

Supporting Statement A for Request for Clearance:
NATIONAL AMBULATORY MEDICAL CARE SURVEY

OMB No. 0920-0234

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Supporting Statement

National Center for Health Statistics National Ambulatory Medical Care Survey

The National Center for Health Statistics (NCHS) requests approval for a revision of an approved data collection, the ongoing National Ambulatory Medical Care Survey (NAMCS) (OMB No. 0920-0234: Expiration date 03/31/2013), for the purpose of continuing survey activities for the 3 years 2012, 2013 and 2014, converting data collection instruments to computer-based instruments, revising the sample design to a list sample and increasing the sample size to allow for state-based estimates, and adding supplements to regular data collection activities.

NAMCS is a national survey of patient visits to office-based physicians conducted by the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Although the core NAMCS, described in the next section, serves the country well by providing national data on ambulatory care, health care is changing and the survey continues to evolve to address these changes. For example, in 2012, NAMCS will include an increased sample totaling 21,753 physicians/CHC providers and change its sampling design to provide state-level estimates to monitor clinical preventive services provided in physician offices at the state level. This sample increase is largely due to 2011 prevention funds from the Patient Protection and Affordable Care Act (ACA). These data expand the capacity of CDC and its health department partners to use these data for monitoring the effects of expanded health coverage on use of appropriate preventive services.

Only recently was the funding amount available for data collection known, and the arrangements to obligate these funds to the Census Bureau carried out. Making state-based estimates will require data collection throughout calendar year 2012, beginning in January.

New/modified activities planned for the 2012-2014 survey period:

- Increase the NAMCS sample size to make state based estimates for 34 states
- Modify the NAMCS sampling design from a geographic primary sampling unit (PSU)-based to a list based sample
- Implement NAMCS automation beginning in 2012 (already approved)
- Field a new asthma supplement, new items to the Physician Induction Interview (NAMCS-1) that evaluate a physician's use of complementary and alternative medicine (CAM), and a lookback module on the Patient Record form (PRF)
- Conduct a pretest during Spring 2012 to evaluate our ability to collect current procedural terminology (CPT) codes on the survey
- Conduct a re-abstraction of patient visits from 500 NAMCS physicians/CHC providers

Continuing Data Collection activities:

- Patient visits to office-based NAMCS physicians
- Patient visits to physicians and mid-level providers at community health centers (CHCs)
- National Electronic Health Records Survey (NEHRS)
- Physician Workflow Survey
- Minor modifications to several forms will be described within the appropriate sections

Typically throughout a survey period, slight modifications to the forms are needed. Therefore, in addition to the requested approval summarized above and herein, we are also requesting the ability to submit non-substantive change packages, as needed, for form modifications occurring throughout the 2012-2014 study period. A three-year clearance is requested.

A. Justification

1. Circumstances Making the Collection of Information Necessary

Background

NAMCS was conducted from 1973 through 1981, in 1985, and since 1989 has been an annual survey. The breaks in data collection from 1982 through 1984 and 1986 through 1988 were due primarily to budget constraints. The survey is conducted under authority of Section 306 of the Public Health Service Act (42 USC 242k) (**Attachment A**).

Core NAMCS

The core NAMCS refers to the traditional sample of nonfederal office-based physicians, and physicians and mid-level providers sampled in community health centers (CHCs). The specific purpose of the core NAMCS is to meet the needs and demands for statistical information about the provision of ambulatory medical care services in the United States, and as such, fulfills one of NCHS missions, to monitor the nation's health. Ambulatory services are rendered in a wide variety of settings, including physician offices and hospital outpatient and emergency departments. Since more than 80 percent of all direct ambulatory medical care visits occur in physician offices, NAMCS provides data on the majority of ambulatory medical care services. To complement these data, the National Center for Health Statistics (NCHS) initiated the National Hospital Ambulatory Medical Care Survey (NHAMCS) (OMB No. 0920-0278) in 1992 to provide data on patient visits to hospital outpatient and emergency departments.

In addition to health care provided in physician offices and outpatient and emergency departments, CHCs play an important role in the health care community by providing care to people who might not be able to afford it otherwise. Specifically, CHCs are local, non-profit, community-owned health care providers which serve approximately 13 million individuals throughout the United States. Research has shown that up to 4 percent of all

primary care visits and 10 percent of all visits by uninsured patients are made to CHCs. Prior to 2006, visits made to CHCs, although captured in NAMCS, were not purposely included in the sampling plan; at that time, CHCs did not represent a separate NAMCS stratum. In an attempt to obtain a more accurate picture of health care provided in the United States, a sample of 104 CHCs was included in the 2006 NAMCS panel. There has been annual data collection since that time, and these settings will continue to be sampled in 2012-2014.

NAMCS is part of the ambulatory care component of the National Health Care Surveys (NHCS), a family of provider-based surveys that capture health care utilization from a variety of settings, including hospital inpatient and long-term care facilities. NCHS surveys of health care providers, including NAMCS, National Hospital Care Survey (OMB No. 0920-0212), National Nursing Home Survey (OMB No. 0920-0353), National Home and Hospice Care Survey (OMB No. 0920-0298), National Survey of Residential Care Facilities (OMB No. 0920-0780) and NHAMCS, have been modified and expanded into this integrated NHCS.

Other justifications for conducting NAMCS include the need for more complete ambulatory medical care data to study (1) the performance of the U.S. health care system, (2) care for the rapidly aging population, (3) changes in services such as health insurance coverage change, (4) the introduction of new medical technologies, and (5) the adoption of electronic health records. As a result of these societal changes, there has been considerable diversification in the organization, financing, and technological delivery of ambulatory medical care. This diversification is evidenced by the proliferation of insurance and benefit alternatives for individuals, the development of new forms of physician group practices and practice arrangements, and growth in the number of alternative sites of care.

New/modified activities planned for the 2012-2014 survey period

- Additional Office-Based Physicians

The currently approved NAMCS sample (4,700 physicians) includes 3,000 physicians for the historical sample size, an increase continued from 2010 of 200 oncologists, and the additional 1,500 office-based physicians funded by the Patient Protection and Affordable Care Act of 2010 (ACA) (**Attachment A**). We propose adding an additional 11,029 office-based physicians also funded by the ACA for a total of 15,729 physicians.

Also, the number of delivery sites for community health center (CHC) services will include an additional 1,904 sites for a total of 2,008 sites. Since each CHC site can sample up to 3 providers, this adds a maximum of 6,024 providers to the NAMCS sample. Therefore, the total 2012 NAMCS sample would increase to 21,753 providers, allowing the NAMCS to produce state level estimates for 34 states (in both traditional office settings as well as CHCs).

- New Sampling methodology

The basic statistical design and data collection methods for the NAMCS are being updated to allow the NAMCS to make state-based estimates for 34 states. The core interview survey (NAMCS & CHC) uses multi-stage stratified samples of provider-patient encounters or visits selected from office-based physician practices and from CHCs. In 2012 and beyond, the new physician sample will use two-stage design in which the first stage is a stratified list sample of office-based physicians and the second stage is visits to the sampled provider. The CHC survey will use a three-stage design in which the first stage is a stratified list sample of CHC service delivery sites, physicians practicing at the sampled CHC, and visits to the sampled provider.

- Fielding the NAMCS- Asthma supplement, complementary and alternative medicine (CAM) items on the NAMCS-1, and lookback modules.

Results from the approved pretest in the spring of 2011 pretest to evaluate the new asthma supplement, complementary and alternative medicine (CAM) items on the NAMCS-1, and the retrospective health care data collection items on the patient record form (PRF) (lookback module) were successful. Therefore, we intend to add the aforementioned new items with minor modifications to their respective forms, and field them beginning in the 2012 survey.

Asthma Supplement

Although the means to control asthma have been widely disseminated by the National Heart, Lung, and Blood Institute's (NHLBI) Guidelines for the Diagnosis and Management of Asthma (the Guidelines) (see <http://www.nhlbi.nih.gov/guidelines/asthma/index.htm>), uptake of effective management strategies remains suboptimal. Although other national sources have reported data on patient outcomes related to asthma, the following relevant points are still uncertain:

- (1) Where do major barriers to implementation of asthma management strategies occur on the pathway from health care delivery to acceptance and practice by patients
- (2) What is the overall acceptance of the Guidelines by health care practitioners
- (3) To what extent can identification of the implementation and barriers to use of specific asthma management strategies by health care providers inform ongoing strategies in the hope of increasing uptake of the Guidelines

The proposed 2012 asthma supplement (**Attachment B**) will be administered to primary care physicians, physicians likely to see asthma patients. The goal of the supplement will be to construct an accurate picture of uptake and implementation of asthma management as specified by the Guidelines. The Guidelines have been available since 1991 and most recently updated in 2007.

Complementary and Alternative Medicine (CAM)

Use of many complementary and alternative medicine (CAM) therapies has been increasing in the United States. From the CAM supplement of the 2007 National Health

Interview Survey (NHIS), almost 4 out of 10 adults (38.3%) had used some type of CAM in the past 12 months, and total out-of-pocket costs for visits to CAM practitioners and purchases of CAM products total \$33.9 billion. Although these practices are not part of conventional medicine, some conventional medical providers do refer their patients and/or use CAM treatments in their practices.

The short set of questions (**Attachment C**) with definitions (**Attachment D**) is proposed for inclusion in the 2012 NAMCS induction form. These items will collect information on the frequency of referrals and use of CAM by conventional providers, which have not been previously collected on a large-scale national survey. Because the majority of providers who use CAM do so in conjunction with conventional medicine, it is important to find out the extent to which conventional providers are integrating CAM into their treatment plans. This short set of questions is sponsored by the National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health (NIH). NCCAM's mission is to study the use and effectiveness of CAM therapies and data collected via these questions will be invaluable for shedding light on the integration of conventional and CAM therapies in the United States.

Lookback Module

The lookback module will collect additional information from the 12 month period prior to the sampled visit on risk factors and clinical management of patients with conditions that put people at high risk for heart disease and stroke. For example, the module would record medications prescribed, changes in medications, family history, and contraindications to certain medications. The intent of the lookback module is to improve the nation's ability to monitor and evaluate the quality of clinical care to prevent heart disease and stroke as health reform proceeds. Since these surveys already collect selected intermediate outcomes, including blood pressure and cholesterol levels, combining currently collected PRF data with the additional lookback items would permit the evaluation and monitoring of appropriateness of clinical management and the relationship to these outcomes. The lookback module is funded from prevention funds from the Patient Protection and Affordable Care Act of 2010.

The utility of the lookback module as an addition to the current NAMCS starting in 2012 will be considerable. For example, these items would greatly improve the nation's ability to monitor and evaluate the effects of increased insurance coverage on the quality of care provided in physicians' offices to prevent heart disease and stroke. Furthermore, information on the clinical management of conditions that put patients at risk could identify shortfalls in the quality of care that in turn could lead to improvements in clinical and public policy to improve prevention.

The questions are similar to the currently collected items on the PRF except they will be based on an earlier visit time period (**Attachment E**).

- Pretest for assessing the feasibility of developing nationally-representative estimates of payments for care in physician offices through the collection of Current Procedural Terminology (CPT) codes.

NCHS proposes conducting a pretest during the spring of 2012 to assess the feasibility of developing nationally-representative estimates of payments for care in physician offices using the Current Procedural Terminology (CPT) codes. The NAMCS provides nationally-representative data on the use of medical care in physician offices, but does not collect information on payments to physicians. This pretest proposes to address that gap, which will allow tracking payments to physicians by patient attributes. The NCHS project team has consulted with outside experts including Dr. Ciaran Phibbs of Stanford University and Dr. Mark Hornbrook of Kaiser Permanente's Center for Health Research in developing this plan. The team plans to communicate further with these experts and with additional experts who work with the Medical Expenditure Panel Survey (OMB No. 0935-0118) at the Agency for Healthcare Research and Quality.

Specifically, the NCHS project team will conduct a pretest of approximately 30 visits to each of the sampled 50 physicians chosen from the American Medical Association's frame file. Physicians from all four Census regions and from each of the major NAMCS specialty groups will be chosen. Each participating physician would fill out a 2012 NAMCS-1 (see **Attachments Z and AA**). Additionally, for each PRF (**Attachment BB**), up to fifteen CPT codes associated with the patient visit will be recorded using a modified data collection tool developed by Census. After the pretest, each service provided during a physician contact will be matched via the CPT code to a measure of the relative costliness of the inputs (physician work, practice expenses, and professional liability insurance expenses) used to provide the service and to an estimate of what Medicare would pay for that service. The project team will prepare a report summarizing results and recommendations for beginning survey-wide collection of CPT codes in NAMCS in 2013.

Computerize Data Collection: NAMCS Induction and Patient Record form

Beginning in 2012, the NAMCS-1 induction interview will be conducted through a computer assisted interviewing instrument. The Patient Record forms (PRFs) completed by Census Field Representatives (FRs) will also be entered directly into a computerized instrument. Both instruments were evaluated in two 2011 pretests. The automated data collection tools of the NAMCS-1 and PRF will be used by the FRs. It is anticipated that the use of a computer assisted interviewing instrument will simplify the data collection activities and also reduce data entry errors and omissions, thus improving data quality. Furthermore, it will reduce the time required for processing the data since individual question editing could now be done at the same time data are collected and not retrospectively. The use of a computer assisted interviewing instrument will also reduce respondent burden by tailoring data questions to the individual sampled case, thus skipping out irrelevant questions.

- Laptop for Physicians:

When physicians prefer to complete the PRFs themselves (estimated to be 20 percent of the time), they will use a web-based tool developed and provided by Census. This tool, referred to as Centurion, is web-based PRF. The sampled physician will have the opportunity to complete PRFs either using a notebook computer, or via a secure web site. A more detailed description of the procedures involved in the use of Centurion is discussed below.

- Conduct a re-abstraction of patient visits from 500 NAMCS physicians/CHC providers

Beginning in 2012, medical record number will also be used for re-abstraction, which will be used to evaluate the reliability of the abstraction process. Specifically, a total of 500 physicians (250 primary care & 250 specialists)/CHC providers spread proportionally across all Census regional offices would be selected randomly for re-abstraction. A different Census Field Representative (FR) would visit the physician, and using medical record numbers, select 10 patient visits that had been previously abstracted for reabstraction. The reabstraction would be conducted by the Census FR using the same data collection tool that was used for the original abstraction. See **Attachment CC** for computer screen shots of the proposed 2012 re-abstraction PRF and **Attachment DD** for computer screen shots of the 2012 re-abstraction look-back module. Re-abstraction data would be compared directly with original abstraction data, with rates of agreement computed for each data field. The comparison will be used to identify any particular fields with low agreement between abstraction/re-abstraction. If any are identified, we will explore possible reasons for the low agreement with Census. Results may be used to design supplemental training in 2012 to improve abstraction quality, or may lead to proposed modification of instructions or data collection forms. Also, while re-abstraction will not be used to evaluate individual FRs, it will be used to track the level of abstraction/re-abstraction agreement in Census regional offices, and may identify a need for supplemental training. Medical record numbers will be maintained by the contractor on a separate file to facilitate record selection. Without medical record number, there would be no connection between the original visit and visits the second FR will abstract.

Privacy Impact Assessment

The substantive information required for this section is provided in detail in “Overview of Data Collection System” below. The section titled “Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age” includes discussion of the NAMCS website.

Overview of the Core NAMCS Data Collection System

The target universe of the core NAMCS includes visits made in the United States to the offices of nonfederally employed physicians, excluding those in the specialties of anesthesiology, radiology, and pathology, who were classified by the American Medical Association (AMA) or the American Osteopathic Association (AOA) as “office-based, patient care.” The target universe also includes visits to physicians (MDs and DOs) and

mid-level providers (i.e., nurse practitioners, physician assistants, and nurse mid-wives) practicing at non-office-based community health centers.

For the core NAMCS, each physician/provider in private practice/CHC is asked to participate and complete questions from what was once paper-based NAMCS-1 physician induction form. Compared to previous survey years, the biggest change for 2012-2014 is that these questions will now be recorded by the FR in a computerized instrument rather than a paper booklet. Beginning in 2012, except for the asthma supplement, no data will be collected using a paper-based survey instrument. Since screen shots of the computer-based induction questions are still in process, the 2011 paper NAMCS-1 is presented in **Attachment F**, and a summary of the item changes is also presented in **Attachment G**. Additional questions proposed for 2012 contain several modified items relating to the adoption of electronic health records, presented below within the National Electronic Health Records Survey.

Items from the NAMCS-1 computerized instrument are conducted over the telephone and during an initial personal interview. The questions in the first-half of the NAMCS-1 computer-based instrument, which are designed to be completed over the telephone, are used to guide Census Field Representatives (FRs) through the induction process and verify the physician/provider's eligibility. The second-half of the instrument, which is completed in person with the physician/CHC provider, is dedicated to obtaining information concerning selected practice characteristics and determining a sampling strategy to collect the PRFs (**Attachment H**). Changes from the 2011 PRF to the 2012 PRF are included within **Attachment I**. In addition, the approved EHR (**Attachment J**) and the new CAM items (**Attachment D**) will be added to the second half of the new NAMCS-1 computerized instrument.

To select the sample of providers at each CHC service site, we use the CHC Induction. Within this instrument the FR will list all the providers who are scheduled to work at the site during the reporting period. Based on a selection probability proportional to the expected number of visits each provider expects to see during the reporting period, a sample of up to three providers is selected into sample. Each CHC executive/medical director is also asked to complete a computer-based induction instrument (NAMCS-201) during a personal interview. The 2011 paper NAMCS-201 is presented in **Attachment K**, as the content is not appreciably different for 2012. However, there is one change to the revenue source item response categories that is highlighted at the bottom of **Attachment G**. These questions permit the collection of general CHC contact information including type of center, various sources of revenue, and identification of sampled providers.

The majority of the data collection occurs with the completion of PRFs. As with the induction instruments mentioned above, all previously paper PRFs will be converted to a computer-based instrument beginning in 2012. A PRF is completed for each sampled patient visit and, except for the addition of the lookback module (**Attachment E**), will basically be the same as the one currently used in 2011. The proposed 2012 PRF (**Attachment H**) will still have cholesterol laboratory values in the computer-based instrument, although only selected physicians will be asked to complete these items.

Overview of National Electronic Health Records Survey

NCHS is requesting a continuance to field the National Electronic Health Records Survey (NEHRS), renamed in 2012, which was formerly known as the Electronic Medical Records Supplement (EMRS) in 2011. This mail survey is a self-administered paper questionnaire that is sent from NCHS and returned in the mail by the sampled physician.

To assist in measuring the progress of meeting the President's goal for most Americans to have access to an interoperable electronic health record (EHR) by 2014, NCHS will continue to field the NEHRS (**Attachment L**) from 2012-2014. This mail survey is sponsored by the Office of the National Coordinator for Health Information Technology (ONC), Department of Health and Human Services (DHHS). With the implementation of the Health Information Technology for Economic and Clinical Health (HITECH) Act, ONC wished to have estimates of EHR adoption rates faster than the earlier model, which combined the responses to the mail survey with those of the face-to-face NAMCS, a process that could take up to 14 months from the end of the face-to-face data collection. Additionally, it is important for ONC to measure adoption rates by state in order to better evaluate and understand the impact of key HITECH programs and to obtain state estimates that can be used to develop programs and approaches to support providers becoming meaningful users of EHRs. For these two reasons, ONC sponsored, and OMB approved, an increase in the sample starting in 2010. This larger state-based sample allowed the mail mode of data collection to stand on its own and not be tied to the face-to-face survey for estimating the adoption rate of EHRs in the United States.

The NEHRS is one part of an ongoing project that involves funding from the American Recovery and Reinvestment Act of 2009 (ARRA) (Public Law 111-5) (**Attachment A**). The physician workflow supplement (PWS), initiated in 2011, is a longitudinal follow-up study of the 2011 EHR mail survey and expands on physician experiences with electronic health records. Both the National Electronic Health Records Survey (NEHRS) and the PWS help to measure progress towards Health Information Technology for Economic and Clinical Health (HITECH) Act program goals. Additionally, the PWS addresses provisions of the Patient Protection and Affordable Care Act of 2010 (ACA) section 1561 (Public Law 111-148) (**Attachment A**). Section 1561 requires the Department of Health and Human Services (HHS), in consultation with the Health Information Technology (HIT) Policy Committee and the HIT Standards Committee, to develop interoperable and secure standards and protocols that facilitate electronic enrollment to encourage adoption of modern electronic systems. The main purpose of the physician workflow survey is to better understand physician experiences at various levels of EHR adoption and use in order to develop and inform policies that facilitate the adoption of modern electronic systems. The aim of both the HITECH Act and ACA include enhancing efficiency and improving quality in the health care system, expanding access to care, and improving patient health. The NEHRS and PWS will provide important information that will aid in the evaluation and implementation of ARRA and ACA goals.

Several modifications were made on the 2012 NEHRS and are summarized in **Attachment M**. All of the new questions on the 2012 mail survey will help guide the policymaking process surrounding Stage II meaningful use. The meaningful use rule is part of a coordinated set of regulations to help create a private and secure 21st century electronic health information system. ONCs criteria for meaningful use will be implemented in three stages. Specifically, Stage 1 began in 2011; Stage 2 will begin in 2013, and will add more requirements and new reports; and Stage 3 will begin in 2015 and is expected to add more requirements. The information obtained from the modified electronic health record (EHR) questions (checking insurance eligibility electronically, questions related to information exchange, and the new EHR functionality questions) will provide great value to ONC and NCHS. Several questions were deleted for the NEHRS relating to several types of consults and computerized capabilities that were not deemed as important to ONC. The proposed questions will not increase the survey burden for physicians; that is, for each question that will be added, we have removed or modified an existing question in order to keep the survey length constant.

NCHS also proposes to modify current EHR questions on the NAMCS-1 induction interview for 2012 so they are the same as the proposed changes to 2012 NEHRS mail survey, as described above (**Attachment J**). Having nearly all of the EHR items the same as those collected on the NAMCS-1 and the mail survey will allow for more reliable estimates to be obtained. Some items are different for computerized NAMCS-1 instrument and reflect the importance of national estimates for some and state level estimates for other items.

Overview of the Physician Workflow Supplement

As part of the American Reinvestment and Rehabilitation Act of 2009 (ARA), the Health Information Technology for Economic and Clinical Health (HITECH) Act set forth a plan for advancing a nationwide health information technology infrastructure in order to improve efficiency and the quality of care in the health care system. Central to the vision of a nationwide electronic health information network is the use of electronic health records (EHRs). HITECH authorizes the Centers for Medicare & Medicaid Services (CMS) to administer incentives to eligible professionals and hospitals for meaningful use of certified EHR technology. The HITECH Act also authorizes the establishment of several new grant programs that will provide resources to facilitate the adoption and use of EHRs by providing technical assistance, the capacity to exchange health information, and the availability of trained professionals to support these activities.

Additionally, recommendations from the Patient Protection and Affordable Care Act of 2010 (ACA) section 1561 requires the Department of Health and Human Services (HHS), in consultation with the Health Information Technology (HIT) Policy Committee and the HIT Standards Committee, to develop interoperable and secure standards and protocols that facilitate electronic enrollment to encourage adoption of modern electronic systems. The aim of both the HITECH act and ARA includes enhancing efficiency and improve quality in the health care system, expanding access to care, and improve patient health.

Like the National Electronic Health Records Survey (NEHRS), the Physician Workflow Supplement is a mail survey sponsored by the Office of the National Coordinator for Health Information Technology (ONC), Department of Health and Human Services (DHHS). To assist in measuring the progress of meeting the President's goal for most Americans to have access to an interoperable EHR by 2014, ONC has funded NCHS to follow from 2011-2013 the eligible cohort from the original 2011 Electronic Medical Records Supplement (EMRS) through the Physician Workflow Supplement (PWS) mail survey.

The sample for the follow up supplement was drawn from the responding physicians from the 2011 EMRS mail survey, which is separate from the traditional NAMCS sample with a state-based sample of 10,302 physicians. Additionally, this cohort will be followed for three years from 2011 to 2013. For 2012-2013, all physicians found eligible for NAMCS in the 2011 EMRS will be contacted annually to evaluate information that ONC requires on the costs, benefits, and barriers associated with the use of EHRs at various levels of adoption. This information helps ONC measure the progress towards HITECH program goals and provides insight into where scarce resources need to be devoted to help physicians achieve Stage I and Stage II meaningful use of certified EHR technology. The longitudinal nature of this physician workflow study will also provide insight into physician investment behavior, intent to meet HHS' meaningful use criteria, and barriers that physicians face at various stages of EHR adoption. ONC will use this information to inform policy-making around Stage II meaningful use criteria. The meaningful use rule is part of a coordinated set of regulations to help create a private and secure 21st century electronic health information system. ONC's criteria for meaningful use will be implemented in three stages. Stage 1 will begin in 2011; Stage 2 will begin in 2013, and will add more requirements and new reports; and Stage 3 will begin in 2015 and is expected to add more requirements. The information obtained from the new workflow supplement will provide great value to ONC and NCHS. Together with the NEHRS, the information obtained will help ONC monitor the effectiveness of federal programs and grants, and inform key policy decisions to develop criteria for successive stages.

See **Attachments N and O** for the proposed 2012 physician workflow supplementary mail surveys. One workflow survey is intended for physicians who currently have an electronic health record system (**Attachment N**), and the second is for physicians without a current electronic health record system (**Attachment O**).

Items of Information To Be Collected

The current core NAMCS collects information on a range of data on the characteristics of the users and providers of physician office-based and CHC care. Information on the sampled provider concerning selected practice characteristics, such as ownership, utilization of electronic medical records, and practice revenue, is collected.

Expanded data collected on the current patient visits include demographic characteristics, injury/poisoning/adverse effects, reasons for visit, continuity of care, diagnoses, vital

signs, diagnostic/screening services, health education, non-medication treatment, medications, providers seen, visit disposition, and time spent with provider.

Information in Identifiable Form (IIF)

The face-to-face NAMCS and related supplements provide numerous and varied national estimates on provider, visit, and practice characteristics. Although a majority of the data collected are not considered personally identifiable, some fit the definition of information in identifiable form (IIF). A list of all IIF data items is highlighted below, and all were approved in the past packages by OMB to be collected on survey forms, except the new addition of the National Provider Identifier (NPI) number. None of these data are released to the public or become part of public-use files. All forms are now automated for data collection by the FR or sampled physician.

Information in Identifiable Form Categories:

- Physician/CHC provider name
- Physician/CHC provider mailing address
- Physician/CHC provider telephone number
- Physician/CHC provider National Provider identifier (NPI)
- CHC executive director name
- CHC mailing address
- CHC contact person
- Physician office/CHC staff name
- Patient medical record number
- Patient date of birth

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age

There are no websites directed at children under 13 years of age.

The ambulatory health care data website dedicated to NAMCS and NHAMCS (http://www.cdc.gov/nchs/ahcd/namcs_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 NAMCS.

2. Purpose and Use of Information Collected

The general purpose of this study is to collect information about physician practices, community health centers (CHCs), ambulatory patients, their problems, and the resources used for their care. The resulting published statistics and data sets help the profession plan for more effective health services, improve medical education, and assist the public health community in understanding the patterns of diseases and health conditions. In addition,

policy makers use NAMCS data to identify (1) quality of care issues, (2) medical resource utilization, and (3) changes in health care over time.

If NAMCS data were not collected, there would be no national estimates on health care issues faced by office-based physicians and CHC providers. The physician/CHC provider and patient visit data of the 2012-2014 NAMCS will be used in basically the same manner as data from prior surveys. The additional supplements and items on the NAMCS-1 will allow research to focus on the following: (1) measurement of EHR system adoption and associated system characteristics, (2) ability to perform diagnostic tests at specific in-scope physician practice locations, (3) integration of complementary and alternative medicine in physician treatment plans, (4) clinical management and patient risk factors during the 12 months before a sampled visit associated with heart disease and stroke, and (5) management of asthma by physicians/CHC providers.

Privacy Impact Assessment Information

The following sections highlight the numerous components of the 2012-2014 NAMCS, and in doing so, fulfill the Office of Management and Budget's privacy impact assessment requirement. Specifically, the requirement is met by describing why NAMCS information is being collected, and the usefulness of collecting the data.

Core NAMCS

Each year, the core NAMCS provides a range of baseline data on the characteristics of the users and providers of physician office-based and CHC care. Data collected include the demographic characteristics of patients, reasons for visit, diagnoses, diagnostic services, medications, and visit disposition. These annual data, together with trend data, may be used to monitor the effects of change in the health care system; provide new insights into ambulatory medical care; and stimulate further research on the utilization, organization, and delivery of ambulatory care.

The data obtained from the core NAMCS are useful to managers of health care delivery systems, and others concerned with planning, monitoring, and managing health care resources. The data are valuable to those who develop and evaluate new and modified health care systems and arrangements. The continuing nature of the survey permits observation and measurement over time of different modes (e.g., examinations, imaging, procedures) for managing and treating patient problems. In addition, it provides general information on the patterns of selected conditions. The core NAMCS also provides valuable information about the speed and effectiveness with which certain advances in medical practice are adopted, and about the effectiveness of educational programs among office-based physician practices.

Users of NAMCS include numerous governmental agencies, state and local governments, medical schools, schools of public health, colleges and universities, private businesses, non-profit foundations, corporations, and professional associations, as well as individual practitioners, researchers, administrators and health policymakers. Uses vary from the

inclusion of a few selected statistics in a large research effort, to an in-depth analysis of the entire NAMCS data set covering multiple years.

The examples listed below illustrate selected users and uses of face-to-face NAMCS data, and an extensive list can be found at <http://www.cdc.gov/nchs/data/ahcd/publist-09-23-11.pdf>.

- Researchers within and outside NCHS have published work in scholarly journals using NAMCS data:
- Katerndahl D, Wood R, Jaen CR. Family Medicine Outpatient Encounters are More Complex Than Those of Cardiology and Psychiatry. *J Am Board Fam Med*. 2011 Jan-Feb;24(1):6-15.
- Pickett-Blakely O, Bleich SN, Cooper LA. Patient-physician gender concordance and weight-related consulting of obese patients. *Am J Prev Med*. 2011 Jun;40(6):616-9.
- Staff from the Ambulatory and Hospital Care Statistics Branch presented face-to-face NAMCS data on trends in visit rates for skin and soft tissue infections typical of *Staphylococcus aureus* at the 136th Annual Meeting of the American Public Health Association in 2008.
- The Department of Health and Human Services is currently using face-to-face NAMCS data to evaluate certain Healthy People 2010 and 2020 objectives. These objectives are designed to serve as a road map for improving the health of all people in the United States by the year 2010, and NAMCS data support efforts to quantify national improvement.
- The results of the face-to-face 2003 NAMCS bioterrorism questions have been presented by Ambulatory and Hospital Care Statistics Branch staff to outside partners, such as the Association of American Medical Colleges, and decision-making components of the Department of Health and Human Services charged with bioterrorism preparedness. Combined results from the 2003 and 2004 face-to-face NAMCS bioterrorism questions have been recently published in peer-reviewed journals in the primary medical care literature and as NCHS annual reports.
- The Medicare Payment Advisory Commission (MedPAC), an independent Congressional agency, is required by law to make recommendations to Congress on payment updates to Medicare providers. MedPAC uses face-to-face NAMCS data in its analysis of physician services. In particular, face-to-face NAMCS data provide MedPAC with information on trends in physician willingness to serve Medicare beneficiaries. MedPAC presents this indicator yearly in its public meetings and in its official reports to the Congress to help determine payment updates for Medicare services.

The addition of CHCs to the traditional physician-only NAMCS sample (now considered the “core NAMCS”) has produced a better overall picture of the ambulatory care provided in the United States. The core NAMCS now allows us to compare the delivery of health services at CHCs and non-CHC settings to understand utilization differences across ambulatory care settings. Also, a separate stratum of CHCs allows NCHS not only to improve our estimates of health care for the uninsured, but also to make separate estimates for providers and visits at CHCs.

Impact on the privacy of the patient is negligible, as the only piece of sensitive information being collected is the medical record number. Medical record number will only be used for internal survey operations purposes, and will be eliminated from the dataset prior to transmittal to NCHS. No IIF data are shared with researchers.

The National Electronic Health Records Survey

The National Electronic Health Records Survey (EHRS) will continue to assist in measuring the progress of meeting the goal for most Americans to have access to an interoperable EHR by 2014. The items for both the mail survey and the NAMCS-1 induction interview will help guide the policymaking process surrounding Stage II meaningful use. The meaningful use rule is part of a coordinated set of regulations to help create a private and secure 21st century electronic health information system. The information obtained from these questions (checking insurance eligibility electronically, questions related to information exchange, and the new EHR functionality questions) will provide great value to the Office of the National Coordinator for Health Information Technology (ONC) and NCHS.

Having data that identify an office’s ability to perform a particular diagnostic test will allow for identifying the adoption of new medical technologies across various physician and practice characteristics (e.g., specialty, office type, and ownership) over time.

Estimates from 2009 and 2010 EMR/EHR data have recently been published by NCHS staff and show that medical record system adoption varies considerably as a function of practice location and type of EMR/EHR system. The highlighted report below can be of great utility for ONC in measuring physician’s access to interoperable EHR adoption by 2014.

- Hsiao J, Hing E, Socey TC, Cai B. Electronic Medical Record/Electronic Health Record Systems of Office-Based Physicians: United States, 2009 and Preliminary 2010 State Estimates. *NCHS Health E-Stat*. 2010 December. (see http://www.cdc.gov/nchs/data/hestat/emr_ehr_09/emr_ehr_09.htm)

Physician Workflow Supplement

ONC requires continuous information on the costs, benefits, and barriers associated with the use of EHRs at various levels of adoption. This information helps ONC measure the progress towards HITECH program goals and provides insight into where scarce resources need to be devoted to help physicians achieve Stage I and Stage II meaningful use of

certified EHR technology. The longitudinal nature of this physician workflow study will also provide insight into physician investment behavior, intent to meet HHS' meaningful use criteria, and barriers that physicians face at various stages of EHR adoption. ONC will use this information to inform policy-making around Stage II meaningful use criteria. The meaningful use rule is part of a coordinated set of regulations to help create a private and secure 21st century electronic health information system. ONCs criteria for meaningful use will be implemented in three stages. Stage 1 will begin in 2011; Stage 2 will begin in 2013, and will add more requirements and new reports; and Stage 3 will begin in 2015 and is expected to add more requirements. The information obtained from the PWS supplement will provide great value to ONC and NHCS. Together with the NEHRS, the information obtained will help ONC monitor the effectiveness of federal programs and grants, and inform key policy decisions to develop criteria for successive stages. Baseline estimates of the PWS cohort's experiences with EHR adoption is expected to be disseminated by the end of the calendar year 2011.

3. Use of Improved Information Technology and Burden Reduction

Respondent burden in NAMCS data collection is minimized through sampling procedures, which are discussed in more detail in items A.5 and B.1.

A move to electronic collection is requested which will significantly reduce the burden for NAMCS respondents when answering both the NAMCS-1 and CHC induction interview questions. Currently, completing the form requires a Census field representative (FR) to follow the flow of the form from front to back, navigating numerous skip patterns, adding information from complicated lists, and administering flash cards to the respondent. This process can be complicated and lengthy and involve numerous opportunities to enter incorrect data. Using a computer assisted interviewing instrument of the induction interview will allow FRs to skip unneeded questions, reduce incorrect or inconsistent entries, and eliminate the need for paper flash-cards that highlight item choices. In the end, we expect the time a respondent spends during the induction interview to be reduced.

Use of a computerized data entry system for PRF data will significantly simplify 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 should reduce FR and respondent burden, and ultimately improve overall data quality. In addition, collecting the data electronically will speed editing, transmission, and processing, thereby making release of the yearly statistics more timely.

There are no legal obstacles to reducing the burden.

4. Efforts to Identify Duplication and Use of Similar Information

NCHS staff have had extensive contacts regarding survey items with organizations and individuals in both the private and public sectors who are familiar with physician utilization data, e.g., the American Medical Association. Over the 40 years since work on

NAMCS began, three sources of similar data have been identified and are discussed below.

The National Health Interview Survey (NHIS, OMB No. 0920-0214) is a population-based survey in which information is obtained through household interviews. In addition to the recall problems 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 NAMCS. NHIS can provide only counts of physician visits and general medical information.

The Medical Expenditures Panel Survey (MEPS) (Agency for Healthcare Research and Quality, OMB No. 0937-0187) is a survey of households and their members' health care providers (including physicians in office-based practice), health insurance companies, and employers. As with NHIS, household respondents cannot supply detailed medical information. The medical information collected from physician respondents does not include detailed data on specific diagnostic services, medications, and other therapeutic services. Both NHIS and MEPS also experience an unknown degree of reporting bias since it is likely that respondents may be reluctant to report medical contacts for sensitive problems, such as psychiatric disorders and sexually transmitted diseases.

IMS America, Inc., a private organization, conducts a study titled the National Disease and Therapeutic Index (NDTI) that produces data somewhat similar to those collected in NAMCS. These data are focused on the drug prescribing habits of physicians, and results are sold to drug companies for drug marketing purposes. The data collected are limited to only drug data and the corresponding patient's age, sex, and diagnosis, whereas NAMCS collects information on expected source of payment, reasons for visit, and other diagnostic and therapeutic services. Although the NDTI data are available for purchase by the government, the cost is prohibitive for most agencies. The data also have limitations that preclude their use for many purposes: data on response rates are proprietary and may be under 50 percent, and the survey and sampling procedures are of unknown validity. Efforts to obtain such information from IMS America have been unsuccessful.

These information sources are not adequate for needs such as those described in A.2 above. NAMCS allows for greater emphasis on analysis of the provision of effective health services, adoption of electronic medical technology, determination of health care workforce requirements, and improvement of medical education. Furthermore, the depth of data collected in NAMCS about ambulatory patients allows for rich analysis regarding the principal reason for patients' visits and the resources used in the provision of their medical care.

Although general information is known about community health centers (CHCs) through the Uniform Data System (a mandatory reporting system of characteristics submitted to the Bureau of Primary Health Care at the Health Resources and Services Administration (HRSA)), the continuation of a CHC sample in NAMCS will provide details of the patient/physician encounter not collected elsewhere. Only federally qualified health

centers that are funded under Section 330 of the Public Health Service Act are required to submit information to HRSA.

Advice from consultants, attendance at relevant meetings, and literature reviews have been used to identify other sources that collect practice characteristics similar to those collected by NAMCS; however, there has been no other source found that would be able to provide national estimates.

5. Impact on Small Businesses or Other Small Entities

Many NAMCS respondents are physicians in solo practices. In order to reduce respondent burden for these and all respondents, several data collection methods are used. These methods are designed to be flexible to meet the varied reporting and record keeping situations found in physician offices and community health centers (CHCs). A sample of patient visits is collected within practices and CHCs to minimize data collection workload. The data reported on each patient visit is limited to data already obtained by the physician for the patient's medical record and is further limited to a minimum number of items which adequately describe the utilization of ambulatory medical care. In addition, the impact of NAMCS on office-based physicians is further reduced by (1) design procedures that limit participation to once every three years, and (2) for all providers, requirements that ask for the collection of forms for a designated one-week period. Because of limitations in population size, a small number of CHCs may be included in the survey for successive years. Census field representatives (FRs) monitor reporting, and assist physicians/providers and their staffs in data collection to the extent possible.

6. Consequences of Collecting the Information Less Frequently

The rapidly changing environment of ambulatory care delivery makes it important to have annual data for decision making, describing the public's use of physician 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 changing arrangements for delivering care, by having continuous data collection before, during, and after the restructuring. To increase reliability, data from NAMCS are often analyzed by combining data across years, and less frequent collection would limit the study of rare visit characteristics. The current design asks a sampled physician/provider to participate for a 1-week period no more than once every 3 years, and only a small proportion of all physicians/providers are included in the survey each year. There are no legal obstacles to reduce the burden.

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

This request fully complies with the regulation 5 CFR 1320.5.

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

A. Federal Register Notice

This project fully complies with all guidelines of 5 CFR 1320.8(d). The 2012-2014 NAMCS was published for public comment in the Federal Register October 13, 2010, Vol. 75, No. 133, pages 39947-39948 (**Attachment P**).

Four public comments were received in response to the notice and shown in **Attachment Q**. The following CDC response, plus additional documents when needed, was forwarded to each of the four individuals providing comments:

Thank you for your comments concerning the CDC 60 Day Federal Register Notice for OMB No. 60-Day 10-0234, National Ambulatory Medical Care Survey. We have given the concerns you described careful consideration. For further information regarding the unique mission of CDC, please refer to our website at www.cdc.gov.

B. Efforts to Consult Outside the Agency

The following consultants both within and outside CDC were instrumental to the development of the NAMCS. The Office of the Assistant Secretary for Planning and Evaluation (OASPE) was consulted along with other government agencies, such as the Food and Drug Administration, National Institutes of Health, and Centers for Medicare and Medicaid Services. In addition, representatives from the American Medical Association and other major national medical organizations as well as private and public health services researchers were contacted for their input. We are currently collaborating with Census about the implementation of computerized data collection.

From an historical point of view, in the summer of 2005, experts from Batelle and the University of California-San Francisco were consulted to review the CCSS questionnaire and provide recommendations concerning items to add, delete, or modify on the supplement. Also during this time, considerable consultation was solicited prior to the introduction of the CHC sampling strata. First, The National Association of Community Health Centers (NACHC) worked closely with NCHS in reviewing and providing comments on all the CHC forms and procedures. A meeting was held with individuals identified as having an interest in data collection from CHCs. A total of 15 people attended whose affiliation ranged from the federal government (NCHS, HRSA, and the Census Bureau) to professional association (NACHC) to academia (The Johns Hopkins Bloomberg School of Public Health). During this meeting, NCHS presented the methodological plan as well as the survey instrument for comment and discussion. Based on comments received during this meeting and those afterwards, changes were made to the CHC survey instruments. Finally, NCHS met with representatives from the Indian Health Service (IHS) to present our plan for including Indian Federally Qualified Health Centers in the CHC sample. During this meeting, NCHS explained our methodological plan and provided all forms for comment. The IHS commented on the forms and agreed to provide their list of health centers locations.

More recently, the additional NCHS sample of office-based physicians for the EMR/EHR mail survey was funded by the Office of the National Coordinator for Health Information Technology (ONC), DHHS. Both ONC and NCHS have worked closely on the development of the EMR/EHR questions currently used in the face-to-face NAMCS and the mail survey. Consultation has also taken place with experts from the Robert Wood Johnson Foundation, Massachusetts General Hospital, and The George Washington University.

The continuing physician workflow study and National EHR Survey continues collaborations with the Office of the National Coordinator for Health Information Technology and a panel of health information technology experts was consulted in development of the physician workflow surveys (**Attachments N and O**).

NCHS will continue to work closely with these individuals and agencies as the need for consultation arises. The NCHS Board of Scientific Counselors is kept abreast of activities and reviews the overall goals of all NCHS surveys. There are no outstanding unresolved issues. A list containing the names of the many of our most recent consultants is provided in **Attachment R**.

9. Explanation of Any Payment or Gift to Respondents

NAMCS will not offer a payment or gift to respondents for participation. OMB will be notified of any plans to offer payment or gifts in the future.

10. Assurance of Confidentiality Provided to Respondents

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 (NCHS legislation),...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.”

Privacy Impact Assessment Information

A. This submission has been reviewed by Information Collection Review Office (ICRO), who determined that the Privacy Act does apply. The applicable System of Records Notice is 09-20-0167 Health Resources Utilization Statistics. The NCHS Privacy Act Coordinator and the NCHS Confidentiality Officer have also reviewed this package and have determined that the Privacy Act is applicable.

B. The automation of the survey will eliminate the need to record potentially identifiable information on paper. Medical record numbers will be entered into the computerized instruments but will only be used for survey operations purposes. The medical record number will aid 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.

An assurance of confidentiality is provided to all respondents as described earlier in this section. Prior to 2003, NAMCS was exempted from IRB review because physician practices were not considered to be human subjects, the medical record data already existed, and no patient identifiers were collected. However, with the implementation of the Privacy Rule mandated by the Health Insurance Portability and Accountability Act (HIPAA) in April, 2003, a full review of NAMCS protocol was required by the IRB. The NAMCS data collection plan has been approved by CDC’s Research Ethics Review Board (IRB) (Protocol #2010-02) based on 45 CFR 46. In addition, the Board has granted (1) a waiver of the requirement to obtain informed consent from the patient, (2) a waiver of the documentation of informed consent by physicians, and (3) 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.

The Research Ethics Review Board’s letter granting approval for continuation of Protocol #2010-02 NAMCS for the maximum allowable period of one year is presented in **Attachment S**.

In this survey, as in others, NAMCS will include a routine set of measures to safeguard confidentiality, including the following: all staff who have 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; and when confidential information is not in use, it is stored in secure conditions.

In keeping with NCHS policy, NAMCS data are made available via public-use data files to the public. Confidential data are never released to the public. All personal identifiers such as physician/provider name, address, patient date of birth, and any other specific information are removed from the public release files. All data releases are reviewed by the NCHS Disclosure Review Board to avoid data breaches, such as release of detailed geographic information that may allow anyone to identify practices or individuals in the general population.

C. The Research Ethics Review Board granted a waiver of the requirement to obtain informed consent from the patient.

D. In the introductory letter from the NCHS director, it states that participation in the NAMCS is voluntary. There is no effect on the respondent for not participating. NAMCS data are used to monitor office-based and CHC ambulatory health care utilization. The information is not shared with anyone, although public-use data files are available on the NAMCS website once individually identifiable information is removed. The legal authority for NAMCS data collection is Section 306 of the Public Health Service Act (42 U.S.C. 242k).

11. Justification for Sensitive Questions

It is necessary for NAMCS to collect some protected and approved health information, such as date of visit, birth date, and ZIP code. These data are used internally to create certain composite variables, such as patient age, which contains 6 mutually exclusive groups. Also, in cases when the Census Bureau abstracts the data from the medical record, the patient's name or address may be viewed in the process of collecting the survey data. Strict procedures are utilized to prevent disclosure of identified NAMCS data. Individual patient names or other identifying information are not collected. At no time are the patients contacted to obtain information.

After the data have been collected from the physicians/providers 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 within NCHS to match the visit data to characteristics of the patient's residential area, such as median household income or percent of the population who are high school graduates.

Medical Record Number

Starting in 2012, we will be collecting medical record number for internal survey operations purposes. The medical record number will be 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. All information, including medical record number, recorded on laptop-based survey instruments will be encrypted and securely transmitted to databases at the Census bureau. 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 will never receive any medical record number.

As mentioned earlier, medical record number will also be used for re-abstraction efforts, where a second field representative would revisit a physician’s office or CHC to reabstract patient visit information to check data quality. In such a situation, medical record number will be used in identifying the exact patient visits that were originally abstracted.

In 2012, instead of asking for the tax ID number, we will be using the National Provider Identifier (NPI) number to uniquely identify a health care provider in standard transactions, such as health care claims. HIPAA requires that covered entities use NPIs in standard transactions. NPI of physicians participating in NAMCS is collected as part of the interview, offering the ability to link the individual patient’s care with the specialty of the providers from whom care was received. Information linking provider identifiers to their characteristics (e.g., specialty, provider age) is available from CMS for research purposes (<https://nppes.cms.hhs.gov/NPPES/>). We will not disclose in any manner the identity of specific providers but only analyze the data in aggregate according to physician characteristics.

12. Estimates of Annualized Burden Hours and Costs

A. Burden Hours

This submission requests OMB approval for three years of NAMCS data collection. The burdens for one complete survey cycle and the proposed pretest are summarized in the tables below. The estimated annualized burden hours were based on previous years' experience in administering the survey, and final data from of the 2009 NAMCS. The table represents an estimate for one year of data collection. The estimated annual burden is 50,923 hours. A detailed description of the table is located below.

Table of Estimated Annualized Burden Hours

Type of Form	Type of Respondent	Form Name	Number of Respondents	Number of Responses per Respondent	Hours per Response	Total Burden (Hours)
Core	Office-based	Physician Induction	17,034	1	35/60	9,937

NAMCS Forms	physicians/CHC providers	Interview (NAMCS-1)				
	Community Health Center Directors	Community Health Center Induction Interview (NAMCS-201)	2,008	1	20/60	669
	Office-based physicians/CHC providers	Patient Record form (NAMCS-30)	3,407	30	14/60	23,849
	Office/CHC staff	Pulling, re-filing medical record forms	13,627	30	1/60	6,814
	Office-based physicians/CHC providers	Lookback module	1,192	15	10/60	2,980
	Office-based physicians/CHC providers	Asthma Supplement	11,072	1	20/60	3,691
National Electronic Health Records Survey (NEHRS)	Office-based physicians	NEHRS form	4,344	1	20/60	1,448
Physician Workflow Survey (PWS)	Office-based physicians	PWS form	2,645	1	30/60	1,323
Pretest NAMCS Forms	Office-based physicians	Physician Induction Interview (NAMCS-1)	17	1	35/60	10
	Office-based physicians	Patient Record form (NAMCS-30)	17	30	14/60	119
Re-abstraction Study	Office/CHC staff	Pulling, re-filing medical record forms	500	10	1/60	83
	Total					50,923

Core NAMCS, NEHRS, and PWS

For the core NAMCS, eligible physicians in private practice and all CHC providers will be asked to complete induction items (NAMCS-1) (**Attachment F with revisions shown in Attachment G**) (N=17,034 eligible out of the total sampled 21,753). All community health center executive/medical directors from sampled CHCs (N=2,008) will also be asked to complete the automated CHC facility-level induction items (NAMCS-201) (**Attachment K and revision at the bottom of Attachment G**). A minority of participants will complete electronic Patient Record forms (NAMCS-30) (**Attachment H**) themselves (N=3,407), while a majority will rely on Census abstractors to complete the forms. In

cases abstracted by Census FRs, the only responsibility for office staff will be to pull and re-file the medical records (N=13,627) (**Attachment T**). Approximately 30 forms are expected from each sample physician's practice. We estimate that approximately 35 percent of eligible physicians and all CHC providers will complete a lookback module (N=5,962) (**Attachment E**). Out of the providers who will complete the lookback module, 20 percent will abstract their own data, therefore, the only burden will be for office staff to pull and re-file medical records (N=1,192). Furthermore, we estimate that approximately 11,072 physicians and CHC providers will be asked to complete the asthma supplement (**Attachment B**). Based on who completed the 2011 Electronic Medical Records Supplement mail survey, we expect that 4,344 physicians should complete the newly renamed National Electronic Health Records Survey mail survey (**Attachment L**). Since the workflow survey (**Attachments N and O**) will be fielded only in 2012 and 2013, the estimated total number of respondents for two years was averaged across the 2012-2014 survey period ($(3,967 + 3,967)/3 = 2,645$ total respondents). Since the procedure for the re-abstraction study involves randomly selecting 10 patient visits that had been previously abstracted by the original FR, the only burden will be for office staff to pull and re-file medical records (N=500) (**Attachment EE**).

CPT Pretest

For the pretest collecting current procedural terminology (CPT) codes on the PRF, we present an average for one year of data collection, which means that the above estimates are based on 17 physicians (50 total physicians in pretest) who will complete the pretest Physician Induction Interview and PRFs.

B. Burden Cost

The cost to providers for each data collection cycle is estimated to be \$3,875,409. The hourly wage estimates for completing the automated items/forms mentioned above in the burden hours table along with pulling and re-filing medical records are based on information obtained from the Bureau of Labor Statistics web site (<http://www.bls.gov>). Specifically, we used the "May 2010 National Occupational Employment and Wage Estimates" for (1) health care practitioners and technical occupations, (2) office and administrative support occupations, and (3) management operations. Data were gathered on mean hourly wages in 2010 for (1) physicians, (2) mid-level providers (i.e., physician assistants) working at CHCs, and (3) other professionals involved in managing either a private office-based practice (e.g., nurses, receptionists, etc.) or CHC. The total cost estimate for NAMCS is detailed by the type of respondent who will complete the automated items/forms. Specifically, the respondent costs include estimates for completing the Physician Induction Interview items (NAMCS-1), CHC facility induction items, PRF (NAMCS-30), pulling and re-filing medical records, lookback module, asthma supplement, NEHRS, physician workflow mail survey, and CPT pretest. Physicians participating in the CPT pretest will only complete NAMCS-1 forms and automated PRFs. Overall, the average hourly wages presented in the table below was averaged across different specialties, and who may complete each applicable form. For example, to better approximate costs, the estimate of \$93.93 (office-based physicians) was an average based

on the hourly salary of family and general practitioners, general internists, obstetricians and gynecologists, general pediatricians, psychiatrists, surgeons, and a catch-all category “Physicians and Surgeons, All Other.” Any category that included physicians and CHC providers combined (\$87.43) included the above categories plus physician assistants (as a proxy for all mid-level providers). Similarly, the average hourly wage for pulling and re-filing medical records (\$24.24) was based on office staff that might perform this activity: registered and licensed nurses, office supervisors and support staff, receptionists, medical secretaries, and physician assistants. Finally, the estimate used for those individuals completing the CHC facility items (\$82.21) included (1) medical and health services managers (as a proxy for medical directors), and (2) family and general practitioners, general internists, obstetricians and gynecologists, and general pediatricians. The medical specialties in the last group were used as a proxy for physicians that might be CHC medical directors. The following table shows the breakdown of the total annual respondent cost.

Table of Annualized Respondent Cost

Type of Respondent	Response Burden (in hours)	Average Hourly Wage	Total Cost
Office-based physicians/CHC providers (NAMCS-1)	9,937	87.43	868,792
Community Health Center directors	669	82.21	54,998
Office-based physicians/CHC providers (PRF)	23,849	87.43	2,085,118
Office/CHC staff (pulling & re-filing medical records)	6,814	24.24	165,171
Office-based physicians/CHC providers (Lookback module)	1,192	87.43	104,217
Office-based physicians/CHC providers (Asthma supplement)	3,691	87.43	322,704
Office-based physicians (NEHRS)	1,448	93.93	136,011
Office-based physicians (Physician Workflow Survey)	1,323	93.93	124,269
Office-based physicians CPT pretest (NAMCS-1)	10	93.93	939
Office-based physicians CPT pretest (PRF)	119	93.93	11,178
Office/CHC staff (pulling & re-filing medical records for re-abstraction study)	83	24.24	2,012
Total			3,875,409

13. Estimates of Other Total Annual Cost Burden to Respondents or Recordkeepers

For this project there will be no annual capital or maintenance costs to the respondent resulting from the collection of information.

14. Annualized Cost to the Government

The estimate of average annual (one-data cycle) cost to the government for the 2012-2014 survey is as follows:

\$3,422,247 Interagency Agreement for data collection with the Bureau of the Census
 \$ 401,711 Overhead
 \$ 19,652 Printing

\$ 867,316 Contract costs for conducting the EMR/EHR mail survey and coding/keying data

\$ 671,168 Staff salaries, data processing, printing, overhead, etc.

\$ 5,385,970 Total cost for 12 months

15. Explanation for Program Changes or Adjustments

Adding physicians/providers to the core NAMCS, the NEHRS, workflow survey, the proposed asthma supplement, and the pretest will increase the requested burden by 38,744 hours from the 12,179 total hours reported in the most previously approved package. The total NAMCS burden will now equal 50,923 hours.

16. Plans for Tabulation and Publication and Project Time Schedule

The timetable for key activities for the 2012 National Electronic Health Records Survey (NEHRS) is as follows:

2/2012	Begin data collection for 2012 NEHRS
5/2012	End data collection
7/2012	Begin data analysis
11/2012	Publish Health E-stat

The timetable for key activities for the 2012 Physician Workflow mail survey (Follow up NEHRS) is as follows:

3/2012	Begin data collection for 2012 Physician Workflow mail survey
7/2012	End data collection
8/2012	Begin data analysis
12/2012	Publish Health E-stat

The duration of activities for core NAMCS (office-based physicians and CHCs) will span 12 months. The timetable for key activities for the 2012 survey is as follows:

12/2011	Begin data collection for 2012 survey
6/2012	Begin scheduled NAMCS pretest
12/2012	Formally end reporting period
3/2013	Close out field work
5/2013	End data processing
6/2013	Begin data analysis
8/2013	Publish National Health Statistics Report
12/2013	Public use data available on Internet
3/2014	Publish additional reports

Plans for types of data analyses will parallel the analyses completed for the NHAMCS because a majority of the data items from NAMCS and the outpatient department are the

same. 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 on the Web and in various data briefs. The most recent NAMCS data brief, titled “Nurse Practitioners, Certified Nurse Midwives, and Physician Assistants in Physician Offices” can be found on-line at <http://www.cdc.gov/nchs/data/databriefs/db69.pdf>. In addition, a report comparing data from NAMCS and NHAMCS and combining data from both surveys has recently been published. The link for an on-line copy of the 2006 combined NAMCS and NHAMCS summary is <http://www.cdc.gov/nchs/data/nhsr/nhsr008.pdf>. Finally, NCHS reports examining (1) characteristics of office-based physicians and their practices (on-line copy: http://www.cdc.gov/nchs/data/series/sr_13/sr13_166.pdf) and (2) electronic medical record use by office-based physicians and their practices (on-line copy: <http://www.cdc.gov/nchs/data/ad/ad393.pdf>) have also been released.

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

An exception for displaying the expiration date is not requested.

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.