2009 NHAMCS (0920-0278)

Supporting Statement

B. Collections of Information Employing Statistical Methods

The primary goal of this study is to survey a national probability sample of visits to non-Federal, short-stay and general hospital EDs and OPDs. The NHAMCS uses a four-stage probability design with samples of geographic Primary Sampling Units (PSUs), hospitals within PSUs, OPD clinics within hospitals, and patient visits within OPD clinics and EDs. Based on data from the NHAMCS, in 2004, the estimated total number of visits to hospital EDs and OPDs was 195 million. A secondary goal is to provide estimates of characteristics of hospitals with emergency and/or outpatient departments.

1. Respondent Universe and Sampling Methods

The universe for the NHAMCS consists of non-Federal hospitals in the 50 states and the District of Columbia which have six or more beds staffed for inpatient use and are general hospitals or have an average length of stay for all patients of less than 30 days. Until 2003, the hospital sampling frame was constructed from the SMG Hospital Market Database. Beginning with 2003, the sample frame sources are the annual “Verispan Healthcare Market Index" and Verispan’s "Second Quarter, Hospital Market Profiling Solution.” The initial NHAMCS sample of hospitals was selected in 1991 from the 1991 SMG data file. According to the 1991 SMG file, there were about 6,250 NHAMCS-eligible hospitals of which about 5,600 had EDs. The universe and sample hospitals were updated for the 2007-09 NHAMCS using hospital data from Verispan, L.L.C., specifically their “Healthcare Market Index, Updated May 15, 2006” and their “Hospital Market Profiling Solution, Second Quarter, 2006.” These products were formerly known as the SMG Hospital Database. Using the 2006 data to update the sample allows for the inclusion of hospitals that had opened or changed their eligibility status since the previous sample was updated for 2004. The preceding description has been updated to reflect more recent activities not included in the 2006 supporting statement.

The NHAMCS sample design is a multi-stage design with a first stage sample of two of the four PSU panels in the 1985-94 National Health Interview Survey (NHIS), that is, the first stage sample consists of 112 PSUs. From the sample PSUs, a stratified sample of approximately 600 hospitals (representing 15 months of data collection) was selected for the NHAMCS with hospital strata defined by whether hospitals had either EDs or OPDs according to the sampling frame data. About 550 hospitals with reported EDs and/or OPDs and 50 hospitals without reported EDs or OPDs were selected. Sample hospitals are randomly assigned to 16 4-week reporting periods as described below. In 2004, the sample size was 68,000 patient visits from 464 sample hospitals.

Hospitals

Non-Federal, short-stay and general hospitals in the sample PSUs are eligible for inclusion in the sample. Hospitals are stratified by whether they have EDs and/or OPDs. Prior to sampling, hospitals are arrayed within PSUs by type of ownership (voluntary nonprofit, non-Federal government, proprietary) and size, where size is measured by combined volume of ED and OPD visits reported in the hospital sampling frame (constructed from SMG data through 2002 and from Verispan data starting in 2003). From the arrayed hospital list, five hospitals are selected in each PSU without replacement and with probability proportional to the visit volume. If there are five or fewer hospitals, then all hospitals in the PSU are selected. The hospital sample was updated for 2001, 2004 and 2007 by extending the sampling process to new hospitals as if they had been in the sampling frame for 1991, when the original NHAMCS hospital sample was selected.

A sample of approximately 600 hospitals (representing 64 weeks [i.e., 15 months] of data collection) is randomly divided into 16 groups of hospitals (i.e., 37-38 hospitals in each group) in order to avoid hospitals participating during the same time period each year. One hospital group will be assigned to each of the four-week reporting periods during 2007 through 2008, meaning that each hospital will be inducted approximately every 15 months (i.e., about 490 hospitals will be inducted annually). Substitution of the reporting period is not permitted. The overall hospital response rate for the 2004 NHAMCS was 78%. Eighty-seven (87%) percent of eligible EDs and 69% of eligible OPDs participated.

Revised:

ASC data will be collected in all sampled NHAMCS hospitals that indicate they have an ASC. For the ASC component, the hospital response rate is expected to be 75% based on prior NHAMCS response rates and the response rate for the 2006 NSAS.

Outpatient Clinics and Emergency Service Areas

Within the hospital's OPD, a sample of clinics is selected. Clinics are in scope if ambulatory medical care is provided under the supervision of a physician and under the auspices of the hospital. Clinics providing only ancillary services, such as diagnostic X-rays or radiation therapy, are out-of-scope. Services provided in dental or dental surgery clinics, pharmacies, or other settings in which physician services are not typically provided also are out-of-scope. In addition, free-standing clinics are out-of-scope since they are included in the NAMCS, and ambulatory surgery centers, whether in hospitals or free-standing, have been also out-of-scope. The OPD clinic definition excludes the "hospital as landlord" arrangement in which the hospital only rents space to a physician group and is not otherwise involved in the delivery of services. These physicians are currently included in the office-based NAMCS. Emergency services provided under the "hospital as landlord" arrangement, however, are eligible for the study.

During the visit by a field representative to induct a hospital into the survey, a list of all outpatient clinics is obtained from the sample hospital. Hospitals may define the term "separate clinic" differently, for example, by physical location within the hospital, by staff providing the services, by specialty or subspecialty, by schedules, or by patients' source of payment. Because of these differences, "separate clinics" in the NHAMCS are defined as the smallest administrative units for which the hospital keeps separate patient volume statistics. Each clinic's function, specialty, and expected number of visits during the assigned reporting period are also collected. This clinic frame is stratified by specialty: general medicine, surgery, pediatrics, obstetrics/gynecology, substance abuse, and other clinics. For sampling purposes, clinics with very low volumes are combined to form clinic sampling units of a minimum size. If a sample hospital has more than 5 clinic sampling units, then 2 units from each of the 6 specialty strata are selected with probability proportionate to the total expected number of visits to the clinics. If there are 5 or fewer clinic sampling units, then all are included in the sample. On average, hospitals in the sample have 3.6 clinics per OPD.

Within the hospital's ED, a list of all emergency service areas (ESAs) is obtained during the hospital induction interview. ESAs are defined as the smallest administrative unit of an ED where separate patient statistics are kept. It may be located on hospital grounds or operated off site by the hospital. The ED is treated as a separate stratum and up to five ESAs within a sample hospital are included. If a sample hospital has more than 5 ESAs, then a sample is selected with probability proportionate to the total expected number of visits to the ESAs. If there are 5 or fewer ESAs, then all of the ESAs are selected on average.

Visits

Within sampling units, patient visits are systematically selected over the 4-week reporting period assigned to hospitals. A visit is defined as a direct, personal exchange between an ambulatory patient and a physician, or a staff member acting under a physician's direction, for the purpose of seeking care and rendering health services. Visits solely for administrative purposes, such as payment of a bill, and visits in which no medical care is provided, such as visits to deliver a specimen, are out of scope.

Samples of approximately 100 and 200 visits are targeted from EDs and OPDs, respectively. If there are more than five clinics in a hospital, then up to 30 visits are targeted from each clinic included in the survey. In clinics with volumes higher than these desired figures, visits are sampled by a systematic procedure which selects every nth visit after a random start. Sampling rates are determined from the expected number of patients to be seen during the reporting period and the desired number of sample records. This basic procedure is adapted, as necessary, to the record keeping systems of the particular hospitals. Previous studies found that many clinics keep their own logs which are used as the sampling frame for visits. In cases where such a log is not available, the field representative supplies the clinic with a visit log form which can be

used to record patient names. The names of patients are kept confidential and forms containing names remain in the hospital.

Revised:
For hospital-based ambulatory surgery, samples of 100 visits over a 4-week reporting period will be targeted. The procedures described above for EDs will be used to select visits for the purpose of receiving ambulatory surgery. Sampled visits will be drawn from all locations within a facility where ambulatory surgery is performed, including main or general operating rooms, all dedicated ambulatory surgery rooms, cystoscopy and endoscopy units, cardiac catheterization labs, and laser procedure and pain block rooms (in-scope locations). In this document the total of these locations are referred to as the hospital-based ASC. However, locations within hospitals dedicated exclusively to dentistry, podiatry, or small procedures (sometimes referred to as "lump and bump" rooms) are among those which will not be included.

Cervical Cancer Screening

The Cervical Cancer Screening Supplement (CCSS) sample will use a three-stage probability design with samples of geographic Primary Sampling Units (PSUs), hospitals within PSUs, general medicine and obstetrics/gynecology clinics within OPDs.

2. Procedures for the Collection of Information

Training

Training in data collection procedures is conducted at different times with four different types of staff. Census Bureau Headquarters staff are responsible for training the Regional Office staff. Regional Office staff have the primary responsibility for training the field representatives and supervising hospital data collection activities. Field representative training covers the following topics: inducting hospitals, confidentiality, Health Insurance Portability and Accountability Act (HIPAA), clinic sampling procedures, determination of the "take every" and "random start" numbers, instructing hospital staff, supervising patient visit sampling, editing completed forms, retrieving missing data, and medical record abstraction. Field representatives induct the hospitals and train the hospital staff on visit sampling and completion of the Patient Record forms. However, if hospital staff are unable to complete the forms, some field representatives abstract the data.

Census Bureau Headquarters staff are responsible for writing the field manual which contains the following: the purposes of the survey; interviewing techniques; a description of the NHAMCS induction questionnaire and related forms; and the procedures for inducting hospitals, conducting hospital visits, sampling clinics, determining the take every and random start numbers, instructing hospital staff, supervising patient visit sampling, editing completed forms, and retrieving missing data.

Initial Contact

An introductory letter is sent from the Director of NCHS (**Attachment H**) to the chief executive officer of each sampled hospital; one is for a returning hospital and the other is for a hospital new to the sample. The letter describes the purpose of the survey, the authority for data collection, that participation is voluntary and that all collected information is confidential including the identity of the hospital [308(d) confidentiality requirements]. It also covers requirements related to HIPAA. Patient names or other identifying information are not collected and at no time are the patients contacted to obtain information. Letters of endorsement by the American College of Emergency Physicians, Society for Academic Emergency Medicine, Emergency Nurses Association, American College of Osteopathic Emergency Physicians and the Surgeon General (**Attachment I**) are included in the mailing.

Revised:

The introductory letter was revised to reflect the addition of hospital-based ambulatory surgery data (**Attachment S**). We plan to obtain letters of endorsement from the following organizations: Ambulatory Surgery Center Association (ASCA), American College of Surgeons (ACS), American Health Information Management Association (AHIMA), American Academy of Ophthalmology (AAO), and Society for Ambulatory Anesthesia (SAMBA).

Hospital Induction

The introductory letter is followed by a telephone call from the field representative to verify hospital eligibility for the survey and to arrange for an appointment with the chief executive officer, directors of the ED and OPD, and whoever is designated as hospital coordinator for this survey. During the meeting, the field representative explains the purpose of the survey, describes the data collection methods and length of data collection, and obtains both general descriptive information about the organization of the ED and OPD and specific information needed to sample clinics within the hospitals. The NHAMCS 101 Questionnaire **(Attachment J)** is administered to screen sample hospitals, verify the hospital sampling frame information, induct the sample hospitals, and obtain ED and OPD data.

The field representative explains the designated reporting period and the data collection methods which may be either prospective or retrospective. In the prospective approach to data collection, the hospital staff sample patient visits, then complete the Patient Record forms, largely through observation, during or shortly after the sample visits. In the retrospective approach, hospital staff sample visits after the patients have been seen, then complete the Patient Record forms through medical record abstraction. Since hospital staff have experience abstracting data from medical records they are encouraged to perform this task although field representatives may abstract the data if the hospital staff

are too busy. Approximately 45 percent of ED records and 49 percent of OPD records require Census abstraction.

After the preliminary visit, the field representative contacts the hospital coordinator to review the sample selection and to arrange for induction of the sample ESAs and clinics and for instruction of the hospital staff.

Revised:

The procedures above will be followed for the hospital-based ambulatory surgery data collection. The NHAMCS 101 Induction Form and 101U Ambulatory Unit Record Form (**Attachments J and K**) were revised so they can be used for gathering data on ambulatory surgery in the hospital as well as data in the ED and OPD settings.

Three questions not related to the ambulatory surgery component were added to the NHAMCS-101 hospital induction form that were on the form in previous years: item 14l – number of standard ED treatment spaces, item 14m – number of other ED treatment spaces, and item 14r – number of levels in the EDs nursing triage system. Item 14s regarding admission by a hospitalist is new and was added to determine the proportion of hospitals that utilize this new physician specialty. A hospitalist is defined as a physician whose primary professional focus is the general medical care of hospitalized patients. Their activities include patient care, teaching, research, and leadership related to hospital medicine. Items 10c and 17c relating to the NHAMCS-907 Pandemic and Emergency Response Preparedness Supplement were deleted. No change in burden is anticipated due to these changes.

Check Item A-1 was added to the NHAMCS-101/U so that estimates can be made for visits to primary care clinics. Items C2 – number of separate shifts in this unit and C3 – number of separate patient registration logs in this unit were deleted as this information is no longer necessary. No change in burden is anticipated due to these changes.

Outpatient Department Clinic and Emergency Service Area (ESA) Induction

After the OPD clinics and emergency service areas (ESAs) are selected for each hospital, the field representative arranges for induction visits to the sampled OPD clinics and ESAs through the hospital coordinator. At these visits, the purpose and use of the survey data are explained, the visit sampling procedures and Patient Record forms are described, and an NHAMCS-101/U - Ambulatory Unit Record (**Attachment K**) is completed for each clinic and ESA selected for the sample. In some circumstances, a blank NHAMCS-103 Patient Visit Log (**Attachment L**) may be used by the hospital staff to record visits prior to sampling. In order to assure patient confidentiality, the NHAMCS-103 Patient Visit Log is not collected by the field representative, but retained by the hospital. The field representative uses the NHAMCS-124 Sampling & Information Booklet (**Attachment M**) to determine the "random start" and "take every" numbers for the clinics and emergency service areas. Hospital staff are responsible for sampling patient visits by using hospital logs or other records. The field representative assists when necessary.

Hospital staff are instructed how to complete each item by the field representative. Patient visit data are recorded for each sample visit using either the ED or OPD Patient Record form (PRF). Results of the 1992 through 2004 NHAMCS have been incorporated into the design of these forms. For detailed information on PRF question wording see **Attachments N and O**. Instructions on completing the PRFs and definitions of terms are provided in the NHAMCS-122 Emergency Service Area Instruction Booklet (**Attachment P**) and the NHAMCS-123 Outpatient Department Clinic Instruction Booklet (**Attachment Q**).

The Patient Record form for the NHAMCS routinely collects data on patient characteristics such as age, sex, race, and ethnicity, and visit characteristics such as date of visit, reason for visit in patient's own words, physician diagnoses, medications provided or prescribed, and expected source of payment. Periodically specific items on diagnostic tests, procedures or non-medication therapies are added or deleted. Changes to the 2007-2008 ED Patient Record form include the return of the episode of care question; the deletion of pulse; and changes will be made to obtain additional information related to various diagnostic and screening services, procedures, and visit disposition. The OPD Patient Record form will be modified to change the continuity of care question from a categorical to a continuous variable; two checkboxes within diagnosis and screening services will be changed; and visit disposition will be updated to include "Left without being seen" and "No show". (See **Attachments N and O** for 2007 ED and OPD PRFs.)

Revised:
Ambulatory Surgery Centers Induction

The procedures detailed above for the EDs will be the same for the ASCs. Hospital staff will be given instructions on how to complete each item by the field representative. Patient visit data will be recorded for each sample visit using the ASC Patient Record form (PRF), the NHAMCS-100(ASC) (**Attachment T**). Results of the 1992 through 2006 NHAMCS, and for the 1994-96 and 2006 NSAS, have been incorporated into the design of these forms.

NHAMCS items also relevant for ASCs were retained, although sometimes in modified form, to fit the ASC setting. NSAS data items were then incorporated including data on times in the operating room, in surgery and in post-operative care, as well as type and provider of anesthesia, and a shortened version of the item asking about facility follow-up of patients. The NHAMCS items on medication ordered, supplied, or administered during the visit or at discharge and the disposition upon discharge were modified for ambulatory surgery data collection. Items which had very low response rates in the 2006 NSAS, including the detailed source of payment items which asked for a breakdown under Medicare, Medicaid, and private insurance by fee-for-service, HMO or PPO were not retained. Instructions on completing the PRFs and the definitions of terms will be provided in the newly developed NHAMCS-126, Ambulatory Surgery Center Instruction Booklet (**Attachment U).**

In addition to the revisions needed to add ambulatory surgery data collection to NHAMCS, some other changes are planned for the 2009 data collection. The emergency department (ED) Patient Record form was modified (**Attachment N**) to add the month and day for all of the time entries to improve the quality of the time data. Other changes are mainly additional check box items. In item 2a, "(6) On O2" was added to inform the interpretation of the pulse oximetry value. "(7) Glasgow Coma Scale" was added to item 2a to determine the responsiveness of the patient replacing "Oriented X 3" which was deleted as it is a boilerplate phrase found in almost every ED record. Item 6b, checkboxes for selected chronic diseases, were added to determine visits by ED patients with chronic diseases where the diagnosis may not have been recorded in 6a. Changes were made to the patient residence, diagnostic services, procedure, providers, and disposition checkboxes. Item 11 "Level of service" was added to determine the intensity of care. Item 13b "Admitting physician" was added to examine the utilization of hospitalists. The changes to the ED Patient Record Form are expected to add one minute in burden per form.

On the outpatient department (OPD) Patient Record form (**Attachment O**, Item 5b "cancer stages" and Item 5c "enrollment in a disease management program" were deleted due to high item nonresponse rates. Changes were made to the diagnostic/screening services, health education, non-medication treatment, and disposition checkboxes. No change in burden is expected due to these changes.

Cervical Cancer Screening Supplement

A 15-minute CCSS will be added to the OPD component of the NHAMCS to collect information on cervical cancer screening practices (**Attachment R**). When NHAMCS hospitals are contacted for participation, the OPD director will be asked which of the general medicine and obstetrics/gynecology clinics selected for sample performs cervical cancer screening. OPD representatives from these sampled clinics will then be asked to complete the CCSS as a self-administered form. Upon reviewing the introductory letter and questionnaire, the OPD representative will decide which clinician would be most appropriate to complete the supplement (i.e., a person who performs Pap tests or who is involved in setting practice guidelines). The respondent will be asked to complete the CCSS at the end of the 4-week reporting period, so as not to bias the data collected on the Patient Record form.

Monitoring Data Collection and Quality Control

Census Bureau Headquarters staff from the Demographic Surveys Division, Housing Surveys Branch, is responsible for overseeing the data collection. Census Bureau Headquarters staff, Field Division, is responsible for the supervision of staff in the Bureau's 12 Regional Offices who in turn supervise the field representatives.

The field representative visits the sampled ESAs and clinics each week during the data collection period and maintains telephone contact with the hospital staff involved in the

data collection effort. An essential part of this effort is quality control which focuses on the completeness of the patient sampling frame, adherence to the sampling procedures, and assurance that a Patient Record form is completely filled out for every sample patient visit. The field representative reviews the log, or other records used for visit sampling, to determine if any cases are missing and also edits completed forms for missing data. Attempts are made to retrieve both missing cases and missing data on specific cases, either by consulting with the appropriate hospital staff or, if possible, by reviewing the pertinent medical records. A record of this retrieval effort is also made.

Completed survey materials are sent on a weekly basis from the regional offices to the Census Bureau's National Processing Center (NPC) in Jeffersonville, Indiana. NPC is responsible for completing a quality control edit before packaging and shipping work to our contractor where further editing, coding and data entry are done. Keying and data entry activities are performed under contract. All medical and drug coding as well as all data entry operations are subject to quality control procedures where a 10-percent quality control sample of survey records are independently keyed and coded. Computer edits for code ranges and inconsistencies are also performed.

For some items, missing values were imputed by randomly assigning a value from Patient Record forms with similar characteristics. For the ED data, imputation for all imputed items was based on ED volume, geographic region, immediacy with which patient should be seen, and the three-digit ICD-9-CM code for primary diagnosis. In 2004, prior to imputation, the missing values for ED data were as follows: birth year (1.6 percent), sex (0.5 percent), race (11.1 percent), and ethnicity (14.8). For 2004 OPD data the missing values prior to imputation were: birth year (3.1%), sex (2.1%), and race (12.3%), and ethnicity (12.2).

Estimation Procedures

Separate national estimates will be produced for visits to hospital EDs and OPDs. The estimation procedure has three basic components: (a) inflation by reciprocals of the sampling selection probabilities, (b) adjustments for nonresponse, and (c) calibration ratio adjustment. Beginning in 1997, the calibration ratio adjustment for OPD estimates was replaced by an adjustment that controls for effects of rotating hospital sample panels into and out of the sample each year. (The full NHAMCS hospital sample is partitioned into 16 panels that are rotated into the sample over 16 periods of 4 weeks each so that only 13 panels are used in any one year.) Also, beginning with 1997 data, the sampling weights of some OPDs were permanently trimmed to prevent single OPDs from contributing more than 15% of their region's total to OPD visit estimates. For visits to EDs, the calibration adjustments are based on current ED visit counts recorded in the Verispan Healthcare Market Index and Verispan's "Second Quarter, Hospital Market Profiling Solution" for hospitals in the NHAMCS universe. Starting in 2004, the quarter of the year in which the hospital was assigned was taken into account during the nonresponse adjustment such that the unbiased quarterly estimates were made available.

Revised:

Collecting hospital-based ambulatory surgery data through NHAMCS means that separate national estimates for these providers will be produced. For the 2009 NHAMCS, this will be for the hospital-based ASCs only, but for 2010 we anticipate having national estimates for both the hospital-based and the free-standing ASCs. For the ASC component of NHAMCS, the weighting will be similar to that used for visits to EDs described above.

Sampling Errors

Standard errors are calculated using a first-order Taylor series approximation method as applied in SUDAAN variance software.

3. Methods to Maximize Response Rates and Deal with Nonresponse

Based on the results of the 2004 NHAMCS, the projected response rate for 2007 is approximately 87 percent for the ED and 69 percent for the OPD. Endorsements have been solicited from several prominent national organizations, including the American College of Emergency Physicians, Society for Academic Emergency Medicine, Emergency Nurses Association, American College of Osteopathic Emergency Physicians and the Surgeon General. NCHS has developed a participant web page www.cdc.gov/nhamcs, which gives a brief background on the NHAMCS, as well as provides information regarding selection and participation, confidentiality and privacy, the HIPAA Privacy Rule, new data components, data utilization and contact information.

Data collection procedures are designed to minimize response burden, a major concern and influence on response rates. This survey does require commitment from a large number of persons within each hospital, including the director, clinic and ESA directors, and medical and clerical staff. Refusals to participate may occur at any one of the stages of induction or data collection. At the time of refusal, a refusal report is completed and the Census Bureau Regional Office is notified. Reasons for refusal vary considerably, necessitating refusal conversion procedures which are flexible and responsive to individual concerns. In general, the following survey features are stressed: the data are needed by the hospital and medical professions for a variety of purposes and do not exist elsewhere; all data about hospitals, clinics, and patients are kept confidential; and every effort is made to minimize the disruption of hospital routine. Based on earlier experiences, these features are often persuasive in converting refusals.

For the first time in 2004, changes were made to the nonresponse adjustment factor to account for the seasonality of the reporting period. Extra weights for nonresponding hospitals were shifted to responding hospitals in reporting periods within the same quarter of the year. The shift in nonresponse adjustment did not significantly affect any of the overall annual estimates.

Revised:

As described in Section A. 9, NCHS would like to offer monetary support to hospitals for developing the sampling plan, pulling medical records, and performing data abstraction. During the 2006 NSAS, approximately 15 percent of participating facilities received some payment. Response rates would have been lower without the reimbursement.

4. Tests of Procedures or Methods to be Undertaken

The focus on prevention and treatment of selected chronic conditions in ambulatory visits will be continued in 2007-08 with an emphasis on cancer. The proposed 2007 PRF questions were reviewed and will undergo further evaluation. Consultation was sought from experts within DHHS including AHRQ, ASPE, HRSA, and CDC. Experts from outside the DHHS were also consulted (**Attachment F**).

Revised:

In 2007, NCHS asked the Census Bureau to investigate the expansion of NHAMCS to include ambulatory surgery centers (ASCs) and the affordability of collecting NSAS data on a regular basis. Census field representatives conducted a semi-structured interview with representatives from 3 NHAMCS-participating hospitals in three separate Census Regions to gather information about whether the hospital would agree to provide ASC data on a sample of visits during the 4-week reporting period that was assigned for NHAMCS and if their medical records contained the information needed for this annual survey. The results were encouraging. These facilities recognized the need for data of this type, and its inherent value, and said they would participate so long as the burden on them was minimized. They also indicated that the type of data we would need to collect is available in their systems.

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

The statistician responsible for the survey sample design is:
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The data will be analyzed under the direction of:
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ATTACHMENTS

A. Public Health Service Act, Section 306

B. List of NHAMCS Publications

C. Bioterrorism and Mass Casualty Preparedness in Hospitals: United States, 2003

D. Use of Computerized Clinical Support Systems in Medical Settings: United States, 2001-03

E. 60-day Notice in Federal Register

F. List of Consultants for the 2005-07 NHAMCS

G. CDC #2003-06 IRB Approval for Continuation of Protocol

H. Introductory Letters to NHAMCS Hospitals

I. NHAMCS Endorsing Letters

J. NHAMCS-101 Hospital Induction Form (revised)

K. NHAMCS-101/U Ambulatory Unit Record (revised)

L. NHAMCS-103 Patient Visit Log

M. NHAMCS-124 Sampling & Information Booklet

N. NHAMCS Emergency Department Patient Record form (revised)

O. NHAMCS Outpatient Department Patient Record form (revised)

P. NHAMCS-122 Emergency Service Area Instruction Booklet

Q. NHAMCS-123 Outpatient Department Clinic Instruction Booklet

R. NHAMCS-906 Cervical Cancer Screening Supplement

S. Introductory Letter to NHAMCS ASC Hospitals (new)

T. NHAMCS Ambulatory Surgery Center Patient Record Form - 100(ASC) (new)

U. NHAMCS-126 Ambulatory Surgery Center Instruction Booklet (new)