been sampling from these logs: *(name of log(s)/list(s))*

A. _____
B. _____
C. _____
D. _____
E. _____
F. _____
G. _____
H.

4. Have any ambulatory surgery locations (FOR HOSPITALS ONLY: **including satellite facilities) been added during the past year which would not be reflected in the log(s) I have mentioned?**

☐ Yes – **Which additional logs need to be included?** *(Name of logs; address and phone number of satellite, if necessary.)* ↙ *(Continue with item 5a)*

_____

_____

_____

_____

_____

☐ No – **Thank you for your assistance.** *(End interview.)*

5a. *(FOR ADDITIONAL LOGS ONLY)* **Could I have the name(s) and phone number(s) of a contact person for this new log (these new logs) so that we may begin sampling for this (these) location(s)?**

_____

_____

_____

_____

b. *(FOR ADDITIONAL LOGS ONLY)* **Approximately how many ambulatory surgery cases** (FOR HOSPITALS ONLY: **as opposed to inpatients) are performed per month in these new locations?**

Number _____

THANK YOU FOR YOUR ASSISTANCE.

Notes

FORM **NSAS-13**
(12-14-93)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

SAMPLING TABLE

NUMBER OF AMBULATORY SURGERIES PER YEAR	TAKE EVERY
1–599	2
600–899	3
900–1199	4
1200–1499	5
1500–1799	6
1800–2099	7
2100–2399	8
2400–2699	9
2700–2999	10
3000–4499	15
4500–5999	20
6000–8999	30
9000–11999	40
12000–14999	50
15000–17999	60
18000–20999	70
21000–23999	80
24000–26999	90
27000–29999	100

NOTE: If the annual number of ambulatory surgeries for a facility is larger than 29,999 you will need to manually compute the TAKE EVERY. This is done by taking the total number of ambulatory surgeries for a facility divided by 3000, drop fraction, add 1 and multiply the whole number by 10.

EXAMPLE: $\frac{35{,}000}{3{,}000}$ = Divide total by 3,000

11.666 → 11 Drop the fraction
11+1 = 12 Add 1
12x10 = 120 Multiply by 10

The Take Every for 35,000 is 120.

RANDOM NUMBER TABLES

TAKE EVERY 2–9

6	3	9	4	6	2	5	7	9	2
5	6	2	8	5	9	7	1	4	3
8	3	7	7	8	2	2	6	2	3
4	7	3	9	4	3	6	8	9	5
2	2	8	4	6	4	7	9	5	9
6	6	1	4	6	7	2	9	4	2
3	3	1	8	6	9	2	3	4	8
6	4	9	5	1	9	3	5	6	8
4	3	8	9	5	5	1	5	2	5
9	4	8	4	4	7	8	6	8	5

TAKE EVERY 10–99

17	79	52	84	14	79	19	57	03	74
54	52	06	46	28	97	41	13	86	33
80	65	73	48	02	99	91	02	52	72
14	42	49	68	06	46	28	78	47	40
07	04	04	43	05	53	24	91	13	33
56	51	21	94	87	70	39	11	95	11
61	30	47	56	88	67	12	55	90	07
40	31	96	01	29	53	06	35	13	04
08	85	32	07	27	90	86	40	46	37
05	50	24	01	74	65	46	74	34	39

TAKE EVERY 100–999

711	121	251	170	149	831	476	936	662	946
268	549	550	844	627	974	466	833	198	673
323	782	225	615	246	081	970	110	703	356
681	115	146	523	042	461	096	989	622	082
609	686	604	451	908	774	126	956	711	389
559	881	200	905	582	049	137	327	910	981
824	395	667	992	943	875	993	363	408	114
478	577	959	562	602	187	777	262	255	865
001	219	703	230	640	710	769	108	355	521
570	759	991	119	380	772	882	940	763	138

OMB No. 0920-0334: Approval Expires 12/31/96

FORM **NSAS-16** (1-31-94)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

TRANSMITTAL NOTICE
National Survey of Ambulatory Surgery

1. Date of transmittal

2. Facility number

3. Facility name and address

4. This shipment includes –

	Number of records
a. Data for *(Month and year)* _____	
b. Back records	
c. Total number of records transmitted ⟶	

5. BACK RECORDS SUBMITTED *(If applicable)*

NSAS number (a)	Medical record number (b)	NSAS number (c)	Medical record number (d)

6. RECORDS **NOT AVAILABLE** *(If applicable)*

NSAS number (a)	Medical record number (b)	NSAS number (c)	Medical record number (d)

7. CHANGES – *Mark (X) appropriate box for each item. Indicate the changes if the "YES" is marked.*

YES	NO			
□	□	**a.** New Administrator	Full name	Title
□	□	**b.** New Medical Record Contact	Full name	Title
□	□	**c.** New Abstractor	Full name	Title
□	□	**d.** Change in facility name or address	From	To

8. REMARKS

9. REQUEST FOR ADDITIONAL BLANK FORMS
(Enter quantity for each item needed)

Item	Quantity
NSAS-4, Sample Listing Sheets	
NSAS-5, Medical Abstracts	
NSAS-16, Transmittal Notices	
BC-356, Transmittal Envelopes	

10. Name and title of Data Transmitter

FOR OFFICE USE ONLY RO

Copy distribution: WHITE and YELLOW – NCHS Processing **PINK** – RO files **GOLDENROD** – Field Representative

Appendix VII

Introductory Letter

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control and Prevention

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

March 31, 1994

The purpose of this letter is to request your participation in the National Survey of Ambulatory Surgery. As you are aware, ambulatory surgery represents a fast growing and significant portion of surgery in the United States. In 1991 ambulatory surgery accounted for over 57 percent of all surgery in the U.S. and, as medical technology progresses, an even greater proportion of surgery performed in ambulatory settings is anticipated. Unfortunately, there is a large gap in detailed patient information with respect to outpatient procedures. Valid data about ambulatory surgery are important to make national and local decisions for the allocation of resources and training of medical manpower.

Recognizing this lack of vital information, the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), is conducting a National Survey of Ambulatory Surgery. The study has received the endorsement, participation and advice of professional groups and associations involved in this field. The study is authorized by Title 42, United States Code, Section 242k. Your participation in the study is voluntary and there are no penalties for refusing. All information collected, including the identity of your facility, is confidential.

We would like to discuss the participation of your facility in the study. Within the next month, a representative of the Bureau of the Census, acting as an agent of the NCHS, will telephone you to arrange for an appointment. We have enclosed a packet of materials that includes a description of the study, endorsement letters, and an overview of the National Center for Health Statistics.

Your cooperation in this study will be very much appreciated.

Sincerely yours,

Robert Pokras
Chief, Hospital Care Statistics Branch

Enclosures

Appendix VIII

Endorsement Letters

American Hospital Association

AHA

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

To call writer, telephone

February, 1994

TO: Chief Executive Officers

The National Center for Health Statistics is conducting the National Survey of Ambulatory Surgery. This survey is designed to gather more detailed information about outpatient procedures on patients receiving treatment in free-standing or hospital ambulatory surgery settings. Little or no data are currently available on the characteristics of ambulatory surgery, the volume of various procedures, or the diagnosis of persons being treated in ambulatory settings.

The American Hospital Association is interested in these data and has been involved in developing the forms and procedures for this study. We believe that the survey design calls for a minimal amount of record-keeping and time on the part of your staff. All information 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 staff.

Thank you for your help and cooperation.

Sincerely

Peter D. Kralovec
Director
Health Care Information Group

FEDERATED AMBULATORY SURGERY ASSOCIATION
700 N. FAIRFAX STREET SUITE 520 ALEXANDRIA, VA 22314

Telephone: (703) 836-8808

To: FASA Facility Members

Fr: Gail D. Durant, Executive Director

The National Center for Health Statistics, Centers for Disease Control and Prevention (CDC), is conducting the National Survey of Ambulatory Surgery. Information from the study will complement data from the Natioanl Hospital Discharge Survey (inpatient care), the National Ambulatory Medical Care Survey (visits to physicians offices), and the National Hospital Ambulatory Medical Care Survey (visits to hospital emergency rooms and outpatient departments). Information from these surveys will be used by hospitals, freestanding ambulatory surgery centers, physicians, federal and state government agencies, schools of public health, and others for research purposes and to improve health care.

FASA recognizes the need for national data on the utilization of ambulatory surgery and encourages you to participate in surveys that assist in the collection of data that broadens the scope of information about the industry.

Thank you.

AMERICAN ACADEMY OF OPHTHALMOLOGY

February 4, 1994

Dear Colleague:

The National Center for Health Statistics, Centers for Disease Control and Prevention (CDC), is conducting the National Survey of Ambulatory Surgery. Information from the study will complement data from the National Hospital Discharge Survey (inpatient care), the National Ambulatory Medical Care Survey (visits to physicians' offices), and the National Hospital Ambulatory Medical Care Survey (visits to hospital emergency rooms and outpatient departments). Information from these surveys will be used by hospitals, freestanding ambulatory surgery centers, physicians, federal and state government agencies, schools of public health, and others for research purposes and to improve health care.

The American Academy of Ophthalmology recognizes the need for national data on the utilization of ambulatory surgery. Little or no data are currently available on the characteristics of ambulatory surgery, the volume of various procedures, or the diagnoses of persons being treated in ambulatory settings. A National Survey of Ambulatory Surgery will fill this void.

We have reviewed the goals and methods of this study and urge your participation.

Sincerely,

Ronald E. Smith, M.D.
President

655 Beach Street / P.O. Box 7424 / San Francisco, California 94120-7424 / (415) 561-8500 / FAX (415) 561-8533

AHIMA
AMERICAN HEALTH INFORMATION MANAGEMENT ASSOCIATION

Dear Chief Executive Officer/Administrator/Colleague:

The National Center for Health Statistics, Centers for Disease Control and Prevention (CDC), is conducting the National Survey of Ambulatory Surgery. Information from the study will complement data from the National Hospital Discharge Survey (inpatient care), the National Ambulatory Medical Care Survey (visits to physicians' offices), and the National Hospital Ambulatory Medical Care Survey (visits to hospital emergency rooms and outpatient departments). Information from these surveys will be used by hospitals, free standing ambulatory surgery centers, physicians, federal and state government agencies, schools of public health, and others for research purposes and to improve health care.

The American Health Information Management Association (AHIMA) recognizes the need for national data on the utilization of ambulatory surgery. Little or no data are currently available on the characteristics of ambulatory surgery, the volume of various procedures, or the diagnoses of persons being treated in ambulatory settings. A National Survey of Ambulatory Surgery will fill this void.

We have reviewed the goals and methods of this study, including confidentiality, and urge your participation in this process.

Sincerely,

Pam Wear RRA

Pamela K. Wear, RRA
Executive Director

cc: Rose Dunn, RRA, President
Jean Clark, RRA, President-elect
Jackie Stice, RRA, First Successor Director

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pkw/cr

919 North Michigan Avenue, Suite 1400 ▲ Chicago, Illinois 60611-1683 ▲ (312) 787-2672 ▲ (800) 621-6828 ▲ (312) 787-9793 (FAX)

American College of Surgeons

FOUNDED BY SURGEONS OF THE UNITED STATES AND CANADA, 1913

55 EAST ERIE STREET CHICAGO, ILLINOIS 60611 312 • 664-4050 FAX 312 • 440-7014

PAUL A. EBERT, M.D., F.A.C.S.
DIRECTOR

November 19, 1993

Dear Doctor:

I am writing to urge your participation in the National Survey of Ambulatory Surgery (NSAS). The National Center for Health Statistics within the Centers for Disease Control and Prevention has invested many years in developing this unique study which I believe has emerged as a sound and valuable mechanism for collecting national data on freestanding and hospital-based ambulatory surgical facilities.

Approval by the American College of Surgeons and the support generated among all physicians are indispensable in continuation of this research program. There is considerable interest in gaining such information which can prove to be an original, invaluable base for planning and organizing health services, assessing health facility and manpower requirements, determining possible modifications in medical education programs, and providing increased knowledge reflecting the natural history and epidemiology of disease in the ambulatory setting.

Along with other medical organizations, we have been involved in developing the NSAS forms and procedures. Strict confidentiality provisions are to be maintained, with only summary data to be published and made available to the medical profession, to health planners and researchers, and to the public.

I am confident that the information derived will be well worth the extra, individual effort expended by participating physicians like yourself. Again, may I urge your support for the NSAS by providing the information requested? We can look forward to obtaining the results of this research study.

Sincerely,

Paul A. Ebert

Paul A. Ebert, MD, FACS

PAE/RES/wo

Appendix IX

Definitions of Terms Relating to the Medical Abstract Form

Facility number—The uniquely assigned four-digit facility identification number.

NSAS number and list used—The uniquely assigned NSAS number for the sampled ambulatory surgery visit and the alphabetic identifier for the log or list used for sampling.

Medical record number—The uniquely assigned number within a facility that identified the individual patient.

Date of surgery—The date on which the sampled ambulatory surgery visit occurred, using two digits for the month and day, and four digits for the year.

Residence ZIP code—The nine-digit or five-digit U.S. Postal Service ZIP code that designates the patient's residence.

Date of birth—The patient's date of birth, using two digits for the month and day, and four digits for the year.

Age—Entered on the medical abstract form only if the date of birth was unavailable. The computed age that appears in NSAS reports and data tapes is calculated from the date of birth and is the age at last birthday on the date of surgery.

Race—This item was completed based on information recorded in the patient's medical record.

White—Patient is white or Caucasian.

Black—Patient is Negro, black, or African American.

American Indian/Eskimo/Aleut—Patient has American Indian origin or is classified as Eskimo, Aleut, or any other Alaskan Native origin.

Asian/Pacific Islander—Patient has origins in the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. For example, this area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.

Other—Patient's race does not fall into a category described above.

Not stated—Patient's race is not indicated.

Ethnicity—Refers to the national or cultural group from which the patient is descended, i.e., the nationality or lineage of the patient's ancestors. Race and ethnicity are considered separate characteristics. The item was completed from factual information from the medical record and was not completed based on the patient's name or birthplace.

Hispanic origin—Person is of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

Non-Hispanic—All other persons.

Not stated—Patient's ethnicity is not indicated.

Status/disposition of patient—The status/disposition of the patient upon discharge from the facility.

Routine discharge to customary residence—Patient was discharged to return to his or her normal place of residence, i.e., home, nursing home, or prison.

Discharge to observation status—Patient was kept at the facility for up to 72 hours for ''observation,'' but was not considered an inpatient.

Discharge to recovery care center—Patient was discharged to an organized recovery care center.

Admitted to hospital as inpatient—Patient was admitted to the hospital as an inpatient after ambulatory surgery was performed.

Surgery canceled or terminated—Patient was scheduled for ambulatory surgery, appeared at the designated time and received anesthesia and/or began the procedure, but the procedure was terminated prior to completion.

Other-Specify—Patient's status and/or disposition was something other than the above categories.

Status/disposition not stated—Patient's status and/or disposition was not indicated.

Expected source(s) of payment—The method of payment expected for the ambulatory surgery visit. If only one payment source was indicated in the medical record, only the ''Principal'' column was marked and the ''Other additional sources'' column was left blank. If two or more payment sources were indicated and one was designated as the primary source, the ''Principal'' column was marked for the primary source and the ''Other additional sources'' column was marked for the remaining indicated sources of payment. Only one source of payment was marked in the ''Principal'' column.

Worker's Compensation—Expected payment is a state or municipal disability insurance or industrial accident insurance. This category does not include company health insurance plans or direct payment by an employer.

Medicare—Expected payment is under the Health Care Financing Administration's health insurance program for the aged and disabled. This includes Medicare part A and/or B and patients under the renal dialysis program. If Medicare benefits are available, they are considered ''Principal'' unless another source of payment is specifically stated as the principal source.

Medicaid—Expected payment is made under Title XIX of the Social Security Act, which gives Federal assistance to states to provide health care for medically indigent patients. Medicaid may be known as public aid, medical assistance, general relief, or some title specific to the State of residence, such as MediCal in California.

CHAMPUS—Expected payment is made by the Civilian Health and Medical Program of the Uniformed Services and is for military

personnel and their families who use civilian facilities.

Other government payments—Expected payment under the Title V Program, including payment under the State-funded Maternal and Child Health Program and the State-funded Crippled Children's Program, or if the expected payment cannot be classified in one of the other four government categories.

Blue Cross/Blue Shield—Expected payment is made by a Blue Cross insurance plan, Blue Cross Association, or Blue Shield plan.

HMO/PPO—Charges are included under a prepayment plan. Includes health maintenance organizations (HMO's), independent practice associations (IPA's), preferred provider organizations (PPO's), etc.

Other private or commercial insurance—Expected payment is made by any private insurance plan not included in the ''Blue Cross/Blue Shield'' or ''HMO/PPO'' categories.

Self-pay—Charges are paid in part or in full by the patient or the patient's family, which will not be reimbursed by a third party. Includes ''co-payments'' and ''insurance deductibles.''

No charge—Visits for which no fee is charged.

Other—Any other source of payment not covered in the categories above.

Billing Number—Needed on occasion to match medical record data to ''total charge'' information.

Total charges—Total charges as reported by the facility. In most cases, this amount was the facility fee charged for the procedure(s) performed that excluded any professional (e.g., surgeon) fees. However, some charges may have included professional fees if facilities were unable to separate them from an all-inclusive bill or ''flat fee'' charged for certain procedures.

Time—The appropriate clock time (including a.m. or p.m.) was recorded or the ''not available'' box was checked for each phase of the ambulatory surgery visit.

Type of anesthesia—All types of anesthesia used during the ambulatory surgery visit that were clearly documented in the medical record were included. If the type of anesthesia was not clearly identified, ''other'' was marked. If the type of anesthesia was not given, ''none specified'' was marked.

Topical/local—Anesthesia that numbs only part of the body; feeling is numbed by temporarily blocking nerves at or near the site of the operation.

Regional—A special form of local anesthesia; anesthetics are injected around the main nerve to the affected area. The anesthetics stop sensation in a wide region of the body. Regional anesthesia can be of three types: epidural, spinal, and block.

General—Anesthesia causing the whole body to lose sensation. There are two ways that general anesthesia can be administered: inhalation of gas or vapor; and intravenous.

Anesthesia administered by—The specialty of the person(s) administering the anesthesia.

Final diagnoses—The ''final,'' ''discharge,'' ''primary,'' ''secondary,'' ''associated,'' ''additional,'' and ''other'' diagnoses specifically identified and clearly summarized on the discharge summary of the patient's medical record was recorded. ''Admitting,'' ''preliminary,'' ''working,'' ''tentative,'' or ''provisional'' diagnoses were not abstracted. If the final diagnoses were not specifically identified and clearly summarized on the discharge summary, the face sheet of the medical record was used for abstracting the diagnostic information. If the physician did not specify a principal diagnosis (the condition established after study to be chiefly responsible for causing the patient's visit for ambulatory surgery), the first final diagnosis listed on the patient's medical record was designated on the medical abstract form as principal.

Surgical and diagnostic procedures—The physician's exact wording for each procedure as it appeared in the patient's medical record. If a principal procedure was specified, it was listed as ''principal.'' If a principal procedure was not specified, the first procedure listed in the medical record was recorded as the principal procedure on the abstract form.

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

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