

Supporting Statement A Request for Reinstatement with Change:  
NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

OMB No. 0920-0278  
(Discontinued 02/28/2018)

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SUPPORTING STATEMENT  
NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

**Goal of study:** The National Hospital Ambulatory Medical Care Survey (NHAMCS) was designed to assess the utilization of ambulatory services at emergency departments (ED), outpatient departments (OPD), and ambulatory surgery locations (ASL) in the United States. Starting in 2018 NHAMCS will only assess health care services in the ED. This survey will be replaced by the National Hospital Care Survey (NHCS) once there is a sufficient number of hospitals participating in NHCS to ensure reliable national estimates can be made.

**Intended use of the resulting data:** These 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 in the United States.

**Methods to be used to collect:** NHAMCS is a multi-stage probability survey and sampling begins with the selection of certain Primary Sampling Units (PSU). The next level involves selection of certain representative hospitals within those PSUs, and then the selection of eligible emergency departments (EDs) within those hospitals, and finally the selection of patient visits to the ambulatory service areas within those departments. Data collection is done using a computerized instrument on a secure laptop.

**The subpopulation to be studied:** Non-federal, non-institutional, short stay (<30 days) hospitals, and hospitals specializing in general and medical, maternity, children's general, or long term acute care, that have an emergency department and at least 6 beds assigned for inpatient use. Beginning in 2018, the study population will be limited to hospitals that have an ED, as opposed to an ED, OPD, and ASL as was the case in prior years.

**How the data will be analyzed:** NHAMCS data are derived by using a multistage estimation procedure. Public-use files will be made available for visit level data, and facility or provider level data are only accessible through the Research Data Center (RDC).

The National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) requests a reinstatement with change to an approved data collection for the ongoing National Hospital Ambulatory Medical Care Survey (NHAMCS) (OMB No. 0920-0278, Exp. Date: 02/28/2018). Clearance is now being sought to continue the survey activities for another 3 years.

NHAMCS is a national survey of ambulatory medical care provided at hospitals, and it is conducted by NCHS. One of NCHS's missions is to monitor health, and NHAMCS was designed to support this mission by collecting data on patient visits to emergency departments (EDs), outpatient departments (OPDs), and ambulatory surgery locations (ASLs) of short-stay hospitals, and hospitals specializing in general and medical, maternity, children's general, or long term acute care. We plan on conducting NHAMCS only until the National Hospital Care Survey (NHCS) (OMB No. 0920-0212, Exp. Date: 01/31/2019) is able to provide national estimates. Due to budgetary constraints, we plan to implement just the ED component of the survey beginning with the data collection for the 2018 NHAMCS.

Approval is requested for the following data collection activities:

- Continued collection of facility and patient information for the ED setting of hospitals from 2018 through 2020, with the discontinuation of data from OPD and ASL settings..
- Approval to make relatively small modifications to future survey instruments through the submission of OMB nonsubstantive change requests.

## **A. Justification**

### **1. Circumstances Making the Collection of Information Necessary**

Initiated in 1992, NHAMCS was designed to support NCHS's mission to monitor health by providing data on ambulatory health care utilization at hospital EDs, OPDs, and 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 and solo practice arrangements; and growth in the number of emerging fields of medicine, such as pain management and ambulatory surgery. Starting in 2018, data collection will focus only on the ED. The data needed to evaluate the performance of the U.S. health care system in terms of the way in which emergency 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**).

### **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 NAMCS (OMB No. 0920-0234, Exp. Date: 03/31/2019) 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 from EDs 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, and NHAMCS will obtain information on how such care is provided in hospital EDs. Data on ambulatory patient visits to physicians' offices have been collected through the NAMCS since 1973. That information 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-based and hospital emergency 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 2015 NHAMCS, the estimated number of U.S. hospital ED visits was 136,943,000. Annual data on ED visits collected from 1992-2015 are currently available to the public; data for OPD from 1992-2011 and data for ASL from 2010 are also available.

In addition to the sampled ED patient encounters collected in NHAMCS, administrative information about hospitals and their departments is also obtained. Requests from government agencies to collect more information via special supplements have been made. 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 (GAO); 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: depression treatment in adults with multiple sclerosis and depression; bronchiolitis management; hypertension management; head injuries in adult and children in motor vehicle accidents; and narcotic and corticosteroid prescription trends in irritable bowel disease patients (see **Attachment C** for a list of publications).

The information collected on patient visits to hospital EDs provides a unique look into the utilization of acute care in the United States. 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, including ASLs; (d) analyses of facility-level data; and (e) modeling to predict treatment and the use of services.

The following are examples of these uses of NHAMCS ED data:

(a) Emergency Department Visits for Injury and Illness Among Adults Aged 65 and Over: United States, 2012-2013: For this study, 2012 and 2013 ED data were accessed for injury versus illness-related visits in patients aged 65 years and older. Overall, there were more visits associated with illness, 36 per 100 persons, compared with visits for injuries, 12 per 100 persons. Imaging was ordered for more injury related visits (75%) compared with those for illness (63%). However, injury visits were less likely to result in hospital admission (17%) compared with visits related to illnesses (32%). Overall, women showed a higher visit rate for injury compared with men at 14/100 persons and 10/100 persons respectively. *Albert M, Rui P, McCaig LF. NCHS Data Brief. 2017 Feb;(272):1-8.*

(b) Antibiotic Prescribing by Physicians Versus Nurse Practitioners (NP) for Pediatric Upper

Respiratory Infections (URI): This study looked at antibiotic prescribing among nurse practitioners compared with physicians for children <18 years of age who had been diagnosed with an upper respiratory infection. Patients seen by the NPs were found to be more likely from the South, more likely to have Medicaid, and more likely to live in the lowest median household income quartile zip code. NPs showed significantly higher antibiotic prescribing 66.7% +/- 4.2% for pediatric patients with URIs, compared with physicians who only prescribed antibiotics 52.8% +/- 0.8%. *Ference EH, Min JY, Chandra RK, Schroeder JW, Ciolino JD, Yang A, Holl J, Shintani Smith. Ann Otol Rhinol Laryngol. 2016 Dec;125(12):982-991.*

(c) Trends in Ambulatory Management of Urinary Incontinence in Women in the United States: This study compared visit characteristics among women with urinary incontinence between 1999-2000 and 2009-2010, using NAMCS and NHAMCS data. The findings showed a decline in use of urinalysis for evaluation and an increase in antimuscarinic therapy, especially among Urologists between 1999-2000 (23.5%) and 2009-2010 (44.2%; P=0.003). *Forde JC, Chughtai B, Cea M, Stone BV, Te A, Bishop TF. Female Pelvic Med Reconstr Surg. 2017 Jan 18.*

(d) Variation in Pediatric Care between Academic and Nonacademic US Emergency Departments, 1995-2010: This study examined the difference in care provided at an academic ED compared to a non-academic ED to children less than 18 years old with a diagnosis of asthma, bronchiolitis, croup, gastroenteritis, fever, febrile seizures, and afebrile seizures. It was found that among patients with croup, bronchiolitis, and seizures, resource utilization and admission were significantly higher in non-academic settings compared with their academic counterparts. *Li J, Monuteaux MC, Bachur RG. Pediatr Emerg Care. 2017 Jan 24*

(e) Trends in Opioid Analgesic Use in Encounters Involving Physician Trainees in U.S. Emergency Departments: This study looked at data across 11 years of ED visits where an opioid was either administered in the ED or prescribed at discharge. Using survey-weighted logistic regression, the researchers found that the likelihood of opioid use was comparable for trainee and non-trainee visits. Nonetheless, the overall proportion of ED visits where opioid analgesics were used increased from 21.9% (2001-02) to 28.8% (2010-11). An almost 32% increase in utilization, with Hydromorphone use accounting for the highest relative increase. *Mazer-Amirshahi M, Mullins PM, Sun C, Pines JM, Nelson LS, Perrone J. Pain Med. 2016 Dec;17(12):2389-2396.*

### **3. Use of Improved Information Technology and Burden Reduction**

Respondent burden in current data collection is held to a minimum through the use of computerized sampling procedures at the patient level for all settings. Also, the computerized induction interview allows field representatives (FR) to skip non-applicable questions and quickly populate write-in fields with drop-down menus. Consequently, 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 and medications. Overall, using a computerized data entry system has significantly reduced FR and respondent burden, and ultimately improved field operations and overall data quality. In addition, collecting the data electronically has

ped transmission and processing.

Starting with the 2018 data collection, the NHAMCS will only collect visit data on the utilization of medical care services in emergency departments. The discontinuation of the OPD and ASL settings of the survey will also significantly reduce respondent burden.

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.

<u>Survey</u>	<u>OMB No. / Exp. Date</u>	<u>Agency</u>
National Hospital Care Survey (NHCS)	0920-0212/ 01/31/2019	National Center for Health Statistics (NCHS)
National Electronic Injury Surveillance System, All Injury Program (NEISS AIP)	3041-0029 / 01/31/2020	Consumer Product Safety Commission (CPSC) and CDC
National Health Interview Survey (NHIS)	0920-0214 / 12/31/2019	National Center for Health Statistics (NCHS)
Medical Expenditure Panel Survey (MEPS)	0935-0118/ 12/31/2018	Agency for Healthcare Research and Quality (AHRQ)
State Emergency Department Databases (SEDD)	Not applicable	Agency for Healthcare Research and Quality (AHRQ)

The National Hospital Care Survey (NHCS) is conducted by NCHS. It is designed to integrate the data collected by the National Hospital Discharge Survey (NHDS), the NHAMCS, and the Drug Abuse Warning Network (DAWN) (OMB No. 0930-0078, Discontinued: 10/31/2011). The target universe of NHCS is inpatient discharges and ambulatory visits to EDs, OPDs, and ASLs of non-institutional, non-federal hospitals in the 50 states and the District of Columbia. In an effort to streamline data collection and utilize electronic data collection capabilities, particularly electronic health records (EHRs), the NHCS was created. Facility level information is collected using a facility questionnaire; visit level information, otherwise known as encounter data, is collected from UB-04 claims or EHR data. Efforts are in place to ensure that estimates generated using NHCS data are nationally representative. Until the NHCS response levels become sufficient to produce estimates with acceptable reliability, NHAMCS will continue to collect data on just EDs.

The Consumer Product Safety Commission (CPSC) operates the National Electronic Injury Surveillance System (NEISS) (OMB No. 3041-0029, Exp. Date: 01/31/2020) in 100 hospital EDs in the United States. Beginning in 2000, CDC National Center for Injury Prevention and Control 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. 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) (OMB No. 0920-0214, Exp. Date: 12/31/2020) is a population-based survey in which information is obtained through household interviews. The recall problem that may be expected with household respondents prevents them from providing 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 (OMB No. 0935-0118, Exp. Date: 12/31/2018) is based on a subsample of households that participated in the previous year's NHIS. This survey 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 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-six 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. NHIS and MEPS are population-based instead of provider-based surveys. More so, MEPS data cannot be used to make estimates of the frequency of treatment. 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 (for example, medications, verbatim reason for visit, and cause of injury). NHCS is yet to have acceptably reliable nationally representative estimates although hospital recruitment is actively underway. Consequently, the information available from these systems is not adequate for the needs described earlier, and cannot be used as a substitute to the proposed data collection.

## **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. 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 at a given location. Field representatives will do data abstraction on laptops using computerized patient record forms. If the facility refuses to allow field representatives access to their medical records, they can work with the hospital 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 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 the opioid epidemic, ED crowding, antibiotic misuse/overprescribing, mental health and other preventive services, or any of the other analytic examples presented in the package. Respondents are typically 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 (**Attachment B.1**) appeared in the Federal Register on Monday, November 27, 2017, Vol. 82, No. 226, pp. 56027-56028, as required by 5 CFR 1320.8(d). One comment was received, but it did not address the methodology of the study. (**Attachment B.2**).

## **b. Efforts to Consult Outside NCHS**

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 been consulted on the NHAMCS (**Attachment D**).

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

## **9. Explanation of Any Payment or Gift to Respondents**

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

## **10. Protection of the Privacy and Confidentiality of Information Provided by 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 U.S.C. 242m(d)) and Confidential Information Protection and Statistical Efficiency Act (CIPSEA, Title 5 of PL 107-347) which state:

”We take your privacy very seriously. All information that relates to or describes identifiable characteristics of individuals, a practice, or an establishment will be used only for statistical purposes. NCHS staff, contractors, and agents will not disclose or release responses in identifiable form without the consent of the individual or establishment in accordance with section 308(d) of the Public Health Service Act (42USC 242m(d)) and the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA, Title 5 of Public Law 107-347). In accordance with CIPSEA, every NCHS employee, contractor, and agent has taken an oath and is subject to a jail term of up to five years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you. In addition, NCHS complies with the Federal Cybersecurity Enhancement Act of 2015 (6 U.S.C. §§ 151 and 151 note). This law requires the federal government to protect federal computer networks by using computer security programs to identify cybersecurity risks like hacking, internet attacks, and other security weaknesses. If information sent through government networks triggers a cyber threat indicator, the information may be intercepted and reviewed for cyber threats by computer network experts working for, or on behalf, of the government.

The Federal Cybersecurity Enhancement Act of 2015 permits monitoring

information systems for the purpose of protecting a network from hacking, denial of service attacks and other security vulnerabilities.<sup>1</sup> The software used for monitoring may scan information that is transiting, stored on, or processed by the system. If the information triggers a cyber threat indicator, the information may be intercepted and reviewed for cyber threats. The Cybersecurity Act specifies if any information that is scanned by the cybersecurity software programs is found to be suspicious, it may be reviewed for specific threats by computer network experts working for the government (or contractors or agents who have governmental authority to do so). The Act further specifies that such information may only be used for the purpose of protecting information and information systems from cybersecurity risks.

<sup>1</sup>"Monitor" means "to acquire, identify, or scan, or to possess information that is stored on, processed by, or transiting an information system"; "information system" means "a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination or disposition of information"; "cyber threat indicator" means "information that is necessary to describe or identify security vulnerabilities of an information system, enable the exploitation of a security vulnerability, or unauthorized remote access or use of an information system."

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 numbers will be wiped from the dataset and will not be retained beyond that time.

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 every year. 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 on the NCHS network. Any records that are held by U.S. Census or other NCHS agents are deleted permanently from their networks after the data has been released to the public, pursuant with the requirements of the latest IRB approval. Computerization of the survey, which began in 2012, has greatly decreased the risk of losing confidential information, as all survey data are collected on a laptop and are always encrypted before transmittal.

NHAMCS visit level data are made available to the public, for free, on our website, but provider level data are only available through the NCHS Research Data Center. Confidential data are never released to the public. Personal identifiers, such as hospital's name, address, and patient's date of birth, are typically removed from the public release files before publication. All public data releases are reviewed by the

NCHS Disclosure Review Board to avoid data breaches, such as release of detailed geographic information that may allow a person to identify hospitals or individuals in the general population.

## **11. Institutional Review Board (IRB) and Justification for Sensitive Questions**

The NHAMCS data collection plan was approved by the Ethics Review Board (ERB), the Institutional Review Board of record for NCHS (**Attachment E**) through January 21, 2019. The board also approved the amendment of the NHAMCS instrument to collect data at only the ED setting of sampled hospitals, starting with 2018 data collection. 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 in the study, as well as a modified computerized NHAMCS instrument to collect only ED data.

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.

Starting in 2012, we began collecting medical record number for internal survey operations purposes. The medical record number is collected in the patient record form instrument as a reference for 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, usually more experienced 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**

This submission requests OMB approval for the next three years of NHAMCS data collection. The estimated annualized burden is 814 hours and is summarized in the table below.

The total annual sample typically includes about 450 hospitals. Each sampled hospital will be asked to complete a Hospital Induction interview. Using 2012-2015 NHAMCS data, we have determined that approximately 40 of these hospitals have reported that they are out of scope, leaving around 410 hospitals for data collection. Of the 410 sampled hospitals, 340 are expected to complete the hospital induction questionnaire (**Attachment H**). This survey induction instrument can be completed in 45 minutes and has questions on EHR system characteristics and functionality in only the ED setting. The total expected response burden for the 2018 NHAMCS hospital induction questionnaire is expected to be 255 hours annually.

Comparable field operations, as with the hospital induction, are expected at the ambulatory induction level. For the 2018 survey data collection, just the ED will be inducted and its ambulatory units selected. Again based on 2012-2015 NHAMCS data, about 83% or 340 of the 410 sampled hospitals are expected to have eligible EDs. Of these 340, about 85%, or 289 EDs, are expected to respond at the ambulatory induction level. Ambulatory units within the ED are called emergency service areas (ESAs) – with most EDs having 1 or 2 ESAs. Starting with 2018 data collection, the ambulatory induction questionnaire (**Attachment I**) is expected to be completed by about 578 respondents (n = 289 EDs expected to respond × 2 ESAs per ED) with a total anticipated response burden of 145 hours.

With the discontinuation of the web-based patient record forms, abstraction will only be completed by Census bureau field representatives on a computerized ED patient record form (**Attachments J**). Hospital staff will no longer have the option of filling out these forms themselves. Consequently, the respondent burden for the completion of the patient record form has been eliminated. However, there is an anticipated 1 minute per response burden to be incurred by hospital staff (**Attachment K**) in trying to orient the field representative to their medical record system, or in certain cases, where the hospital does not grant full access to the field representative, to pull records from their system and provide that information.

Of the estimated respondents (ED only) to the survey, it is expected that 85% will provide PRFs, resulting in about 246 respondents (85% of 289 hospitals with an eligible ED). The annualized burden, which is based on approximately 100 PRFs which are abstracted per respondent per year, would result in an estimated annual burden of 505 hours.

The last two rows of the burden table correspond to reabstraction. 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 each year's total responding ED hospital sample cases will be selected for reabstraction from among those completed first within the year. The 2018 sample, n = 15 (5% of the 289 responding EDs) will be reabstracted using the same methodology. A telephone call (**Attachment L**) 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. Line 4 refers to the total burden placed upon the hospital staff for those calls for just data collections starting 2018 and onwards, resulting in 1 hour of burden annually. Line 5 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 or two from each ED) will have to pull 10 records. On average, one record will incur 1 minute of burden (**Attachment M**). It is estimated that the annualized burden to the respondents will total 3 hours to complete this task.

**Table 12-A. Annualized Burden to Respondents****2018-2020 NHAMCS**

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 Data Collection	340	1	45/60	255
Ancillary Service Executive	Ambulatory Unit Induction (ED only) data collection	578	1	15/60	145
Medical Record Clerk	Retrieving Patient Records data collection	246	100	1/60	410
Ancillary Service Executive - Reabstraction	Reabstraction Telephone Call (ED only)	15	1	5/60	1
Medical Record Clerk - Reabstraction	Pulling and re-filing Patient Records (ED only)	15	10	1/60	3
Total					814

**Burden Cost**

The average annual response burden cost for the NHAMCS is estimated to be \$38,671 for each survey year. The hourly wage estimate was based on the Bureau of Labor Statistics May 2016 National Occupational Employment and Wage Estimates ([https://www.bls.gov/oes/current/oes\\_nat.htm#00-0000](https://www.bls.gov/oes/current/oes_nat.htm#00-0000)).

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

Type of Respondent	Form Name	Response burden hours	Hourly wage rate	Respondent cost
Hospital Chief Executive Officer	Hospital Induction Data Collection	255	\$93.44	\$23,827
Ancillary Service Executive	NHAMCS Ambulatory Unit Induction (ED only)	145	\$47.56	\$6,896
Medical Record Clerk	Retrieving Patient Records	410	\$19.13	\$7,843
Ancillary Service Executive	NHAMCS Reabstraction Telephone Call (ED only)	1	\$47.56	\$48
Medical Record Clerk	NHAMCS Pulling and re-filing Patient Records (ED only)	3	\$19.13	\$57

TOTAL	\$38,671
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### 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 2018, 2019, and 2020 NHAMCS is as follows:

\$3,970,000	Interagency agreement for data collection with Bureau of the Census
\$ 55,000	Printing of public relations materials and reports
\$ 400,000	Contract (to conduct receipt and control operations, medical coding, data entry, and keying/coding quality control)
\$ 802,440	Sponsoring agency expenses (salaries, benefits, and other misc.)
\$5,227,440	Total cost for 12 months

### 15. Explanation for Program Changes or Adjustments

The currently approved burden is 4,298 hours. With this submission, the average annual burden is expected to decrease to 814 hours. This reduction is due to both the elimination of the OPD and ASL settings of the survey beginning with the 2018 data collection effort and limiting completion of the survey PRFs to field representatives. There is an overall reduction in the total burden time by 3,484 hours.

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

Timely data will continue to be presented for ED visits. 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 this link for a sample of a *Data Brief* using NHAMCS ED data: <https://www.cdc.gov/nchs/products/databriefs/db272.htm>. A list of selected NHAMCS publications can be found in **Attachment C**.

Annual public use NHAMCS files containing the emergency department, outpatient department, and ambulatory surgery data will be available on the NCHS website: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Datasets/NHAMCS](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NHAMCS).

The timetable for key activities for any given survey year is expected to be as follows:

Time after clearance	
--	Receive OMB clearance
Immediate	Begin data collection for 2018 survey
4 months	Begin internal data editing
12 months	End 2018 data collection year
15 months	Close out 2018 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.