# 2015 National Survey of Children's Health Pretest: Request for OMB Review

# **Supporting Statement A**

**January 15, 2015** 

## OMB Control No. 0607-XXXX

**Terms of Clearance: None** 

A. Justification

## 1. Circumstances Making the Collection of Information Necessary

Sponsored by the U.S. Department of Health and Human Services' (HHS') Health Resources Services Administration/Maternal and Child Health Bureau (HRSA/MCHB), the National Survey of Children's Health (NSCH) is designed to produce data on the physical and emotional health of American children ages 0-17 years of age. Data collected from the NSCH informs on factors that relate to the well-being of children, including access to care, medical home, family interactions, parental health, school and after-school experiences, and safe neighborhoods. In 2011-2012, questions also asked about uninsured children from some households to assess parents' awareness of, experience with, and interest in enrolling in Medicaid and the State Children's Health Insurance Program (CHIP).

The Maternal and Child Health Bureau (MCHB) is redesigning the NSCH and its companion survey, the National Survey of Children with Special Health Care Needs (NS-CSHCN) into a single combined survey that will utilize an Address-Based Sampling (ABS) frame. This newly consolidated survey, which will incorporate questions from both of these surveys, will retain the name the National Survey of Children's Health (NSCH).

The former NSCH and the NS-CSHCN utilized the State and Local Area Integrated Telephone Survey (SLAITS) mechanism. Managed by the National Center for Health Statistics (NCHS), SLAITS conducts surveys using the same sampling frame as the National Immunization Survey (NIS). This sampling frame consists primarily of telephone landline numbers, with some cell telephone supplementation, and utilizes Random Digit Dialing (RDD) sampling techniques. SLAITS surveys are conducted subsequent to the NIS interview, using Computer-Assisted

Telephone Interview (CATI) software to collect data from households: once households complete the NIS interview, they are screened to determine eligibility for the SLAITS surveys. Interviews are administered for eligible households.

The telephone interview methodology utilized for these surveys allowed for a complex questionnaire as it ensured that skip patterns were properly followed. Furthermore, it protected against data entry error through preprogrammed range and logic checks on responses. Interviewers were able to address respondent questions and concerns as they arose, helping reduce response error. However, in recent years declining willingness of the public to participate in surveys and changes in household telephone use has resulted in declining response rates for CATI surveys. Of particular concern is the increasing prevalence of households that have substituted wireless service for their landline telephone. Efforts to include these non-landline households within the telephone sampling frames for the former NSCH and NS-CSHCN have resulted in both an increase in costs and a substantial decline in response rates. Furthermore, because the former NSCH and NS-CSHCN were administered using the NIS sampling frame and followed behind the NIS interview, they experienced additional impacts in response rates when cases failed to move through the NIS itself.

This decline in response rates and the increase in costs are no longer sustainable. Considerable work has been done to determine how to address these concerns, and a decision has been reached to utilize a two-phase multimode data collection design for a combined NSCH/NS-CSHCN survey, henceforth known as the NSCH. The NSCH will consist of two questionnaires: (1) an initial household screener to assess the presence of children in the home and facilitate the selection of a target child within the household (with oversampling of children with special health care needs), and (2) a substantive topical questionnaire that combines selected content from the former NSCH and NS-CSHCN questionnaires along with some newly relevant content. Mail is anticipated to be the primary mode of data collection, but web-based administration will also be tested in a "web first" design. This change in the mode of data collection, as well as revisions to the survey's content, requires a redesign of both the initial household screener and topical questionnaires.

This submission requests approval for a small-scale (N = 16,000 addresses) national pretest prior to fielding the first year production NSCH. This pretest will be planned and conducted to assess survey methodology, evaluate the survey instrument, and test operational procedures and processes. The pretest sample will consist of several panels to assess data collection mode preferences (Mail or Web) of respondents, amount of respondent incentives needed to gain cooperation and participation in the survey, and telephone as a method of nonresponse follow-up.

Plans for pretest data collection include two modes:

 Mailout/mailback of a self-administered paper-and-pencil interviewing (PAPI) screener instrument followed by a separate mailout/mailback of a PAPI age-based topical instrument 2. A Web survey (Web Push + Mail) that contains the screener and topical instruments. The Web Push + Mail panels will take the respondent through the Web screener instrument and if the household screens into the study they would be taken directly into one of the three age-based topical instruments.

The target overall response rate for the pretest is 70 percent for the screener and 80 percent for the topical questionnaire.

The U.S. Census Bureau is conducting the National Survey of Children's Health on the behalf of the Department of Health and Human Services (HHS) under Title 13, United States Code, Section 8(b), which allows the Census Bureau to conduct surveys on behalf of other agencies. Title 42 U.S.C. Section 701(a)(2) allows HHS to collect information for the purpose of understanding the health and well-being of children in the United States.

## 2. Purpose and Use of Information Collection

Data from the NSCH are used to measure progress on national performance and outcome measures under Title V Maternal and Child Health Services Block Grant. It is therefore critical that the U.S. Census Bureau performs a pretest to assess the data collection methodologies and mode preferences while evaluating the survey instrument, operational procedures, and processes prior to running a full-scale production survey.

Information quality is an integral part of the pre-dissemination review of the information disseminated by the Census Bureau (fully described in the Census Bureau's Information Quality Guidelines). Information quality is also integral to the information collections conducted by the Census Bureau and is incorporated into the clearance process required by the Paperwork Reduction Act.

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

The NSCH Pretest will be conducted for MCHB by the Census Bureau using three complementary survey systems - (1) Amgraf One Form Plus, (2) Docuprint, and (3) integrated Computer-Assisted Data Entry (iCADE). These survey systems along with the introduction of a Centurion Web instrument allowing online reporting will improve the efficiency and accuracy of the data collection process.

• **Forms Design.** Questionnaires will be created using Amgraf One Form Plus. Completed hardcopy forms can be processed by iCADE to capture responses through optical mark recognition (OMR) and keying from image (KFI). Questionnaires will be printed, trimmed, and stitched through an in-house print on-demand process using a Docuprint system which allows personalization and the ability to tailor items to each specific respondent.

The data from the questionnaires will be captured by the iCADE technology/software, which automatically extracts all check box entries (OMR), captures, and displays an image of all other entries to an operator for KFI.

- **Image Preprocessing.** iCADE applies image preprocessing to the forms in their image format in order to correct any skewing at the time of scanning, and the iCADE software performs registration to align the individual questionnaire page template with the appropriate scanned image. The scanner despeckles the image to remove unwanted pixels.
- **Data Capture.** iCADE reads the form image files, checks the presence of data, processes all check box fields through OMR and presents an image of the handwritten fields to an operator for KFI.
- **Verification.** Extracted KFI data are subject to 100% field validation according to project specifications. If a data value violates validation rules, the data is flagged for review by verifiers who interactively review the images and the corresponding extracted data, and resolve validation errors.
- Archiving. Images will be scanned and archived to magnetic storage located on a secured server in case they are needed later. This eliminates the need to save paper copies of the completed questionnaires.
- Online Reporting. The NSCH Pretest will assess the feasibility of a Web-based version of the questionnaire, a data collection mode that allows for features that will reduce respondent burden as well as report results more quickly and at considerably less cost. In general, respondents find it less taxing to provide sensitive information about their children in self-administered surveys; however, because of the significant number of filter questions, paper-and-pencil versions of the survey appear quite lengthy. The Web-based survey allows for the programming of skip patterns similar to the original telephone interview version of the survey. Thus, the Web-based format allows for the comfort of self-administration with the ease of seeing and subsequently answering only questions relevant to a particular respondent.

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

The NSCH has been conducted since 2003 under the auspices of the National Center for Health Statistics on behalf of the Maternal and Child Health Bureau. In companion with the National Survey of Children with Special Health Care Needs, the NSCH is considered the most robust data source available at national and state levels on children's health and well-being. These data are cited broadly in research literature (<a href="http://www.cdc.gov/nchs/slaits/slaits">http://www.cdc.gov/nchs/slaits/slaits</a> products.htm).

Perhaps the most significant source of duplication was between the NSCH and the NS-CSHCN. A key objective in developing this "new" NSCH instrument is to consolidate the "old" NSCH and the NS-CSHCN into one survey, reducing redundancy in the collection of data and the burden on households that accompanied the administration of two separate surveys. This pretest will support MCHB and the Census Bureau in evaluating the feasibility of conducting the new, condensed NSCH using web and mail as new modes of administration.

In the process of redesigning these two surveys into one survey and eliminate redundancies in questionnaire items, the new NSCH also will pretest new content on the following topics to determine their effectiveness in supporting programs and policies related to children's health and children with special health care needs:

- Items on school readiness to be asked of households with sampled children between 0-5
  years of age to support data needs related to Title V Maternal and Child Health Services
  Block Grants;
- One item on food sufficiency, to support congressionally mandated requirements for USDA to measure food sufficiency among children with disabilities;
- One item on behavioral treatment for Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder (ADD/ADHD) to support CDC programs designed to increase the use of behavioral treatment for this condition among children as it is the standard of care.
- Items on shared decision making added to inform on support provided to children with special health care needs and their families.
- One item on the length of time a doctor spent with child during last well-child visit, to
  evaluate how the impact length of time spent with a physician is associated with receipt
  of anticipatory guidance.

## 5. Impact on Small Businesses or Other Small Entities

Not applicable.

## 6. <u>Consequences of Collecting the Information Less Frequently</u>

The NSCH Pretest is a one-time national data collection activity used to plan for and assess survey methodology, evaluation of the survey instrument, and testing of operational procedures and processes prior to conducting the first year production survey. As this is a one-time activity, the consequences of doing this activity less frequently would be not perform research prior to production.

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

This data collection will be consistent with the general information collection guidelines of 5 CFR 1320.5. No special circumstances apply.

## 8. Comments in Response to the Federal Register Notice/Outside Consultation

The 60-day Federal Register Notice was published in the *Federal Register* on January 22, 2015 (80 FR, No. 1000; p. 3215-3216). No substantive comments were received.

#### 9. Explanation of any Payment/Gift to Respondents

One objective of the NSCH Pretest is to determine the incentive amount necessary to gain respondent cooperation and survey participation. By evaluating the response rates among the four treatment groups, it will help decide which mode and incentive amount will be used for the first year production survey. Each of the 16,000 sampled households were pre-assigned to one of the following treatment groups, explained in Table 9A below. The offer of a cash incentive to NSCH respondents is a well-established practice, and NCHS sponsored multiple incentive experiments over the last ten years. Historically, NSCH respondents received a \$5 incentive to communicate the importance of their participation; an additional \$10 was offered as a token of appreciation for the respondent's time upon completion of the interview.

Table 9A. Treatment Group by Mode and Incentive Amount

Treatmen t Group	Mode	Screener Incentive	Topical Incentive <sup>1</sup>
1	Mail	\$5	\$5
2	Web Push + Mail	\$5	n/a
3	Web Push + Mail	\$10	n/a

- Survey research indicates that incentives are a necessary and cost-effective expense for achieving a response rate that minimizes non-response bias.<sup>2</sup> Due to a preponderance of such research, incentives were used in all previous administrations of the NSCH and NS-CSHCN.
- Recent experimentation within a general population mixed mode (Web and Mail) survey found that the use of a prepaid incentive more than doubled the response rate within that population from 25% (no incentive) to 56% (with incentive) (Messer and Dillman 2011).
- Incentives are commonly used in other HHS-sponsored surveys including the National Health Interview Survey, the National Survey of Family Growth, the National Health and Nutrition Examination Survey, the National Survey on Drug Use and Health, and the Health Center Patient Survey.

## 10. Assurance of Confidentiality Provided to Respondents

Data will be kept private in accordance with applicable law. Respondents will be assured of the confidentiality of their replies in accordance with the Confidential Information Protection and Statistical Efficiency Act (CIPSEA), 44 U.S.C. 3501 note and the Privacy Act of 1974, 5 U.S.C. Section 552a. These laws require the Census Bureau and its designated CIPSEA agents to keep all information about respondents and households strictly confidential, and require that the information be used only for statistical purposes. In compliance with this law, all data released to the public are only in a statistical format. No information that could personally identify a respondent or household may be released. The Census Bureau will ensure that all MCHB staff are made designated CIPSEA agents prior to receiving access to any confidential data.

<sup>1</sup> The topical incentive is not applicable to the Web respondents, since the Centurion Web Instrument combines the screener and topical modules.

<sup>2</sup> See Brick, J. Michael, Douglas Williams, and Jill M. Montaquila. 2011. Address-based sampling for subpopulation surveys. *Public Opinion Quarterly* 75 (3): 409-28; Foster, Erin B., Alicia M. Frasier, Heather M. Morrison, Kathleen S. O'Connor, and S.J. Blumberg. 2010. All things incentive: Exploring the best combination of incentive conditions. Paper presented at the American Association for Public Opinion Research annual conference, Chicago, IL.

### 11. Justification for Sensitive Questions

Sensitive questions are generally not included on the NSCH Pretest. However, it is possible that respondents may find some questions related to their children's health or disease status to be sensitive in nature. Respondents are made aware of the voluntary nature of this survey in the cover letter that accompanies the questionnaire and individuals are free to refrain from answering any question that they do not feel comfortable responding to. The U.S. Department of Health and Human Services requires that race and ethnicity be asked on all HHS data collection instruments and questions on both race and Hispanic origin appear on the NSCH Pretest. There is, however, no requirement that respondents answer these questions.

#### 12. Estimates of Annualized Hour and Cost Burden

Estimates of annualized hour burden and annualized cost to respondents are listed in Tables 12A and 12B, respectively. The total number of estimated respondents is 12,534 annually (pretest). The total number of annual burden hours is 2,262. The estimated total annual respondent cost is \$23,524.80. Please note that the numbers here are different from those in the Federal Register Prenotice. The figures here are the correct figures. The differences are the result of improved estimates of (1) the response rates for the screener and topical modules and (2) the average time to complete the survey instruments<sup>3</sup>.

For the NSCH Pretest, 9,612 respondents are expected to complete the screener and 2,921 respondents<sup>4</sup> are expected to complete one of the three age-based topical questionnaires.

The frequency of response is the same across data collection activities – each instrument requires one response per respondent.

The average burden per response was determined by timing instruments administration with 9 or fewer respondents.

Estimates of the total annual respondent cost for the collection of information use the appropriate wage rate categories. For individuals, the wage rate is \$10.40 per hour. This is based on the average hourly earnings for employees as reported by the Bureau of Labor Statistics (http://www.bls.gov/news.release/realer.t01.htm).

<sup>3</sup> The initial estimates failed to take into account that most households would not receive the topical module because they do not contain children and would, therefore, screen out.

<sup>4</sup> Since 2,921 is not evenly divisible by 3, all three age-based topicals were estimated to have 974 respondents each.

### 12A. Estimated Annualized Burden Hours

Type of Respondent	Questionnaire Name	Expected Number of Respondent s <sup>5</sup>	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours
<b>NSCH Pretest</b>					
Adult Parent or Caregiver	Screener	9,612	1	5/60	801
Adult Parent or Caregiver	0-5 Topical Instrument	974	1	30/60	487
Adult Parent or Caregiver	6-11 Topical Instrument	974	1	30/60	487
Adult Parent or Caregiver	12-17 Topical Instrument	974	1	30/60	487
Total		12,534			2,262

Table 12A NOTE: Details may not sum to totals due to rounding of partial hours.

### 12B. Estimated Annualized Burden Costs

Type of Respondent	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
NSCH Pretest			
Adult Parent or Caregiver (Screener)	801	\$10.40	\$8,330.40
Adult Parent or Caregiver (0-5 Topical Instrument)	487	\$10.40	\$5,064.80
Adult Parent or Caregiver (6-11 Topical Instrument)	487	\$10.40	\$5,064.80
Adult Parent or Caregiver (12-17 Topical Instrument)	487	\$10.40	\$5,064.80
Total	2,262		\$23,524.80

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

There are no direct costs to respondents other than their time to participate in the study.

<sup>5</sup> The expected number of respondents is an estimate of the expected number of completed screener and topical questionnaires, discussed in section B.1.3. This is different than the number of respondents that were mailed a screener or topical questionnaire.

#### 14. Annualized Cost to the Federal Government

This data collection will be carried out under a contract awarded to the Census Bureau for \$2,776,000. This contract spans a three-year project period. This includes all direct and indirect costs of the design, data collection, analysis, and reporting phases of the pretest, as well as delivery of the data sets to MCHB.

#### 15. Explanation for Program Changes or Adjustments

This is a new information collection.

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

The NSCH Pretest will produce datasets, statistics, and reports. Below are the planned deliverables that the Census Bureau will provide MCHB:

Datasets, Statistics, and Reports.

- A fully documented public use data set including three different files:
  - O Household level file This file will contain all of the data collected on the screener and any other variables (derived, flag, admin, etc.) requested by MCHB.
  - Child level file This file will contain all of the child data collected on the topical modules along with any other variables (derived, flag, admin, etc.) requested by MCHB.
  - O Operational level file This file will contain all of the operational and administrative variables that indicate the status, resolution, and history of each case.
- A codebook with weighted and unweighted frequencies of all variables for each of the different files mentioned above
- A user's manual and methodology report created by the Demographic Statistical Methods Division (DSMD) staff

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

Not applicable. No exception requested.

### 18. Exceptions to Certification for Paperwork Reduction Act Submissions

Not applicable. No exception requested.