

Supporting Statement for Request for Clearance:  
NATIONAL AMBULATORY MEDICAL CARE SURVEY  
2007-2008

OMB No. 0920-0234

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## Supporting Statement

### NCHS National Ambulatory Medical Care Survey

This request is for an extension with revision of an approved data collection (OMB No. 0920-0234), the National Ambulatory Medical Care Survey (NAMCS), for the purpose of collecting data in 2007 and 2008. The NAMCS is a national survey of patient visits to office-based physicians conducted by the National Center for Health Statistics (NCHS), one of the centers of the Centers for Disease Control and Prevention (CDC). In addition to the annual statistics normally collected, a key focus of the 2007-2008 NAMCS will be (1) identifying visit characteristics associated with selected chronic conditions with an emphasis on cervical cancer, and (2) ascertaining characteristics of visits to physicians and mid-level providers at community health centers (CHCs). Modifications to the 2006 Patient Record form (PRF) approved in October 2005 included items specific to cancer diagnoses, screening, and treatment options that will be continued in 2007-2008. Minor PRF item modifications are planned for 2007-2008 and are summarized in Attachment K. The 2006 Physician Induction Interview (PII), approved in October 2005, incorporating changes as a result of the addition of CHCs, will be the same in 2007-2008. In addition, we plan to continue the Cervical Cancer Screening Supplement (CCSS) initiated in 2006. The CCSS is sponsored by the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) and will be used to evaluate the adherence to recent national guidelines about the use of genital human papilloma virus (HPV) testing (1) as an adjunct to Pap testing, and (2) for management of patients with abnormal Pap tests. A three-year extension is being requested for this survey. As in 2006, we will draw a sample of 150 additional primary care physicians (i.e., general/family practitioners, internists, and obstetricians/gynecologists), and increase the sample of oncologists from 200 in 2006 to 400 in 2007-2008. The additional primary care physicians will again be sponsored by the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). As in 2006, the supplement of oncologists will be supported by the National Cancer Institute.

#### **A. Justification**

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

The NAMCS was conducted from 1973 through 1981, in 1985, and was fielded again in 1989 as 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**).

The purpose of the NAMCS is to meet the needs and demands for statistical information about the provision of ambulatory medical care services in the United States. 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, the 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) to provide data on patient visits to hospital outpatient and emergency departments.

In addition to health care provided at physician offices and outpatient and emergency departments, community health centers (CHCs) play an important role in the health care community by providing care to people who could not necessarily 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 in-scope for the NAMCS, have been underrepresented due to the fact that the normal sample of physicians was simply not large enough to capture many of the physicians who worked in these important locations. In an attempt to obtain a more accurate picture of health care provided in the United States, a supplementary sample of 104 CHCs was included in the 2006 panel and these settings will continue to be sampled in 2007-2008.

Although general information is known about CHCs through the Uniform Data System (UDS) (a mandatory reporting system of characteristics of each CHC to the Bureau of Primary Health Care (BPHC) at the Health Resources and Services Administration (HRSA)), the addition of 104 CHCs will provide details of the patient/physician encounter not previously collected.

The NAMCS is part of the ambulatory care component of the National Health Care Survey (NHCS), which is a family of provider-based surveys that captures health care utilization from a variety of settings including hospital inpatient and long-term care facilities. For over ten years, the NHCS surveys of health care providers, including the NAMCS, the National Hospital Discharge Survey, the National Nursing Home Survey, the National Health Provider Inventory, the National Home and Hospice Care Survey, the National Survey of Ambulatory Surgery, and the NHAMCS, have been modified and expanded into this integrated NHCS.

Although there are other surveys that collect information on physician office and CHC utilization, no other nationally representative survey provides information on the content and nature of the patient encounter.

A 1992 study completed by the Institute of Medicine (IOM) supports the need to continue the NAMCS. In the report, Toward a National Health Care Survey: A Data System for the Twenty-first Century<sup>1</sup>, the IOM panel states that it, “endorses the NCHS plan to conduct the provider surveys on an annual basis.”

<sup>1</sup>Institute of Medicine. *Toward a National Health Care Survey: A Data System for the Twenty-first Century*. National Academy Press. Washington DC. 1992.

Other justifications for conducting the NAMCS include the need for more complete ambulatory medical care data that has been accentuated by increasing efforts at cost containment, the rapidly aging population, the growing number of persons without health insurance, and the introduction of new medical technologies. As a result of these societal changes, there has been considerable diversification in the organization, financing, and delivery of ambulatory medical care. This diversification is evidenced by the emergence of managed care, 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. Valid data are also needed to address health policy issues and to evaluate changes in the way ambulatory medical care is organized, financed, and delivered.

One of CDC's missions is to provide accurate information that enhances health decisions, and as a component of the NHCS, NAMCS enables this mission by providing office and CHC visit data that allow CDC and other researchers the ability to anticipate trends in diseases, health behaviors, and health care.

An example of how the NAMCS can guide health decisions is by providing data on genital human papilloma virus (HPV). HPV is an infection that is common among sexually active populations, and a test to detect HPV is now available for clinicians to use. Currently, there is recognition that this new information may require different approaches to cervical cancer screening in primary care practice, as well as new information that needs to be conveyed when counseling and educating patients and their sex partners. A cervical cancer screening supplement (CCSS), sponsored by the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) and initially conducted in conjunction with the 2006 NAMCS, will be again used to evaluate adherence to recent national guidelines. The CCSS will be administered to (1) physicians with a specialty of general/family practice, internal medicine, or obstetrics/gynecology, and (2) physicians and mid-level providers at CHCs.

## **2. Purpose and Use of Information Collected**

The purpose of this study is to collect information about ambulatory patients, their problems, and the resources used for their care. The resulting published statistics help the profession plan for more effective health services, improve medical education, and assist the public health community in understanding the epidemiology of diseases and health conditions. If NAMCS data were not collected, there would be no national estimates on the utilization of health care at physician offices or CHCs.

The patient visit data from the 2007 and 2008 NAMCS will be used in basically the same manner as data from prior surveys with an added emphasis on the identification of characteristics associated with visits to office-based physicians, physicians/mid-level providers practicing at CHCs, and cervical cancer screening practices.

The addition of CHCs to the NAMCS sample will not only allow a better overall picture of the ambulatory care provided in the United States, but it will also allow us to look at the specific utilization of healthcare at CHCs and how it might differ from utilization in non-CHC settings. A separate stratum of CHCs allows NCHS not only to improve our estimates of health care for the uninsured, but also allows separate estimates for providers and visits at CHCs.

Additionally, collecting data from physician offices on the CCSS will allow the CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) the ability to examine practices regarding the provision of HPV tests for approved and non-approved uses, cervical cancer screening methods, the use of HPV tests as an adjunct to Pap testing, the use of HPV test results for managing patients with abnormal Pap tests, and the potential impact of HPV testing on lengthening Pap test screening intervals.

Each year, the 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 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 NAMCS are useful to health planning agencies, 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 epidemiology of selected conditions including cancer, which is a continuing focus of the 2007-2008 survey. The 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.

Three other types of uses are possible for physician ambulatory medical care data: (1) descriptive analyses of the content of physician ambulatory medical care; (2) comparative analyses of the content of medical care provided in the hospital and office-based settings; and (3) trend analyses of visits to physician offices.

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, professional associations, as well as individual practitioners, researchers, administrators and health planners. 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 NAMCS data.

- Researchers within and outside NCHS have published work in scholarly journals:
  - Holmes JS, Arispe IE, Moy E. Heart disease and prevention: race and age differences in heart disease prevention, treatment, and mortality. *Med Care* 43: I-33-I-41. 2005.
  - Lin SX, Hyman D, Larson E. Provision of health counseling in office-based practices and hospital outpatient clinics. *Prev Med* 40(5): 542-546. May 2005.
- Staff from the Ambulatory Care Statistics Branch described highlights of the NAMCS during an overview presentation of the National Health Care Survey at the 2005 American Public Health Association's annual conference.
- The Department of Health and Human Services is currently using NAMCS data to evaluate certain Healthy People 2010 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 2003 NAMCS bioterrorism questions have been presented by Ambulatory Care Statistics Branch staff to outside partners such as the Association of American Medical Colleges, and to decision-making components of the Department of Health and Human Services charged with bioterrorism preparedness. Combined results from the 2003 and 2004 NAMCS bioterrorism questions are being prepared for peer-reviewed journal submission in the primary medical care literature.
- Continuation of the CCSS in 2007-2008 will allow researchers the ability to evaluate the adherence to recent guidelines about the use of HPV testing (1) as an adjunct to Pap testing and (2) for management of patients with abnormal Pap tests.

Further examples of studies using NAMCS data are shown in **Attachment B**.

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

Respondent burden in NAMCS data collection is held to a minimum through the use of sampling procedures. These methods are discussed in item A.5 below. In general, for the office-based or "regular" NAMCS sample, improved information technology would not reduce the burden as the recording-keeping systems of different physicians are too diverse to support electronic response. Attempts to implement such technology would actually increase the burden and have no resulting improvement to the final data.

However, response burden may be reduced through electronic reporting for supplements which are not based on medical record data. Respondents have the option to complete the CCSS using a paper questionnaire or on the Internet via Census Taker. Once data for

2006 have been reviewed, NCHS will have more information on what, if any, time is saved by electronic reporting.

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

Staff of the NCHS have had extensive contacts 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 30 years since work on the NAMCS began, three sources of similar data have been identified and are discussed below.

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

The Medical Expenditures Panel Survey (MEPS) (AHRQ, OMB No. 0937-0187) is a survey of households and their members' health care providers (including doctors in office-based practice), health insurance companies, and employers. As with the 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 the NHIS and the 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 entitled the National Disease and Therapeutic Index (NDTI) that produces data somewhat similar to that collected in the 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. While these 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. The NAMCS allows for greater emphasis on analysis directed toward informing physician decisions on the provision of effective health services, the determination of health manpower requirements, and the improvement of medical education. Furthermore, the depth of data collected in the NAMCS about ambulatory patients allows for rich analysis regarding the principal reason for their visit and the resources used in the provision of their medical care.

Advice from consultants, attendance at relevant meetings, and literature reviews have been methods used to identify other sources that collect practice characteristics similar to those collected by the 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 of the NAMCS respondents are physicians in solo practices. In order to reduce respondent burden for these and 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 physician offices and community health centers (CHCs). Field Representatives (FRs) monitor reporting and assist physicians/providers and their staff in data collection to the extent possible. A sampling 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. The forms are designed to allow check box answers to the extent possible. In addition, the impact of the NAMCS on physicians/providers is further reduced by design procedures that limit participation at most to once every three years. When physicians/providers do participate, they are only asked to complete survey forms for a designated one-week period.

## **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, for describing the public's use of physician services, for monitoring the effects of change, and for 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 movement toward managed care plans by having continuous data collection before, during, and after the restructuring. To increase reliability, data from the 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**

There are no special circumstances affecting this survey.

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

### **A. Public Comment**



This project fully complies with all guidelines of 5 CFR 1320.8(d). The 2007-2008 NAMCS was published for public comment in the Federal Register January 12, 2006, Vol. 71, No. 8, pages 2046-2047 (**Attachment C**).

One response to the notice was received on behalf of the American College of Nurse-Midwives. They offered their endorsement and asked if nurse-midwives were part of the sample. We indicated that we would appreciate their endorsement; currently however, the survey is not designed to obtain a comprehensive sample of midwives. There was no further communication from them.

## **B. Other Consultation**

From 2003-2005, numerous individuals, both within and outside CDC were consultants on the 2005-2006 and 2007-2008 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, Centers for Medicare and Medicaid Services. In addition, representatives from the AMA and other major national medical organizations as well as private and public health services researchers were contacted for their input.

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 fifteen 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 FQHCs (Federally Qualified Health Centers) to 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 the list of health centers locations.

NCHS will continue to work closely with these individuals and agencies. There are no outstanding unresolved issues. A list containing the names of the consultants is provided in **Attachment D**.

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

In an effort to boost NAMCS response rates, an incentive test was performed on physicians sampled in quarters 2 through 4 in 2002. Each physician was randomly assigned to one of three incentive panels: a \$50 monetary gift, a small gift under \$25, and a control group which received nothing. The results of this methodological test did not show a significantly higher response rate for the panels of physicians who received either the monetary incentive (73% response rate) or the gift (71% response rate) when compared to the control panel (73% response rate). However, for the year in which we did the study, the overall response rate was higher than typically found. To date, the influence of an incentive on item nonresponse has not been analyzed, but future analyses may show higher item completion rates for practices where incentives were provided. While no payments or gifts are proposed for the 2007-2008 survey, OMB will be notified of any plans to offer token 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."

The study is designed so that NCHS receives no identifiable patient information such as patient names, Social Security numbers, or health identification numbers. The records are covered under Privacy Act System of Records 09-20-0167, Health Resources Utilization Statistics. The top section of each Patient Record form (PRF), which contains

the patient's name and record number, is separated from the bottom section by a perforation running across the page. The top section remains attached to the bottom until the entire PRF is completed. To ensure confidentiality, before collecting the completed PRF, the top section is detached and given to the physician/provider or their staff. The FR instructs the physician to keep this portion for a period of four weeks, in case it is necessary to retrieve missing information or clarify information that had been recorded.

Prior to 2003, the 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 the NAMCS protocol was required by the IRB.

The NAMCS data collection plan has been approved by CDC's Institutional Review Board (Protocol #2003-5) 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 IRB letter granting approval for continuation of Protocol #2003-05 NAMCS for the maximum allowable period of one year is presented in **Attachment E**.

## **11. Justification for Sensitive Questions**

It is necessary for the NAMCS to collect some protected health information, such as date of visit, birth date, and zip code. These data are used internally to create composite variables. Also, in rare 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.

## **12. Estimates of Annualized Burden Hours and Costs**

### **A. Burden Hours**

This submission requests OMB approval for two NAMCS data collections: one that will be initiated in 2007 and one that will be initiated in 2008. These data collections will occur within the context of ongoing data collection activities (OMB #0920-0234). The burden for one complete survey cycle is summarized in the table below. The hour burden estimates were based on previous years' experience in administering the survey.

#### Estimated Annualized Burden

Type of Respondents	Number of Respondents	Number of Responses/ Respondent	Avg. Burden (in hours)	Total Burden (in hours)
Office-based physicians (eligible)				
Physician Induction Interview (NAMCS-1)	2,662	1	35/60	1,553
Patient Record form (NAMCS-30)	2,263	30	5/60	5,658
Pulling and re-filing Patient Record form (NAMCS-30)	399	30	1/60	200
Cervical Cancer Screening Supplement (NAMCS-CCS)	712	1	15/60	178
Office-based physicians (ineligible)				
Patient Induction Interview (NAMCS-1)	888	1	5/60	74
Community Health Center Directors				
Community Health Center Induction Interview (NAMCS-201)	104	1	20/60	35
CHC Providers				
Physician Induction Interview (NAMCS-1)	312	1	35/60	182
Patient Record form (NAMCS-30)	265	30	5/60	663
Pulling and re-filing Patient Record form (NAMCS-30)	47	30	1/60	24
Cervical Cancer Screening Supplement (NAMCS-CCS)	312	1	15/60	78
<b>TOTAL</b>				<b>8,645</b>

Each physician is asked to complete an induction form (NAMCS-1) while each Community Health Center (CHC) is asked to complete a CHC induction form (NAMCS-201), and both are considered respondents (3,550 physicians and 104 CHC's for a total of 3,654 respondents. The physicians will be discussed first.

Of the 3,550 physicians, 888 are deemed to be ineligible and complete one form only. The other 2,662 physician continue with the survey. Eighty-five percent of these (N=2,263) complete the patient record forms (NAMCS-30) themselves. The other 15 percent (N=399) rely on Census abstractors to complete the forms. The burden for the physician is just to pull and re-file the medical records. Each respondent is asked to abstract data on 30 patients. A sample of physician's offices (N=712) are also asked to complete the Cervical Cancer Screening Supplement (NAMCS-CCS)

From the 104 community health centers, a sample of 312 physicians/providers complete an induction interview (NAMCS-1). Approximately 85 percent (N=265) will complete medical record abstracting (NAMCS-30) themselves and 15 percent (N=47) will pull and re-file records for Census abstractors. Each physician/provider is asked to abstract data on 30 patients. All CHC physicians/providers will be asked to complete the Cervical Cancer Screening Supplement.

The total number of annual responses (94,210) was calculated by multiplying the number of respondents by the number of responses per respondent, then adding those values.

Note: Attachments J and L are reference materials and instructions that support data collection forms. Some elements of these Attachments are completed by the Census Bureau Field Representative (see cover page and page 1 of Attachment L), and thus do not enter into the burden calculation for respondents. Other forms are adjunctive tools for respondents (see Attachment L, Exhibit C, Patient Visit Worksheet), but are not used as primary data collection instruments.

## **B. Burden Cost**

The cost for each data collection cycle is estimated to be \$378,653. The hourly wage estimates for completing the Physician Induction Interview (PII) form and the Patient Record form (PRF) are based on information from the Bureau of Labor Statistics web site (<http://www.bls.gov>). Specifically, we used the "November 2004 National Occupational Employment and Wage Estimates" for (1) healthcare practitioners and technical occupations, and (2) office administrative and support administrative support occupations. Data were gathered on mean hourly wage in 2004 for (1) physicians, mid-level providers (e.g., registered nurses), and other professionals involved in managing a private office-based practice (e.g., nurses, receptionists, etc) as well as for (2) physicians (MDs & DOs) and mid-level providers at CHCs who will complete the forms (i.e., physician assistants, nurse practitioners and nurse midwives). The cost estimates for completing the PRF are weighted based on the 1993 NAMCS Reinterview Study which showed who in the office-based practices were completing the PRF. The following table shows how these estimates were calculated.

### Estimated Annualized Respondent Costs to the Respondents

Type of Respondents	Response Burden (in hours)	Average Hourly Wage	Total Cost
Office-based physicians (eligible)			
Physician Induction Interview (NAMCS-1)	1,553	\$85	\$132,005
Patient Record form (NAMCS-30)	5,658	\$30	\$169,740
Pulling and re-filing Patient Record form (NAMCS-30)	200	\$30	\$6,000
Cervical Cancer Screening Supplement (NAMCS-CCS)	178	\$86	\$15,308
Office-based physicians (ineligible)			
Physician Induction Interview (NAMCS-1)	74	\$85	\$6,290
Community Health Center Directors			
Community Health Center Induction Interview (NAMCS-201)	35	\$56	\$1,960
CHC Providers			
Physician Induction Interview (NAMCS-1)	182	\$50	\$9,100
Patient Record form (NAMCS-30)	663	\$50	\$33,150
Pulling and re-filing Patient Record form (NAMCS-30)	24	\$50	\$1,200
Cervical Cancer Screening Supplement (NAMCS-CCS)	78	\$50	\$3,900
<b>TOTAL</b>			<b>\$378,653</b>

### 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 2007-2008 survey is as follows:

\$2,866,602 Interagency Agreement for data collection with the Bureau of the Census  
 \$ 358,550 Overhead  
 \$ 55,162 Printing  
 \$ 134,000 Contract costs for coding/keying data  
 \$ 599,056 Staff salaries, data processing, printing, overhead, etc.  
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 \$ 4,013,370 Total cost for 12 months

### 15. Explanation for Program Changes or Adjustments

In October, 2005, we received approval for 7,460 annual hours for the 2006 survey, however, a more complete review of the documents, the time to complete them, and an increase in the sample of oncologists has resulted in an additional 1,185 hours for a total of 8,645 hours in 2007-2008.

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

The duration of activities for the survey will span 36 months. The timetable for key activities for the 2007 survey is as follows:

9/2006	Receive OMB clearance
9/2006	Submit data collection materials for printing
9/2006	Physician sample selection
11/2006	Begin to send out introduction letters
12/2006	Begin data collection for 2007 survey
12/2007	End data collection
3/2008	Close out field work
7/2008	End data processing
10/2008	Begin data analysis
12/2008	Publish first Advance Data Report
12/2008	Public use data available on Internet
3/2009	Publish additional reports
4/2009	CD-ROM available

Plans for types of data analyses will parallel the analyses completed for the NHAMCS. 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 Advance Data from Vital and Health Statistics report and Vital and Health Statistics Series report. (Follow link for sample of the 2003 NAMCS summary <http://www.cdc.gov/nchs/data/ad/ad365.pdf>). In addition, there are plans to produce reports comparing data from the NAMCS and NHAMCS and combining data from both surveys.

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

Expiration date display exemption 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.

## **B. Collections of Information Employing Statistical Methods**

### **1. Respondent Universe and Sampling Methods**

The basic statistical design and data collection methods for the 2007-2008 NAMCS will be the same as those of the 2006 NAMCS. There are two major components of the

NAMCS universe. First, the NAMCS universe consists of all office-based physicians in the master files of the AMA and the American Osteopathic Association (AOA). There are about 750,000 physicians in the NAMCS universe. Second, physicians (MDs and DOs) and mid-level providers (i.e., nurse practitioners, physician assistants, & nurse midwives) practicing at CHCs represent the second NAMCS target universe. Unlike physicians in the traditional NAMCS, physicians and mid-level providers working at CHCs are not individually selected because a complete sample frame is unavailable. We will include three different types of CHCs in the sample: 1) CHCs that receive grant funds from the federal government through section 330 of the Public Health Service Act (PHSA), (2) Look-alike CHCs who meet all the requirements to receive 330 grant funding, but do not actually receive a grant, and (3) Tribal or Urban Indian Federally Qualified Health Centers (FQHC). The list of federally funded (330 & look-alike CHCs) will be provided by the NACHC, and the list of FQHCs will be provided by the Indian Health Service (IHS).

For the traditional NAMCS office-based physician universe, a multistage probability design is utilized with the elementary sampling unit being a physician-patient encounter or "visit." The first stage of selection is a probability sample of 112 primary sampling units (PSUs), a subset of the 1985-94 National Health Interview Survey sample for PSUs. The physicians in the sample PSUs are grouped into 16 strata defined by physician specialty, including a stratum of oncologists introduced in the 2006 sample. Within each specialty stratum, a systematic random sample of physicians is selected. The total physician sample is divided into 52 sub-samples that are randomly assigned to the 52 weeks of the year. Each sample physician's practice is randomly assigned a one-week data reporting period during the calendar year, and a systematic random sample of approximately 30 patient visits is taken during the assigned week. This provides for continuous data collection throughout the year to account for seasonal variation in disease and patient visit patterns. Data collection within a physician's practice, as well as CHCs, begins on Monday morning of the assigned reporting week and continues through the following Sunday (substitution of reporting week is not permitted). Visits are recorded on a "Patient Visit Worksheet." This worksheet allows the office staff to easily keep track of the patients as they enter the office and select (via the sampling plan) those that fall into sample for the survey.

As mentioned earlier, the sampling of CHCs is somewhat different than the "regular" NAMCS. A multistage probability design is also utilized with the elementary sampling unit being a physician/provider-patient encounter or "visit." The first stage of selection is the same probability sample of 112 primary sampling units (PSUs) as in the "traditional" NAMCS. As in 2006, 104 CHCs will be sampled within PSUs, and a systematic sample of three providers (MDs, DOs, & mid-level providers) will be sampled at each CHC. Specifically, a proportional-to-size sampling method, which takes into account each physician/providers weekly workload, will be used to determine whether a physician/provider will be selected to participate in the NAMCS. As with office-based physicians, a systematic random sample of approximately 30 patient visits will be utilized during the assigned week. The total CHC sample is divided into 52 sub-samples (2 CHCs sampled each week) that are randomly assigned to the 52 weeks of the year. This



provides for continuous data collection throughout the year to account for seasonal variation in disease and patient visit patterns.

All data are weighted to national estimates using the inverses of selection probabilities with non-response adjustments done within specialty, and when feasible, within PSU. Calibration adjustment factors are used to adjust estimated total physicians to known totals within specialty strata. Sampling errors are computed using the linearized Taylor series method of approximation as applied in the SUDAAN software package. Additional details of the statistical design are provided in the "Technical Notes" section of the 2001 Advance Data report . (Follow link for a sample of the 2003 NAMCS summary <http://www.cdc.gov/nchs/data/ad/ad365.pdf>).

In the past 10 years from 1994 through 2003, the average NAMCS physician response rate was 68 percent, and the 2004 survey ended with a response rate of 65 percent. The 2004 response rate was a slight decrease from the previous 10-year average, and efforts to raise the rate are currently ongoing. A motivational insert that was introduced in 2001 will continue to be included with the introductory letter that addresses physicians' concerns about participation. The insert covers confidentiality issues, including requirements pertaining to the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule. Recently we initiated a windowed, multi-colored envelope to send the introductory letter and insert to sampled physicians. Using this type of envelope increases visibility and exposure to office gate keepers who, in many cases, decide which mail a physician receives. We are continually in contact with those administering the survey, assisting with any problems that arise while in the field. We provide our Field Representatives (FRs) with the most current data so they can "sell" the survey as well as promotional material that gives physicians examples of how the survey is used and how important it is for research. We also hold training conferences for the FRs so they can learn from each other how to convert physicians that initially refuse to participate.

No matter how well we train and equip our FRs, the atmosphere of the physician office makes it very difficult, but not impossible, to obtain response rates higher than 70 percent. Because the physician and office staff are already very busy with patients and their associated paperwork, some may view such a survey as additional, volunteer work they do not have time or the desire to complete. In addition, because of the many Medicaid and Medicare regulations imposed on them by the Government, numerous physicians view this survey as a further intrusion into their private practice. Our efforts are many times overshadowed by private industry who pay the physician and office staff for their time. As mentioned previously, the 2004 physician response rate for in-scope NAMCS physicians was 65 percent, which suggests that the HIPAA Privacy Rule, which went into effect in April of 2003, might have had some impact on survey response. However, with only the 2004 data currently available, the direct impact on physician response to the NAMCS is undetermined and will have to be monitored over the course of multiple years to justify a modification to our data collection procedures.

We have conducted research on the extent of possible bias in our estimates. Analysis of nonresponse follow-up operations in 1998 revealed that there was little differential in

nonresponse among practice or physician characteristics. Further, where statistically non-significant differential nonresponse was found to exist, it leads to little bias in the estimates. Notwithstanding, each year we publish response rates by a variety of physician characteristics available from the sample frame.

## **2. Procedures for the Collection of Information**

### Training

Training in data collection procedures is conducted at different times with three different types of staff. Census Bureau Headquarters staff are responsible for training the Regional Office staff. Regional Office staff have the primary responsibility for training the FRs and for supervising physician data collection activities. Field representative training covers the following topics: inducting the physician, confidentiality, HIPAA, determination of the "take every" and "start with" numbers, instructing physicians' staff, supervising patient visit sampling, editing completed forms, retrieving missing data, and medical record abstraction. FRs induct the physicians and train the physician's staff on visit sampling and completion of the PRFs. However, if the physician or physician's staff are unable to complete the forms, FRs abstract the data.

Census Bureau Headquarters staff are also responsible for writing the field manual. The field manual contains topics that cover the following: purposes of the survey; interviewing techniques; a description of the NAMCS physician induction interview (PII) questionnaire and related forms; and procedures that cover inducting physicians, conducting physician visits, determining the take every and random start numbers, instructing the physician's staff, supervising patient visit sampling, editing completed forms, and retrieving missing data.

Throughout the year, conference calls are held between ACSB staff, Census Bureau Headquarters staff, Census Field Division staff, and NAMCS supervisory staff from all of the regional offices to discuss issues relevant to the ongoing NAMCS data collection.

The 2007 and 2008 NAMCS instruments are shown in Attachments F, G, H, I, and K. The actual 2007 versions of the PRF, PII, and CCSS have yet to be printed, but will be unchanged from the 2006 versions.

<b>Attachment F</b>	Introductory letters and motivational insert
<b>Attachment G</b>	Endorsing organization letters
<b>Attachment H</b>	2006 Community Health Center Induction Interview
<b>Attachment I</b>	2006 Physician Induction Interview form (PII)
<b>Attachment K</b>	2006 Patient Record form (PRF)

### Initial Contact

Depending on the setting, initial contact is made at varying times prior to the beginning of the NAMCS. Six weeks prior to the data collection, each CHC director receives a letter notifying him/her that their particular CHC has been randomly selected to participate in the NAMCS. CHC physicians/providers also receive an introductory letter, patterned after the letter sent to “traditional” physicians 5 weeks before their assigned reporting period. Finally, office-based physicians who have been selected to participate in the survey receive an introductory letter, signed by the Director of NCHS, approximately 4 weeks before their 1-week reporting period is to begin. All three types of letters are similar and explain the basics of the survey, the voluntary nature of participation, and the planned contact with a representative from the Bureau of the Census, who will act as NCHS’s data collection agent and provide additional instructions and support. See **Attachment F** for copies of all three types of letters. As mentioned earlier, we include a motivational insert with the introductory letter. This short brochure contains reasons for participation, and questions and answers on confidentiality issues, including the HIPAA Privacy Rule. In addition, the envelope sent to sampled NAMCS participants contains endorsing letters from specialty colleges and/or associations corresponding to the physician’s particular specialty (**Attachment G**).

During the initial interview with the CHC director, a Census FR will complete a NAMCS-201 which is the Community Health Center Induction Interview (**Attachment H**). This form allows for the collection of general CHC contact information, along with other information such as sources of revenue/operating expenses. The major purpose of the NAMCS-201 is to list eligible providers that will see patients at all in-scope locations for the week the CHC has been chosen to participate. This list of providers will include those that work at satellite locations of the CHC as well as mobile units. School-based locations of the CHC are not eligible as institutional and occupational settings are not within the scope of the NAMCS. When the list of providers has been supplied, the FR will select three providers to be sampled. This selection will be proportional to visit volume. The FR will then obtain the locations and telephone numbers of the selected providers so they can be contacted and inducted.

### Physician/Provider Induction

The introductory letter is followed by a telephone call to the physician from a Census Bureau FR to schedule an appointment so that the physician can be inducted into the NAMCS by personal interview (**Attachment I**). Each CHC provider is also inducted with a letter followed by appointment scheduling and personal interview (**Attachment I**). Instructions for the FR on how to complete these interviews are shown in **Attachment J**. During the induction visit, the interviewer provides the physician/provider and staff with verbal and written instructions on the completion of patient records. At this time the interviewer also instructs the physician/provider and staff on the sampling procedures which vary according to how many visits the physician/provider expects to see during the sample week (to reduce the burden to busy physicians/providers). Printed on the folder containing PRFs are general instructions and definitions for easy reference by the physician/provider. More detailed definitions and instructions for selected PRF items are provided on a printed card placed in a pocket of the folder.

## Data Collection

A Physician Induction Interview (PII) is completed for each sampled physician and CHC provider during the induction visit (**Attachment I**). As mentioned above, the questions in the first-half of the PII are used to guide the FRs through the induction process and verify the physician/provider's eligibility. The second-half of the form is dedicated to obtaining information concerning selected practice characteristics, including questions pertaining to specific medical procedures the provider is able to perform at each office location (e.g., CT scan, chemotherapy, colonoscopy, etc.). A draft of the 2007-2008 form, based on the 2006 form, is shown in **Attachment I**.

The real bulk of data collection occurs with the completion of Patient Record forms (PRFs) (**Attachment K**) by the sampled physician and/or office staff. Based on a "start with" and "take every" number, the physician/provider records each patient visit in sequence during the reporting week and completes PRFs for the designated sample visits. This record of patient visits can be completed which ever way works best for the physician. We provide a worksheet in the back of the PRF Instruction Booklet (**Attachment L**) for the physician/provider to use if he/she finds it easier than other methods. Patient sampling rates (based on the "start with" and "take every" number) are assigned to physicians/providers according to practice size so that the physician/provider will complete about 30 PRFs during his/her reporting week. A random start is provided for each physician/provider after which every  $n^{\text{th}}$  patient is sampled throughout the 7 day reporting period. The patient name is retained by the physician for confidentiality reasons.

A PRF is completed for each sampled patient visit. The proposed 2007-2008 PRF will have questions that are slightly modified from the ones used in 2006. Instructions on completing the PRFs and definitions of terms are provided in the 2006 NAMCS Instruction Booklet (**Attachment L**). The NAMCS PRF collects data on patient characteristics such as age, sex, race, and ethnicity, and visit characteristics such as date, expected source of payment, reason for visit in patient's own words, physician diagnoses, and medications provided or prescribed.

We initiated a Cervical Cancer Screening Supplement (CCSS) in 2006 (**Attachment M**) and plan to continue its use in 2007-2008. This supplement is sponsored by the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) and is conducted in conjunction with the NAMCS. This supplement has been previously tested with physicians in private practice, and during the most recent pilot test, it was tested on physicians/mid-level providers in CHCs. Results indicated that the questions could be answered without difficulty by physicians and providers at CHCs.

The CCSS will be administered to (1) physicians with a specialty of general/family practice, internal medicine, or obstetrics/gynecology, and (2) all types of physicians and mid-level providers at CHCs. When NAMCS providers are contacted for participation, they will be asked if they perform any cervical cancer screening. If screening is

performed, the respondent will be asked to complete the CCSS at the end of the 1-week reporting period, so as not to bias the data collected on the PRF (i.e., conventional Pap test, liquid-based Pap test, Pap test-unspecified, HPV DNA test ordered or performed).

Respondents will have the option to complete the CCSS on a paper questionnaire or via the internet. On the internet, the Census Bureau's Census Taker service provides a standardized system for collecting survey and census information by means of encrypted web page (HTML) forms. All user supplied information is encrypted both in transport and when saved. In combination, the system hardware, operating system, web server, and application software are configured to make Census Taker a highly secure system. The respondent's name will not be collected, but instead a unique ID number will be entered.

During the week after the physician's reporting period, the FR returns to the physician's office to retrieve all completed survey materials and to do a brief edit of the PRFs. Attempts are made while in the physician's office to retrieve missing data, correct inconsistencies, and clarify unclear entries directly with the responding physician and his or her staff. When excessive travel or other expense is involved in the return visit, the physician is instructed to mail the materials to the FR (at no cost to the respondent).

#### Monitoring Data Collection and Quality Control

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

The FR calls the physician's office or CHC 3 times during the week. Calls are intended to answer any questions the office may have and to make sure sampling is being carried out as instructed. Specifically, the first phone call at the beginning of the week is to remind the office to start sampling; mid-week contact is to handle any problems the office may be having; the final contact, on the last day of the physician's reporting week, is used to again answer questions and arrange for pick-up or delivery of the forms. An essential part of this effort is quality control which focuses on the completeness of the patient sampling frame, adherence to the sampling procedures, and assurance that a PRF is completed for every sample visit. The FR reviews the log or other record used for visit sampling to determine if any cases are missing and also edits completed forms for missing data. Attempts are made to retrieve both missing cases and missing data on specific cases. A record of this retrieval effort is also made.

Completed survey materials are sent on a weekly basis from the regional offices to the Census Bureau's National Processing Center (NPC) in Jeffersonville, Indiana. NPC is responsible for completing a quality control edit before packaging and shipping work to our keying contractor where further editing, coding and data entry are done. Our keying contractor is under contract to NCHS. All medical and drug coding as well as all data entry operations are subject to quality control procedures. Computer edits for code

ranges and inconsistencies are also performed. Missing and incorrect data are imputed using data from randomly selected patient visits with similar characteristics.

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include reporting and processing errors, as well as biases due to nonresponse and incomplete response. To eliminate ambiguities and encourage uniform reporting, attention was given to the phrasing of items, terms, and definitions. To help eliminate nonsampling errors, pretesting of the 2006 proposed PRF changes, CHC induction form, and CCSS was completed in August of 2005 with subsequent modifications to the forms made before the 2006 survey year. In addition, quality control procedures, consistency and edit checks reduce errors in data coding and processing. During processing, our keying contractor takes a 10-percent systematic random sample of PRFs and independently recodes the sample. If 5 percent of the sample fails, the complete batch must be recoded. Coding error rates ranged from 0.0 to 0.9 percent for 2004 data year.

Missing values, for a few items on the survey, are imputed by randomly assigning a value from a PRF with similar characteristics. These imputations are based on physician specialty, geographic region, and the 3-digit ICD-9-CM code for primary diagnosis. In 2004 (most recent data), imputations were performed for the following variables: birth year (2.4 percent), sex (4.0 percent), ethnicity (20.5 percent), race (17.7 percent), patient seen before in practice (1.1 percent), how many past visits in the last 12 months (6.3 percent), and time spent with physician (15.4 percent).

### Estimation Procedures

National estimates will be produced for visits to private non-Federal physicians as well as federally qualified and urban Indian community health centers in the United States. The estimation procedure has four basic components: (1) inflation by reciprocals of the sampling selection probabilities, (2) adjustments for nonresponse, (3) calibration ratio adjustment, and (4) weight smoothing. It is expected that the precision of estimates from the 2007 and 2008 NAMCS will be at least as good as that of the recently conducted surveys. Starting in 2003, the non-response adjustment factor utilized variation in responses by physicians who see more patients in their reporting period and how many weeks they work during the year. In addition, starting in 2004, the estimation process was modified to produce unbiased quarterly estimates.

The 2004 data, which to date is the most recent cycle processed, has an approximate relative standard error of about 30 percent for an aggregate estimate of about 1,162,000 patient visits. Such precision is adequate for the analyses planned, but any improvement that can be attained is highly desirable.

### Sampling Errors

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

### 3. Methods to Maximize Response Rates and Deal with Nonresponse

The NAMCS uses multiple methods for maximizing physician response. The medical community, including the American Medical Association and the American Osteopathic Association, is informed and consulted about the study. Twenty major medical societies have endorsed the NAMCS and have provided letters of support for use in enlisting sample physicians (**Attachment G**). Survey procedures and forms are designed to minimize the time required of physicians to participate. Physicians selected in the NAMCS sample are excluded from possible selection again for the following two years. The Census Bureau assigns only the most experienced FRs to work on the NAMCS. In addition, the FRs are given detailed training in survey procedures with special modules on gaining physician cooperation. A video provides scenarios on getting past difficult "gate keepers" in the physician's office and persuading reluctant physicians. There are intermittent "nurturing" sessions where FRs from the same Census Regional Office get together to discuss problems and strategies for improving physician response.

As mentioned in a previous section, NCHS has designed a mailing insert to help persuade the physician, gate keeper, or CHC provider to participate. The insert (**Attachment F**) includes persuasive statements from the Secretary of Health and Human Services and the Director of CDC/ATSDR. It also has answers to questions that physicians may have on why they should participate, describes how the Privacy Rule permits data collection for the NAMCS, and provides a link ([www.cdc.gov/NAMCS](http://www.cdc.gov/NAMCS)) to our participant Web site. This Web site makes available further material that physicians can use to verify, under the requirements of the Privacy Rule, that they are indeed allowed to disclose to NCHS/CDC the information requested as part of this survey. This includes the authority under which NCHS is collecting this information and that the information being collected is the minimum necessary.

The FRs provide the sampled physician with materials that show the importance of NAMCS including the most recent survey report (Follow link for samples of NAMCS summary <http://www.cdc.gov/nchs/data/ad/ad365.pdf>), and specialty-specific lists of journal articles using NAMCS data (subsets of **Attachment B**).

Survey procedures were also developed to verify the status of the out-of-scope physicians to ensure they were not just refusal cases that were erroneously labeled as out-of-scope. A 20 percent sample of all out-of-scope cases from each FR is reinterviewed over the telephone to confirm that the physician is not within the scope of the survey. If one case is found to be in error, then all out-of-scope cases from that FR are reinterviewed.

This survey requires a commitment from the physician and their staff, along with CHC directors and sampled providers. Any of these groups can refuse to participate for many different reasons. Through years of experience with the NAMCS, techniques for converting refusals have been developed that are quite effective - each flexible and responsive to individual concerns. Primarily using supervisory personnel, interviewers have successfully converted approximately 15 percent of initial refusals to successful

participants. Conversion is successful by emphasizing the following ideas: professional responsibility to enhance the knowledge of the utilization of ambulatory care in the United States, and the fact that no confidential information is collected on any patient resulting in only descriptive statistical reports.

If all else fails to bring the response rates up to the expected levels, then we request the option to investigate the specific causes of nonresponse so as to devise additional corrective measures, funding permitting.

A recent study of nonresponse cases in the NAMCS found that break off was most likely to occur at the stage of the telephone screener (43 percent) and that often the refusal is from the office staff rather than the physician. This is consistent with information that shows that a majority of nonresponding physicians do not remember being contacted about NAMCS. A comparison of cooperation rates for many variables including physician specialty, gender, age, geographical region, board certification, metropolitan statistical area (MSA) status, and type of practice found that only type of practice had varying cooperation rates. Physicians in group practices where the physician was part-owner were less likely to participate compared with solo practice physicians or physicians in group practices where they were an employee or contractor.

Beginning later in 2006, we will be providing licensed physicians and nurses the opportunity to learn more about the NAMCS by implementing web-based educational modules presented on the CDC Public Health Training Network (PHTN). Specifically, the module will present key NAMCS concepts, interspersed with quiz questions after each concept to reinforce learning. The goal of the web-based material will be for physicians and nurses to increase their understanding of NAMCS methodology, and to improve their ability to read critically those articles in peer-related literature that use national estimates of office-based practice parameters. Providing this NAMCS education module to physicians and nurses will not only give participants a chance to receive valuable continuing education credits, but will expand the level of NAMCS exposure to potential survey participants.

#### **4. Tests of Procedures or Methods to be Undertaken**

Nonresponse investigation (9 or fewer physicians) under DHHS task order contracts may be conducted should such studies be deemed necessary. If nonresponse studies are undertaken, OMB will be notified of the findings.

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

The statistician responsible for the survey sample design is:

Iris Shimizu, Ph.D.  
Mathematical Statistician  
Statistical Research and Survey Design Staff  
Office of Research and Methodology  
National Center for Health Statistics



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The data collection agent is the Bureau of the Census and the contact person is:

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The data will be analyzed under the direction of:

Catharine W. Burt, Ed.D.  
Chief, Ambulatory Care Statistics Branch  
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National Center for Health Statistics  
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Supporting Statement  
List of Attachments

- A. Public Health Service Act, Section 306
- B. List of NAMCS Publications
- C. Federal Register: Public Comments
- D. Consultants for 2007-2008 NAMCS
- E. IRB Continuation of Protocol Approval Letter
- F. NAMCS Introductory Letters and Motivational Insert
- G. NAMCS Endorsing Organizational Letters
- H. 2006 NAMCS Community Health Center Induction Interview form
- I. 2006 NAMCS Physician Induction Interview form
- J. Instruction on the NAMCS Physician Induction Interview for Field Representatives
- K. 2006 NAMCS Patient Record form, Proposed Changes for 2007-2008 NAMCS Patient Record form, and Draft of 2007-2008 Patient Record form
- L. 2006 NAMCS Instruction Booklet and Proposed Changes for 2007-2008 NAMCS Instruction Booklet
- M. 2006 Cervical Cancer Screening Supplement