Supporting Statement A for Request for Clearance:

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

OMB No. 0920-0278

(Expires 12/31/2014)

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SUPPORTING STATEMENT

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

The National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) requests a revision to an approved data collection, the ongoing National Hospital Ambulatory Medical Care Survey (NHAMCS) (OMB No. 0920-0278, expiration 12/31/2014). Clearance is now being sought to continue the survey activities for NHAMCS for 3 years.

NHAMCS is a national survey of hospital ambulatory medical care conducted by NCHS. One of NCHS’s missions is to monitor health, and NHAMCS supports this mission by collecting data on patient visits to emergency departments (EDs), outpatient departments (OPDs), ambulatory surgery locations (ASLs) of general and short-stay hospitals. As part of a broad data strategy for survey integration, NCHS began a plan to integrate NHAMCS into the new National Hospital Care Survey (NHCS) back in 2013 (OMB No. 0920-0212, expires 4/30/2016). Due to budgetary and recruitment concerns, we feel it is prudent to ensure the continuation of NHAMCS in the event that NCHS encounters difficulty in carrying out the NHCS.  As the plans for integration of NHAMCS into NHCS are still being developed, we felt it was best to request clearance for NHAMCS beyond 2014.  Once plans for the NHCS are finalized and integration of NHAMCS is certain, NCHS will submit to OMB a request to discontinue all NHAMCS survey activities.

Approval is requested for the following data collection activities:

* Continue collection of facility and patient information from hospital EDs, OPDs, and ASLs for the year 2015, 2016 and 2017.
* Minor adjustments to ED, OPD, and ASL Patient Record forms, including modifying items based on responses in previous survey years.
* Approval to make relatively small modifications to the survey instruments from 2015 to 2017 through the submission of OMB nonsubstantive change requests.

**A. Justification**

# 1. Circumstances Making the Collection of Information Necessary

Background

The National Hospital Ambulatory Medical Care Survey (NHAMCS), initiated in 1992, supports NCHS’s mission to monitor health by providing data on utilization at hospital emergency departments (EDs), outpatient departments (OPDs), and ambulatory surgery locations (ASLs). The need for more complete ambulatory medical care data has been driven by changes in the health care system which in turn are influenced by factors such as increasing efforts to contain costs and improve access and health care quality; the rapidly aging population; the introduction of new medical technologies; the adoption of electronic health records; and the expansion of health care coverage to the growing number of persons without health insurance. As a result of these societal, technological and policy changes, there has been considerable diversification in the financing, organization, and delivery of ambulatory medical care as manifested by the proliferation of managed care, insurance, and benefit alternatives for individuals; the development of new forms of physician group practices and practice arrangements; and growth in the number of emerging fields of medicine, such as pain management and ambulatory surgery. The data needed to evaluate the performance of the U.S. health care system in terms of the way in which ambulatory health care is organized, financed, and delivered and to track health care trends can be provided by NHAMCS. NHAMCS data collection is authorized under Section 306 of the Public Health Service Act (42 U.S.C. 242k) (Attachment A).

New/modified activities planned for the 2015-2017 survey period

Minor changes were made to the NHAMCS Patient Record forms based on recommendations from experts at NCHS and after careful consideration of previously collected data. The PRFs for the Emergency Department (ED) and the Outpatient Department (OPD) were updated for certain questions and answer choices to standardize the wording of injury questions and patient conditions. Fields for entering Current Procedural Terminology (CPT) were also added to the OPD PRF; this change was previously made to the NAMCS PRF and is now being integrated into the OPD PRF. The Ambulatory Surgery PRF was updated to include the option to provide CPT and ICD-9 Procedural codes.

# 2. Purpose and Use of Information Collection

NHAMCS data are widely used by all agencies of the Public Health Service and other government, academic and private research organizations in tracking changes in hospital-based ambulatory health care. These data complement those from the National Ambulatory Medical Care Survey (NAMCS) (OMB No. 0920-0234) to provide a complete description of ambulatory health care utilization in the United States. A negative consequence of not having information collected in the NHAMCS is that there would be a paucity of hospital-based ambulatory health care data to monitor health care reform efforts and changes in payment policies before, during, and after the restructuring of the health care system.

Ambulatory medical care is the predominant method of providing health services in the United States. NHAMCS is an ongoing survey and was initiated in 1992 to obtain information on how such care was rendered in hospital EDs and OPDs. Data collection on ambulatory patient visits to physicians' offices began through the NAMCS in 1973 and has been conducted annually since 1989. Although NAMCS provides a wide range of data describing the public's use of physician services, it is limited to patient visits to office-based physicians, thus omitting visits to hospitals which represent a significant segment of total ambulatory medical care. Valid data concerning both office and hospital ambulatory medical care are needed to make rational decisions for the allocation of resources and training of health professionals, to aid in efforts to control health care costs, monitor quality of care, and to plan for the provision of ambulatory medical care. According to the 2011 NHAMCS, the estimated number of U.S. hospital ED and OPD clinic visits were 136,296,000 and 125,721,000, respectively. In 2011, there were an estimated 16,229,500 visits to hospital-based ambulatory surgery locations. Annual data on ED and OPD visits collected from 1992-2011 are available to the public.

In addition to the sampled patient encounter information collected in the NHAMCS, information about the hospital is also obtained. Requests from government agencies to collect more information via special supplements have been made since 2002. Previous special supplements include Emergency Pediatric Services and Equipment, Pandemic and Emergency Response Preparedness, and Cervical Cancer Screening.

Users of NHAMCS data include Congress and federal government agencies, (e.g., the Government Accountability Office; the DHHS Office of the Assistant Secretary for Planning and Evaluation (ASPE); the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA); CDC’s National Center for Injury Prevention and Control, Coordinating Center for Infectious Diseases, and National Center for Chronic Disease Prevention and Health Promotion); state and local governments; medical schools; schools of public health; colleges and universities; private businesses; non‑profit foundations and corporations; professional associations; and health maintenance organizations, as well as individual practitioners, researchers, administrators, and health planners.

NHAMCS data are cited frequently to describe quality of care and to assess utilization. Recent journal articles using NHAMCS data have been published on the following topics: ethnic disparities in the management of trauma patients; uninsured adults presenting to the ED; quality of care for pediatric respiratory illness seen in the ED; and screening and diagnostic testing for women seen in OPD clinics. Academic researchers have used the NHAMCS to analyze the following topics: hypertension management, emergency department visits for antibiotic-associated adverse events, inappropriate use of antibiotics for acute asthma, and opioid prescription trends (see Attachment B for a list of publications).

The information collected on patient visits to hospital EDs, OPDs, and ASLs complements the current NAMCS data on office‑based ambulatory care. Hospital ambulatory medical care data are used for (a) descriptive analyses of the content of hospital ambulatory medical care; (b) comparative analyses of the content of medical care provided in the hospital and office-based settings; (c) trend analyses of visits to hospital EDs and/or OPDs; (d) analyses of facility-level data; and (e) modeling to predict treatment and the use of services. Examples of uses of NHAMCS data follow:

Descriptive analyses: The NCHS Data Brief (NCHS 2014), entitled “Injury-related Emergency Department Visits by Children and Adolescents: United States, 2009-2010” reported that the injury-related ED visit rate was 151 per 1,000 persons aged 18 years and under, and rates were higher for males than for females for all age groups (0-4 years, 5-12 years, and 13-18 years). The injury-related ED visit rates among persons aged 5-12 years and 13-18 years were higher for non-Hispanic black persons than for other race and ethnicity groups. Leading causes of injury-related ED visits among both males and females included falls and striking against or being struck unintentionally by objects or persons. Visit rates were higher for males than for females for both of these causes. (Available at: http://www.cdc.gov/nchs/data/databriefs/db150.pdf).

Comparative analyses: A study published in the American Journal of Rhinology and Allergies entitled, “Medications prescribed at ambulatory visits for nasal polyposis” looked at medication prescribing rates. Patients with a diagnosis of nasal polyps were prescribed nasal steroids (43.7%), oral steroids (26.9%), antibiotics (26.0%), and oral antihistamines (18.5%). Medication use rates for nasal steroids, oral steroids, oral antihistamines, and antibiotics were 36.3, 25.9, 15.3, and 22.2% respectively for otolaryngology visits with analogous medication use rates for 57.1, 28.8, 24.2, and 32.9% respectively for non-otolaryngology visits. (Am J Rhinol Allergy. 2013 Nov;27(6):479-81).

Visit trend analyses: A cross-sectional analysis reported in Current Medical Research and Opinion examined the national trend in outpatient office visits and treatment prescribed for osteoporosis by primary care providers (PCPs) and non-PCPs in the United States from 2002 to 2008. The majority of patients in these visits were women (89%), between 65 and 84 years of age (56%), of non-Hispanic (88%) and White (81%) ethnic/racial backgrounds and had Medicare (51%) as the source of payment. Almost half (49.5%) of the visits were made to the PCPs. Non-PCPs were more likely to have prescribed bisphosphonates (p < 0.05) during an osteoporosis-related visit compared to PCPs (odds ratio:1.81, 95% CI: 1.12-2.92). (Curr Med Res Opin. 2013 Aug;29(8):881-8)

Facility-level data analyses: A report entitled “Electronic health record use and preventive counseling for US children and adolescents,” published in Journal of the American Medical Informatics Association assessed whether rates of preventive counseling delivered at well child visits (WCVs) differ for practices with basic, fully functional, or no electronic health record (EHR). Practices with fully functional EHRs documented delivery of 34% more counseling topics than those without an EHR. Well child visits with a fully functional EHR lasted 3.5 more minutes than those with a basic EHR. Overall, for each additional 10 min, 12% more topics were covered, regardless of EHR functionality. (J Am Med Inform Assoc. 2013 Sep 6)

Modeling to predict treatment: Data from NHAMCS was used in a report in the American Journal of Emergency Medicine to determine predictors of non-opioid receipt for non-malignant pain. The adjusted odds of non-opioid rather than opioid receipt were greater among visits for patients 18 to 24 years old (odds ratio [OR] 1.35, CI 1.24-1.46), receiving fewer medicines (OR 2.91, CI 2.70-3.15) and those with a diagnosis of mental illness (OR 2.24, CI 1.99-2.52) (Am J Emerg Med. 2014 May;32(5):421-31)

# 3. Use of Improved Information Technology and Burden Reduction

Respondent burden in current data collection is held to a minimum through the use of sampling procedures at both the hospital and patient level.

Improved information technology has significantly reduced the burden for NHAMCS respondents when answering induction interview questions since automation of the survey in 2012. Using a computer assisted interviewing instrument of the induction interview allows Field Representatives (FRs) to skip unneeded questions, quickly populate write-in fields with drop-down menus, and eliminate the need for paper flash-cards that highlight item choices. As a result, the time a respondent spends during the induction interview has been significantly reduced.

The use of a computerized data entry system for Patient Record form (PRF) data has also greatly simplified the data collection activities by reducing data entry errors and omissions, as well as providing on-screen look-up tables for items such as reason for visit, diagnosis, and medications. Overall, using a computerized data entry system has significantly reduced FR and respondent burden, and ultimately improved overall data quality.

There are no legal obstacles to reducing the burden.

# 4. Efforts to Identify Duplication and Use of Similar Information

Based on previous work at NCHS and discussions with other government and professional organizations, five sources of related data were identified.

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| --- | --- | --- |
| **Survey** | **OMB No.** | **Agency** |
| National Electronic Injury Surveillance System, All Injury Program (NEISS AIP) | Not applicable | Consumer Product Safety Commission (CPSC) and CDC |
| National Health Interview Survey (NHIS) | 0920-0214 | National Center for Health Statistics (NCHS) |
| Medical Expenditure Panel Survey (MEPS) | 0937-0187 | Agency for Healthcare Research and Quality (AHRQ) |
| State Emergency Department Databases (SEDD) | Not applicable | Agency for Healthcare Research and Quality (AHRQ) |
| State Ambulatory Surgery Databases (SASD) | Not applicable | Agency for Healthcare Research and Quality (AHRQ) |

The Consumer Product Safety Commission (CPSC) operates the National Electronic Injury Surveillance System (NEISS) in 64 hospital EDs in the United States.  Beginning in 2000, CDC established an interagency agreement with CPSC to conduct the NEISS All Injury Program (NEISS AIP).  The NEISS AIP is designed to provide national incidence estimates of all types and external causes of nonfatal injuries and poisonings treated in U.S. hospital EDs. This expansion boosts the percent of covered ED visits from 15% to about 34%.  Illness-related ED visits are not covered by this surveillance system; therefore, the use of this system for examining utilization of medical care issues regarding hospital ED visits is very limited. NHAMCS data are used by the NEISS AIP to benchmark their statistics.

The National Health Interview Survey (NHIS) is a population-based survey in which information is obtained through household interviews. In addition to the recall problem that may be associated with household respondents, respondents cannot provide the detailed medical information about diagnoses, diagnostic procedures, medications, or therapeutic procedures that are collected in the NHAMCS.

The Medical Expenditure Panel Survey (MEPS) Household Component, based on a subsample of households in NHIS, provides nationally representative data on health care utilization, expenditures, insurance coverage, sources of payment, and access to care measures at the individual and family level. MEPS is sponsored by AHRQ and co-sponsored by NCHS/CDC. MEPS has a linked Medical Provider Survey that acquires more detailed information on the sources of payment and the associated medical procedures and medical diagnoses that characterize the medical events that the household respondents have experienced. MEPS is a household based complex sample survey of the civilian noninstitutionalized population and health care use data are reported by household respondents. NHAMCS is a provider-based survey with a slightly broader population, covering homeless and institutionalized populations. Health care utilization estimates will differ between MEPS and NHAMCS due to different survey methodologies and various sources of error (sampling and nonsampling).

The State Emergency Department Databases (SEDD) are a set of databases, from data organizations in participating States, that capture discharge information on all ED visits that do not result in an admission. Information on patients initially seen in the ED and then admitted to the hospital is included in the State Inpatient Databases (SID). SEDD and SID are sponsored by AHRQ. Thirty-one states now participate in the SEDD and data files are available beginning with data year 1999. SEDD contain clinical and resource use information included in a typical discharge abstract, such as, all-listed diagnoses, all-listed procedures, patient demographics, and expected payment sources; however, NHAMCS variables such as reason for visit, external cause of injury, and medications are not included. Data collected from SEDD varies from state to state, whereas NHAMCS data collection procedures are standardized nationwide.

The purposes of all of these data collection systems and the contents and utility of the resulting data are distinctly different from those of the proposed data collection. NEISS is limited to specific public health problems, while NHAMCS has the broadest coverage of all the surveys described. NHIS and MEPS are population-based instead of provider-based surveys. MEPS data cannot be used to make estimates of the frequency of treatment and do not provide the breadth of information available from NHAMCS. Data from SEDD are not nationally representative and do not contain the level of detail about the ED visit as that captured on the NHAMCS Patient Record form (e.g., medications, verbatim reason for visit, and cause of injury). Consequently, the information available from these systems is not adequate for the needs described earlier, and cannot be used as an alternative to the proposed data collection.

Individual states have made varying progress in recent years in collecting ambulatory surgery data. Thirty-two states collect data on ambulatory surgery through the State Ambulatory Surgery Databases (SASD). Also, the format and data elements used in different states vary. Some states collect only aggregate data at the facility level; others have implemented one-time or periodic surveys to collect a limited amount of ambulatory surgery data. In view of states’ budgetary constraints, they are struggling to maintain existing data programs rather than planning any expansions.

The State Ambulatory Surgery Databases (SASD) system, a part of AHRQ’s Health Care Utilization Project (HCUP), includes ambulatory surgery data from some states which have been put together in a uniform data format. SASD does not have data on all 50 states, and even with the state data they have, there are serious gaps. The gaps and problems with individual states’ data described above are carried over into the SASD system. The data from SASD are not nationally representative. In addition, because of the state budgetary problems, there is a great deal of uncertainty about the number of states that will be willing and able to continue to provide data to SASD in the future.

# 5. Impact on Small Businesses or Other Small Entities

Some NHAMCS respondents are small hospitals. In order to reduce respondent burden for all respondents, several data collection methodologies are used. These methods are designed to be flexible to meet the varied reporting and record keeping situations found in emergency service areas, clinics, and ASLs. Patient visit sampling is used in each of these settings to minimize data collection workload. The data collected on each patient visit are limited to a minimum number of items which adequately describe the utilization of hospital ambulatory medical and surgical care. Field representatives will do data abstraction on laptops with computerized Patient Record forms. If the facility prefers to complete the Patient Record forms, they can complete the forms on a secure web-based system accessible from any computer with Internet. If they do not have their own computer, they will be given access to a laptop with the computerized PRF, which will facilitate data collection. Field representatives monitor reporting and assist staff in data collection.

# 6. Consequences of Collecting the Information Less Frequently

The rapidly changing environment in hospital ambulatory health care delivery and the current interest in health care reform lend importance to having annual data for decision making; describing the use of hospital ED, OPD, and ASL services; monitoring the effects of change; and planning possible changes in payment policies. This information has become even more crucial with the need to track the effects of the health care industry’s evolution, by having continuous data collection before, during, and after policy change and possible restructuring. Since data from the surveys are often analyzed by combining data across years, the potential consequence of less frequent data collection is loss of ability to study issues such as ED crowding, antibiotic use, preventive services, or any of the other analytic examples presented in the package. Respondents will be asked to participate in data collection every 15 months. There are no legal obstacles to reducing the burden.

# 7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

There are no special circumstances applicable to this survey.

# 8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

**a. Federal Register Notice**

The agency’s 60-day notice for NHAMCS appeared in the *Federal Register* on Thursday**,** August 21, 2014,Vol. 79, No. 162, pp. 49520-49521. One comment was received and the standard CDC response was sent (Attachment C).

**b. Efforts to Consult Outside the Agency**

The NHAMCS is an ongoing survey and experts are consulted on survey advice as needed. As the survey is fairly consistent from year to year, consultants are not solicited for every survey year, but are contacted when major changes are made to the survey. Numerous individuals both within and outside CDC have consulted on the NHAMCS (Attachment D). NHAMCS was also reviewed by ASPE.

NCHS will continue to work closely with these individuals and agencies. There are no outstanding unresolved issues.

# 9. Explanation of Any Payment or Gift to Respondents

NHAMCS will not offer a payment or gift to respondents for participation.

# 10. Assurance of Confidentiality Provided to Respondents

This submission has been reviewed by the NCHS Privacy Act Coordinator and the NCHS Confidentiality Officer who determined that the Privacy Act does apply. The legal authority for NHAMCS data collection is Section 306 of the Public Health Service Act (42 U.S.C. 242k). The applicable System of Records Notice is 09-20-0167 Health Resources Utilization Statistics.

An assurance of confidentiality is provided to all respondents according to Section 308 (d) of the Public Health Service Act (42 USC 242m) which states:

"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,..."

In addition, legislation covering confidentiality is provided according to Section 513 of the Confidential Information Protection and Statistical Efficiency Act (PL 107-347) which states:

“Whoever, being an officer, employee, or agent of an agency acquiring information for exclusively statistical purposes, having taken and subscribed the oath of office, or having sworn to observe the limitations imposed by section 512, comes into possession of such information by reason of his or her being an officer, employee, or agent and, knowing that the disclosure of the specific information is prohibited under the provisions of this title, willfully discloses the information in any manner to a person or agency not entitled to receive it, shall be guilty of a class E felony and imprisoned for not more than 5 years, or fined not more than $250,000, or both.”

A routine set of measures are in place to safeguard the confidentiality of NHAMCS. Confidential data will be treated in a secure manner and will not be disclosed. All staff with access to confidential information are given instruction by NCHS staff on the requirement to protect confidentiality, and are required to sign a pledge to maintain confidentiality. Only such authorized personnel are allowed access to confidential records, and only when their work requires it. When confidential materials are moved between locations, records are maintained to ensure that there is no loss in transit, and personally identifiable information is shipped separately from providers’ contact information. When confidential information is not in use, it is stored in secure conditions. Automation of the survey, which began in 2012, has greatly decreased the risk of losing confidential information, as all survey data are collected on a secure laptop and are always encrypted before transmittal.

In keeping with NCHS policy, NHAMCS data are made available via public-use data files to the public. Confidential data, however, are never released to the public. All personal identifiers such as hospital name, address, and patient date of birth, are removed from the public release files. Outside researchers have access to items not available on the public use files through the Research Data Center, including zip code linked income, education, or urbanicity status. Users are not allowed to remove data files and cannot use data to identify patients or providers. All data releases are reviewed and approved by the NCHS Disclosure Review Board to avoid data breaches, such as release of detailed geographic information that may allow sponsors to identify individuals in the general population.

An ambulatory health care data website dedicated to NHAMCS (http://www.cdc.gov/nchs/ahcd/nhamcs\_participant.htm) describes the survey, answers questions respondents may have on why they should participate, and describes how the Privacy Rule permits data collection for NHAMCS.

**10.1 Privacy Impact Assessment Information**

Overview of the Data Collection System

The target universe of NHAMCS is in-person visits made to EDs, OPDs, and ASLs of non-Federal, short-stay hospitals (hospitals with an average length of stay of less than 30 days) or those whose specialty is general (medical or surgical) or children’s general. Facility-level data are collected via telephone and personal interviews with hospital staff through computer-assisted personal interviews (CAPI). The patient visit data is abstracted from medical records onto electronic Patient Record forms. Completed induction and Patient Record data are encrypted and transmitted via a secure network to the US Census Bureau and transmitted through the CDC’s Secure Access Management Services network (SAMS) to NCHS.

Items of Information to be Collected

The following facility-level data will be collected from hospitals:

* Eligibility criteria (ownership, licensing, specialty)
* Expected number of visits
* Number of treatment spaces
* Use of electronic medical records

Patient visit data to be collected include:

* Medical record number
* Demographic information (age, gender, race, ethnicity, etc.)
* Sources of payment
* Reason for visit
* Diagnosis
* Diagnostic/screening services
* Procedures
* Medications
* Providers
* Disposition

The NHAMCS and related supplements collect a variety of information on hospital, visit, and EHR system characteristics. While the majority of the data collected is not considered personally identifiable, a few pieces of information fit the definition of Information in Identifiable Form (IIF). A list of all IIF data items is provided below, and all were previously approved by OMB. No IIF data are released on public-use files.

IIF Categories:

* Facility names
* Facility addresses
* Facility telephone numbers
* Contact name
* Medical record number and date of birth

The automation of the survey has eliminated the need to record potentially identifiable information on paper. Medical record numbers are entered into the computerized instruments and are only used for survey operations purposes. The medical record number aids field representatives in abstracting data from the various record systems in the facility. The medical record number may also be used during reabstraction efforts to verify the quality of initial abstraction. Once the case is complete and the data are ready to be transmitted to NCHS, medical record number will be wiped from the dataset and will not be retained beyond that time.

The NHAMCS data collection plan was approved by CDC’s IRB/NCHS ERB (Protocol #2010-03) based on 45 CFR 46. In addition, the ERB granted (1) a waiver of the requirement to obtain informed consent from the patient, and (2) in accordance with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Regulation (45 CFR 164.512), a waiver of patient authorization for release of patient medical record data by health care providers. Most recently, a “Request for Continuation to conduct the NHAMCS” was approved through December 21, 2014 (Attachment E).Approved materials included an introductory letter from the NCHS director informing the facility administrator that their participation in the NHAMCS is voluntary and that there would be no effect on the respondents for not participating.

# 11. Justification for Sensitive Questions

In order for some key analyses to be possible, it is necessary for the NHAMCS to collect some protected health information, such as date of visit, birth date, and zip code. Also, in some cases when the Census Bureau’s Field Representatives (FR) abstract the data from the medical record, the patient’s name may be disclosed to the FR in the process of collecting the survey data. Strict procedures are utilized to prevent disclosure of identified NHAMCS data. At no time are the patients contacted to obtain information.

After the data are collected from the facilities and processed, a file of the sample visits will be sent to NCHS. The only identifiable elements on the file are date of visit, zip code, and birth date. For the public use files, date of visit is converted to month and day of week, birth date is converted to patient’s age, and zip code is deleted. Patient’s zip code is used internally to match the visit data to characteristics of the patient’s residential area, such as median household income or percent of population who are high school graduates.

Medical Record Number

Starting in 2012, we began collecting medical record numbers for internal survey operations purposes. The medical record number is collected in the Patient Record form instrument to aid the field representative in abstracting data from the various record systems in the facility. Some facilities maintain patient visit information in more than one electronic or paper system, and the medical record number would help the field representative to ensure that they are abstracting data for the correct patient. After the case is transmitted and the medical record number is no longer necessary, the medical record numbers will be deleted from the dataset. NCHS never receives any medical record number.

The medical record number is also used for reabstraction efforts, where a second field representative revisits a subset of sampled hospitals to reabstract patient visit information to check data quality. In such a situation, the medical record number is used in identifying the exact patient visits that were originally abstracted. During this stage of data collection, medical record numbers are maintained by the contractor on a separate file to facilitate record selection.

# 12. Estimates of Annualized Burden Hours and Cost

**a. Burden Hours**

This submission requests OMB approval for three years of NHAMCS data collection. The burden for one complete survey cycle is 4,412 hours and is summarized in the table below.

Each hospital will be asked to complete a Hospital Induction Interview. Approximately 458 hospitals will be asked to complete the hospital induction questionnaire (Attachment H.1). A complete induction will take one and a half hours. This results in an overall response burden of 687 hours.

At each of the participating hospitals in the original sample, we will approach the ED, OPD, and any hospital-based ASLs and will induct ambulatory units from each. Ambulatory units within the ED are called emergency service areas (ESAs), and within the OPD they are called clinics. Ambulatory surgery units within hospitals are referred to as ASLs. Each unit in the hospital will be inducted through the Ambulatory Unit Induction questions (Attachment I) of the computerized instrument, which takes about fifteen minutes to complete. In years past, NHAMCS has typically had approximately 1,750 sampled ambulatory units, with a total annual burden of 438 hours.

From each department in the hospital, a set number of PRFs will be targeted for abstraction. Patient Record forms will be completed by Census bureau staff or facility staff on a computerized Patient Record form.

Approximately 100 ED PRFs (Attachment J) will be targeted for completion in each of the approximately 325 participating EDs. Based on preliminary data from 2012 and 2013, we anticipate that 90% of EDs will allow a Field Representative to abstract the patient record data. In the 292 EDs where the Field Representative abstracts the data, a burden of 1 minute will be incurred by the hospital for every patient record that the hospital’s medical record clerk has to retrieve (including in line 6 of table). An average of approximately 33 EDs will complete their own forms, which take 7 minutes to complete. The total annual burden for the hospital staff to complete the ED PRFs is 385 hours.

In each OPD, 200 PRFs (Attachment K) will be targeted. Among the approximately 225 outpatient departments expected in our sample, we anticipate that 23 OPDs (10%) will complete their own PRFs. Each OPD PRF will take 14 minutes to complete, and the total annual burden for the hospital staff to complete the OPD PRFs is 1,073 hours. The PRFs from the remaining 202 OPDs will be abstracted by Census staff, but will require 1 minute of burden for each patient record that the hospital’s medical record clerk has to retrieve (included in line 6 of table).

Hospitals with participating ASLs will be asked to complete approximately 100 PRFs for ambulatory surgery visits (Attachment L). One form will take 7 minutes to complete, and 23 ASLs are expected to complete the forms without assistance. The total annual burden for the staff to complete the Ambulatory Surgery (AS) PRF is 268 hours. Census staff will abstract the PRFs for the remaining 202 ASLs. The burden to the medical record clerk is 1 minute per form (included in line 6 of table).

As noted, a portion of the Patient Record forms will be abstracted by Census staff. The burden to Census staff is not included in the burden table. The burden to the respondent will be 1 minute per PRF, as the medical record clerk will have to pull and re-file the records for abstraction. Given there is 1 medical clerk at each ED (n=292), OPD (n=202), and ASL (n=202), a total of 696 medical record clerks will have to pull and re-file an average of 133 PRFs. At an average of 1 minute per record, the total annual burden to medical record clerks is 1,543 hours (Attachment P).

The last two rows of the burden table correspond to reabstraction activities. Reabstraction activities involve returning to a subsample of participating hospitals to reabstract patient record data in order to verify the consistency of the data abstracted. Approximately 5% of completed hospital cases will be randomly selected for reabstraction (n=24). For each selected hospital, one ambulatory unit will be selected from each department (n=72). First, a telephone call will be made to the ancillary service executive of the selected hospital ambulatory unit to obtain permission to return to the facility. This phone call will take approximately 5 minutes. The overall burden to respondents is 6 hours. Line 7 refers to the burden placed upon the hospital staff for those calls. Line 8 refers to the medical record clerk that will have to pull the patient records a second time. One medical record clerk from each ambulatory unit (one each from ED, OPD, and ASL) will have to pull 10 records each. On average, one record will incur 1 minute of burden. With 720 records to be pulled, it is estimated that the burden to the respondents will be 12 hours.

**Table 12-A. Annualized Burden to Respondents**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type of Respondent** | **Form Name** | **No. of Respondents** | **No. of Responses per Respondent** | **Average Burden per Response**  **(in hours)** | **Total Response Burden**  **(in hours)** |
| Hospital Chief Executive Officer | Hospital Induction | 458 | 1 | 90/60 | 687 |
| Ancillary Service Executive | Ambulatory Unit Induction | 1,750 | 1 | 15/60 | 438 |
| Physician/  Registered Nurse/ Medical Record Clerk | ED[[1]](#footnote-1) Patient Record form | 33 | 100 | 7/60 | 385 |
| Physician/  Registered Nurse/ Medical Record Clerk | OPD1 Patient Record form | 23 | 200 | 14/60 | 1,073 |
| Physician/  Registered Nurse/ Medical Record Clerk | ASL1 Patient Record Form | 23 | 100 | 7/60 | 268 |
| Medical Record Clerk | Retrieving Patient Records (ED, OPD, and ASL) | 696 | 133 | 1/60 | 1,543 |
| Ancillary Service Executive - Reabstraction | Reabstraction Telephone Call | 72 | 1 | 5/60 | 6 |
| Medical Record Clerk - Reabstraction | Retrieving Patient Records (ED, OPD, and ASL) | 72 | 10 | 1/60 | 12 |
|  | | | | Total | 4,412 |

**b. Burden Cost**

The average annual response burden cost for the NHAMCS is estimated to be $264,779 for each survey year. The hourly wage estimate for the Hospital Induction interview and the Patient Record form for hospital executives was based on the Hay Group’s Hospital Compensation Survey; for other hospital employees it was based on information from the mean hourly rate for physicians (general medicine/obstetricians/gynecologists/internists), physician assistants/nurse practitioners, registered nurses, and medical secretaries published by the Bureau of Labor Statistics May 2013 National Occupational Employment and Wage Estimates (http://www.bls.gov/oes/2013/may/oes\_nat.htm) .

All mean hourly rates were then adjusted according to the yearly compensation inflation rates provided by the Bureau of Labor Statistics. The average annual hourly wage was determined by assuming that 10% of the Patient Record forms will be completed by physicians, 30% by nurses, and 60% by clerks.

**Table 12-B. Annualized Burden Cost**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Respondent** | **Form Name** | **Response burden hours** | **Hourly wage rate** | **Respondent cost** |
| Hospital Chief Executive Officer | Induction, NHAMCS-101 | 687 | $177.18 | $121,723 |
| Ancillary Service Executive | Ambulatory Unit Induction, NHAMCS-101U | 438 | $86.47 | $37,874 |
| Physician/Registered Nurse/ Medical Record Clerk | ED Patient Record, NHAMCS-100 ED[[2]](#footnote-2) | 385 | $40.03 | $15,412 |
| Physician/Registered Nurse/ Medical Record Clerk | OPD Patient Record, NHAMCS-100 OPD2 | 1,073 | $40.03 | $42,952 |
| Physician/Registered Nurse/ Medical Record Clerk | ASL Patient Record, NHAMCS-100 ASL2 | 268 | $40.03 | $10,728 |
| Medical Record Clerk | Retrieving medical records | 1,543 | $23.12 | $35,674 |
| Medical Record Clerk | Re-abstraction telephone call | 6 | $23.12 | $139 |
| Medical Record Clerk | Retrieving medical records (Re-abstraction) | 12 | $23.12 | $277 |
| TOTAL | | | | $264,779 |

# 13. Estimates of Other Total Annual Cost Burden to Respondents and Record keepers

There are no annual capital or maintenance costs to the respondent resulting from the collection of information for this project.

# 14. Annualized Cost to the Government

The estimate of average annual cost for the 2015, 2016, and 2017 NHAMCS is as follows:

$4,816,627 Interagency agreement for data collection with Bureau of the Census

$ 55,000 Printing of public relations materials and reports

$ 653,350 Contract (to conduct receipt and control operations, medical coding, data entry, and keying/coding quality control)

$ 764,229 Sponsoring agency expenses (salaries, benefits, and other misc.)

$6,289,206 Total cost for 12 months

# 15. Explanation for Program Changes or Adjustments

The current approved burden is 7,352 hours based on a nonsubstantive change approved on November 5, 2013. The annual burden has been further reduced due to the increased emphasis on FR abstraction. The overall annualized burden has decreased by 2,940 hours to 4,412 hours for 2015-2017.

# 16. Plans for Tabulation and Publication and Project Time Schedule

Data will be presented separately for ED visits, OPD visits, and ambulatory surgery visits. Plans for data analysis will parallel the analysis completed for the NAMCS because the data elements in the OPD and NAMCS are similar. For example, data will be presented in the following tables: patient visits by age, sex, and race; expected source(s) of payment; principal reason for visit; primary diagnosis; diagnostic service; disposition; and provider type seen. NCHS plans to publish the data in its *Data Brief* reports.Follow links for samples of NHAMCS reports(ED) **http://www.cdc.gov/nchs/data/databriefs/db150.htm** and (OPD) **http://www.cdc.gov/nchs/data/databriefs/db47.pdf.** In addition, there are plans to produce reports comparing data from the NAMCS and NHAMCS and combining data from both surveys. A list of selected NHAMCS publications can be found in Attachment B.

NHAMCS collection of ambulatory surgery data began in 2009, and analysis of the data is forthcoming. The types of reports and tables produced will be similar to the OPD report referred to above. Data will be published in an NCHS *Data Brief* report. Data will be presented on the type, number, and rate of surgeries by age and sex, and by expected source of payment. In addition, data on diagnostic categories for surgery patients by age and sex will be included. Plans are to prepare articles for professional journals, special reports, and presentations for meetings and conferences of professional organizations, such as the American Public Health Association, Academy Health, the Ambulatory Surgery Center Association, and the Society for Ambulatory Anesthesia.

Annual public use NHAMCS files containing the ambulatory surgery data will be available on CD-ROMS and on the NCHS website: [**http://www.cdc.gov/nchs/nhamcs.htm**](http://www.cdc.gov/nchs/nhamcs.htm)**.**

The estimated timetable for key activities for the 2015 survey is as follows:

|  |  |
| --- | --- |
| Time after clearance |  |
| -- | Receive OMB clearance |
| Immediate | Begin data collection for 2015 survey |
| 4 months | Begin internal data editing |
| 12 months | End data collection year |
| 15 months | Close out field work |
| 17 months | End data processing by contractor |
| 17 months | End internal data editing |
| 18 months | Begin data analysis |
| 20 months | Publish first NCHS Data Brief |
| 2 years | Public use data available on Internet |

# 17. Reason(s) Display of OMB Expiration Date is Inappropriate

Not applicable

# 18. Exceptions to Certification for Paperwork Reduction Act Submissions

The data encompassed by this project will fully comply with all guidelines of 5 CFR 1320.9 and no exception is requested to certification for Paperwork Reduction Act Submission.

1. ED = Emergency department, OPD = Outpatient department, ASL = Ambulatory Surgery location [↑](#footnote-ref-1)
2. ED = Emergency department, OPD = Outpatient department, ASL = Ambulatory Surgery location [↑](#footnote-ref-2)