Supporting Statement B for Request for Clearance:

NATIONAL AMBULATORY MEDICAL CARE SURVEY SUPPLEMENT on Culturally and Linguistically Appropriate Services

OMB No. 0920-NEW

Contact Information:

Carol DeFrances, Ph.D.

Chief, Ambulatory and Hospital Care Statistics Branch

Division of Health Care Statistics

National Center for Health Statistics/CDC

3311 Toledo Road

Hyattsville, MD 20782

301-458-4440

301-458-4032 (fax)

csd0@cdc.gov

April 4, 2016

Table of Contents

[B. Collections of Information Employing Statistical Methods 3](#_Toc434408996)

[1. Respondent Universe and Sampling Methods 3](#_Toc434408997)

[2. Procedures for the Collection of Information 3](#_Toc434408998)

[Monitoring Data Collection and Quality Control 4](#_Toc434408999)

[Estimation procedures 5](#_Toc434409000)

[Sampling Errors 5](#_Toc434409001)

[3. Methods to Maximize Response Rates and Deal with Nonresponse 5](#_Toc434409002)

[4. Test of Procedures or Methods to be Undertaken 6](#_Toc434409003)

[5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data 6](#_Toc434409004)

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

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

The National Ambulatory Medical Care Survey Supplement on Culturally and Linguistically Appropriate Services (NAMCS CLAS) will collect information on the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (the National CLAS Standards) among non-federally employed office based physicians. The target universe will be non-federally office-based employed physicians (excluding those in the specialties of anesthesiology, radiology, and pathology) practicing in the United States. The survey sample will be selected from physicians who are classified as office based or hospital employed in the American Medical Association (AMA) master file or as office based in the American Osteopathic Association (AOA) master file. The AMA “hospital employed” physicians will be included in the sampling frame to account for medical doctors who may be in office based practices but are classified by AMA as “hospital employed” because their practices were purchased by hospitals. The master files used for the sampling frame were obtained from AMA and AOA in 2015 prior to August 31, 2015. A stratified sample of physicians will be selected with strata defined by region and 14 physician specialty groups. The physician specialty groups are general and family practice, internal medicine, pediatrics, general surgery, obstetrics and gynecology, orthopedic surgery, cardiovascular diseases, dermatology, urology, psychiatry, neurology, ophthalmology, otolaryngology and all other specialties. Within strata, physicians will be selected using systematic random sampling from lists in which physicians are arrayed by Census Division, Metropolitan Statistical Area status, and practice type (primary care, medical specialty, and surgical specialty).

The NAMCS CLAS is currently a one-year data collection. This will be a single data collection with the potential of future data collections if funding allows and there is sufficient justification.

The NAMCS CLAS will sample approximately 2,400 physicians who will be divided across approximately 50 strata. There will be approximately 600 physicians in each of the four Census regions and approximately 170 physicians per specialty. Physicians sampled for any other NAMCS data collection in the past two years will not overlap with the NAMCS CLAS sample. NCHS anticipates a 62 percent response rate for sampled cases.

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

The NAMCS CLAS will be a self-administered web questionnaire, self-administered paper questionnaire or telephone interview. Telephone interviews will be the follow-up alternative for non-respondents. All telephone interview staff will be trained for the survey. Data collection and data processing will be overseen by the contractor, CSRA, Durham, NC.

Data Collection

The initial mailing will include an introductory letter (**Attachment F**). The introductory letter will invite physicians to participate via web, inform them of the voluntary nature of the survey and provide login instructions for the web version of the survey. Each physician will receive a unique User ID and password. Procedures to check that the person completing the online survey is the physician to whom the survey is addressed include a set of questions that will verify the physician’s name, specialty and office. A list of the questions on the survey can be found in **Attachment C**. Eligibility will be determined based on response to screening questions that the physician currently practices in an office-based setting (question 3) and typically provides care to the most patients in a solo or group practice, freestanding clinic or urgent care center, community health center, mental health center, non-federal government clinic, family planning clinic, health maintenance organization or faculty practice plan (question 4). The respondent is asked to select all settings that apply in question 4.

Three weeks after the introductory letter, all sampled physicians who have not responded to the web-based survey will receive another mailing. This mailing will include a modified introductory letter (**Attachment F**), a paper questionnaire, and self-addressed return envelope for the paper questionnaire.

Approximately four and a half weeks after the introductory letter, all sampled physicians will receive a postcard that thanks them for their participation or reminds them that their participation is still needed (**Attachment F**). This postcard also allows sampled physicians to request additional information.

Seven weeks after the introductory letter, physicians who have not responded to the web-based questionnaire or returned the paper questionnaire will receive another mailing. This mailing will include a modified introductory letter (**Attachment F**), a paper questionnaire and self-addressed return envelope for the paper questionnaire.

Eleven weeks after the introductory letter, physicians who have not responded to the web-based questionnaire or returned the paper questionnaire will receive a final mailing. The final mailing will include a modified introductory letter (**Attachment F**), the paper questionnaire and a self-addressed return envelope.

Fourteen weeks after the introductory letter, telephone calls (**Attachment D**) will be made to all remaining non-responding physicians in a final attempt to obtain survey data. If the physician is contacted and agrees to participate, the survey will be administered via telephone. If the physician declines participation this will be documented by the interviewer; the interviewer will also attempt to determine the physician’s eligibility.

CSRA will track, document and collect response to the web-based questionnaire and the paper questionnaires.

### Monitoring Data Collection and Quality Control

Quality control procedures and edit checks will be used to reduce errors in data coding and processing. During processing, our contractor will perform independent verification of all data entry and correct discrepancies. The independent verification will include double entry of all data and adjudication of any discrepancies; respondents will not be contacted during this process. NCHS will receive an export of data during the data collection period to access data quality. NCHS staff will be included in the sample provided to the contractor to receive mailings and phone calls. This will allow NCHS to evaluate the quality of the materials, survey mailings, and that phone scripts are followed to our specifications. Throughout the data collection period, conference calls to discuss issues relevant to the data collection and data processing will be held between Division of Health Care Statistics (DHCS) staff and the contractor, CSRA. There will also be weekly data status reports to monitor the flow and completeness of data collection.

As in any survey, results will be subject to both sampling and non-sampling errors. Non-sampling errors include reporting and processing errors, as well as biases due to nonresponse and incomplete response. To eliminate ambiguities and encourage uniform reporting, attention has been given to the phrasing of items, terms, and definitions. A team of researchers from the NCHS Center for Questionnaire Design and Evaluation Research (CQDER) conducted OMB approved (OMB No. 0920-0222, Expires 07/31/18) cognitive interviews with 20 office-based physician respondents to identify patterns of interpretation, evaluate the usability of the questionnaire, and discover potential response errors. Revisions were made to the questionnaire after consultation with the CQDER staff and NAMCS CLAS project staff from NCHS and OMH. The web-based questionnaire will be tested for web usability by CSRA staff and NAMCS CLAS project staff to ensure proper data collection and skip patterns occur. Issues identified during this testing will be addressed. A list of the questions can be found in **Attachment C**; the phone script can be found in **Attachment D**.

### Estimation procedures

The NAMCS CLAS will be used to produce national and regional estimates of non-federal office-based physicians and their practices related to the National CLAS Standards. The analytic weights will be the result of four basic factors as follows: the reciprocals of the sampling selection probabilities; adjustment for nonresponse; calibration to known physician total counts; and weight smoothing. Physicians who cannot be located will be deemed as out-of-scope under the assumption that if survey personnel cannot find them in the survey telephone follow-up, patients would also not be able to find the physicians as required if the physicians were, indeed, seeing patients in an office-based practice.

### Sampling Errors

Standard errors will be calculated using Taylor series approximation, such as the first-order Taylor series approximation method used in the SUDAAN software to take into account the complex sampling design of NAMCS CLAS.[[1]](#footnote-1)

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

The NAMCS CLAS survey will use a modified Tailored Design Method, developed by Dillman. This method is often regarded as the standard for mail surveys. Features that will be used in NAMCS CLAS are: sending a personalized letter, the questionnaire with a return addressed, postage prepaid envelope, a follow-up postcard, and duplicate packets to non-respondents. This method has been tested in other surveys of physicians and other health care professionals and has yielded favorable response rates.

Additionally, the survey questionnaire is designed to minimize the time required of physicians to participate, thus lowering the burden required to respond. Extensive web searches will be performed and follow-up phone calls will be made to locate and confirm the eligibility status of non-responding physicians. Techniques proven effective for converting refusals will be used. Specifically, ideas that will be emphasized during conversion attempts are: professional responsibility to enhance knowledge of the adoption of the National CLAS Standards in the United States and that the collected data will only be reported as descriptive statistics.

The 2016 NAMCS CLAS sample will include 2,400 physicians. NCHS anticipates an approximately 82 percent eligibility rate and a 62 percent response rate for sampled cases. This would yield approximately 1,220 eligible respondents. This rate is consistent with NCHS’ previous experience with physician mail surveys that include telephone follow-up, such as the 2013 NAMCS Physician Workflow Survey (OMB No. 0920-0234, Expiration date 12/31/2014).

Because of the low expected response rate, we plan to conduct a non-response bias analysis of the survey’s results. NCHS will also investigate the specific causes of nonresponse. This may include further understanding about survey methods in order to inform the reason for non-response, such as burden, brand, time, and content.

The NAMCS CLAS will also use the web-modality, which may increase response and survey representativeness in a similar approach used in the 2013 NAMCS Physician Workflow Survey (OMB No. 0920-0234, Expiration date 12/31/2014). The 2013 NAMCS Physician Workflow Survey used a tri-modal approach of web and 3 mailings with telephone follow-up to encourage physicians to participate in the survey.

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

OMB approved (OMB No. 0920-0222, Expires 7/31/2018) cognitive interview testing was conducted by a team of researchers at NCHS’ Center for Questionnaire Design and Evaluation Research (CQDER). Cognitive interviews were conducted with 20 office-based physician respondents to identify patterns of interpretation, evaluate the usability of the questionnaire, and discover potential response errors The results of this testing were used to improve the clarity of several items and provide an estimate of the response time to complete the questionnaire. Revisions were made to the questionnaire after consultation with the CQDER staff and NAMCS CLAS project staff from NCHS and OMH.

## **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

(301) 458 4497

ishimizu@cdc.gov

The data will be analyzed under the direction of:

Carol DeFrances, Ph.D.

Chief, Ambulatory and Hospital Care Statistics Branch

Acting Ambulatory Care Team Lead

Division of Health Care Statistics

National Center for Health Statistics

(301) 458 4440

cdefrances@cdc.gov

**Supporting Statements**

List of Attachments

A. Applicable Laws and Regulations

B. Federal Register Notice

C. 2016 Questionnaire

D. 2016 Phone Script

E. Consultants

F. 2016 NAMCS CLAS Letters

G. NCHS ERB Protocol Approval Letter

1. Research Triangle Institute. SUDAAN User’s Manual, Release 9.0.1. Research Triangle Park, NC: Research Triangle Institute, 2005 [↑](#footnote-ref-1)