

Supporting Statement A

Revision Request for Clearance

**NATIONAL HEALTH INTERVIEW SURVEY**

OMB No. 0920-0214, Expiration Date 12/31/2019

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December 27, 2017

## Table of Contents

1.	Circumstance Making the Collection of Information Necessary	5
2.	Purpose and Use of Information Collection	6
3.	Use of Improved Information Technology and Burden Reduction	8
4.	Efforts to Identify Duplication and Use of Similar Information	8
5.	Impact on Small Businesses or Other Small Entities	9
6.	Consequences of Collecting the Information Less Frequently	9
7.	Special Circumstances Relating to the Guidelines of 5 CFR 1320.5	10
8.	Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency	10
9.	Explanation of Any Payments or Gifts to Respondents	11
10.	Protection of the Privacy and Confidentiality of Information Provided by Respondents	11
11.	Institutional Review Board (IRB) and Justification for Sensitive Questions	13
12.	Estimates of Annualized Burden Hours and Costs	14
13.	Estimates of Other Total Annual Cost Burden to Respondents or Record keepers	17
14.	Annualized Cost to the Federal Government	17
15.	Explanation for Program Changes or Adjustments	18
16.	Plans for Tabulation and Publication and Project Time Schedule	18
17.	Reason(s) Display of OMB Expiration Date is Inappropriate	18
18.	Exceptions to Certification for Paperwork Reduction Act Submissions	18

### List of Attachments

Attachment 1	Legislative Mandates
Attachment 2a	60-Day Federal Register Notice
Attachment 2b	Public Comment
Attachment 3a	Redesigned Questionnaire Modules and Periodicity
Attachment 3b	Main and Redesigned Questionnaire Structures
Attachment 3c	Need for Core Modules in Main Questionnaire
Attachment 3d	Need for Core Modules in Redesigned Questionnaire
Attachment 4a	Main Questionnaire Household Composition and Family Section
Attachment 4b	Main Questionnaire Adult Section

Attachment 4c	Main Questionnaire Child Section
Attachment 4d	Main Questionnaire Supplement Questions
Attachment 4e	Main Questionnaire Supplement Descriptions
Attachment 4f	Main Questionnaire Flashcards
Attachment 5a	Redesigned Questionnaire Household Roster Section
Attachment 5b	Redesigned Questionnaire Adult Section
Attachment 5c	Redesigned Questionnaire Child Section
Attachment 6a	Main Reinterview Questionnaire
Attachment 6b	Redesigned Reinterview Questionnaire
Attachment 7	Methodological Projects Description
Attachment 8	Data Collection Procedures
Attachment 9	Redesign Consultations
Attachment 10a	Advance Letter
Attachment 10b	NHIS Brochure
Attachment 10c	Supplemental Mailings
Attachment 10d	Thank You Letter
Attachment 11	Research Ethics Review Board Approval Notice
Attachment 12	Listing of Proposed items for 2019 and 2020

## Supporting Statement

### NCHS National Health Interview Survey

- Goal: To collect data to measure and monitor the amount, distribution, and effects of illness and disability in the population and the utilization of health care
- Intended use: For use by the Department of Health and Human Services (DHHS) to monitor trends in illness and disability and to track progress toward achieving many of the health objectives for the nation, and for the public health research community to conduct epidemiologic and policy analysis of such timely issues as characterizing those with various health problems, measuring levels of health insurance coverage, determining barriers to accessing and using health care, and evaluating the impact of health programs.
- Data collection methods: In-person household interviews via Computer Assisted Personal Interview.
- Subpopulation to be studied: Civilian noninstitutionalized population residing in the United States.
- Data analysis methods: Descriptive, bivariate, and multivariate statistics, including frequencies; chi-square and t-tests; and linear, logistic, and multilevel regression.

The National Health Interview Survey (NHIS) is a critical ongoing source of information on the health of the civilian, noninstitutionalized population of the United States. On December 29, 2016, OMB approved the NHIS through the 2018 data collection (OMB# 0920-0214, expires 12/31/2019), including the estimated sample size and estimated annual burden.

In this revision request, OMB approval is being sought to:

- Conduct the National Health Interview Survey in 2018, 2019, and 2020.
- Continue the NHIS questionnaire that was approved for 2017 into 2018, with minor alterations to selected supplementary sections
- Conduct a dress rehearsal and systems test of the redesigned NHIS questionnaire to be launched in 2019, by introducing a field test in the last quarter of 2018 that splits the NHIS sample between the 2018 and 2019 questionnaires
- Continue the redesigned NHIS questionnaire rehearsed in the field test through the 2020 data collection period, submitting any minor modifications that may result from the dress rehearsal as a nonsubstantive change request
- Carry out cognitive testing and methodological projects, using web and/or mail survey tools, that will inform the development of new rotating and supplemental content

A three year clearance is requested. Attachment 12 captures a listing of proposed items for 2019 and 2020. Nonsubstantive change requests will be submitted to request permission to make subsequent minor modifications to the questionnaire(s) and to conduct methodological testing.

## **A. Justification**

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

#### Background

The NHIS is conducted by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), to comply with the NCHS mandate under 42 USC 242k (Attachment 1) to collect, on an annual basis, statistically valid data on the amount, distribution, and effects of illness and disability in the population and on the utilization of health care services for such conditions. NHIS data are used widely throughout the Department of Health and Human Services (DHHS) to monitor trends in illness and disability and to track progress toward achieving many of the health objectives for the nation. The data are also used by the public health research community for epidemiologic and policy analysis of such issues as characterizing those with various health problems, measuring levels of health insurance coverage, determining barriers to accessing and using health care, and evaluating the impact of changes in federal health programs.

In accordance with the 1995 initiative to increase the integration of surveys within DHHS, respondents to the NHIS serve as the sampling frame for the Medical Expenditure Panel Survey (MEPS; OMB# 0935-0118, expires 12/31/2018). MEPS uses completed interviews from the NHIS to identify and select the desired sample, contact that sample to collect additional data, and combine their survey data with the original NHIS data. These procedures reduce survey costs, reduce overall burden on the public, and increase the amount of data available for critical health-related analysis.

The NHIS has been conducted every year since 1957. The current design of the NHIS questionnaire was implemented in 1997, and consists of a standard basic or Core Module, covering general health topics and demographic characteristics that is repeated every year. In addition to the Core Module, each year supplementary questions or modules are included. Topics are rotated in and out of the annual NHIS depending on funding availability and data requirements of federal programs such as Healthy People 2020. For example, the 2018 NHIS is replacing supplementary questions covering receipt of culturally and linguistically appropriate health care services, epilepsy, diabetes, cognitive disability, complementary health, hepatitis B/C screening, vision, and heart disease and stroke prevention that were fielded in 2017 with supplementary questions on asthma and cancer control that were approved in recent prior years. Continuing from 2017 are supplementary questions about, disability and functioning, family food security, ABCS of heart disease and stroke prevention, immunizations, smokeless tobacco and e-cigarettes, and children's mental health.

A redesigned NHIS questionnaire, which differs from the current design in both content and structure, is scheduled to begin in 2019. The redesigned NHIS questionnaire features a rotational schedule consisting of annual core, rotating core and supplemental content modules, as shown in Attachment 3a. The 2020 NHIS will include the same annual core content as the 2019 NHIS, along with new rotating and supplemental content (that will replace the 2019 rotating and supplemental modules). Prior to its official, full-scale launch in January 2019, the redesigned instrument will undergo a dress rehearsal and systems test in 2018. The purpose of this two-stage testing, described in greater detail below, is to ensure that the programmed instrument for the redesigned questionnaire is working properly, and to identify any operational issues that

would be problematic in a full-scale implementation of the redesigned questionnaire in 2019. A secondary purpose of this test is to compare some key estimates between the 2018 NHIS and the new redesigned survey instrument. The questionnaire instrument used for this testing will be comprised of the same annual core, rotating core and supplemental content modules that will continue as the redesigned NHIS beginning in January 2019.

Aims of the redesign are to improve the measurement of covered health topics, reduce respondent burden by shortening the length of the questionnaire and seamlessly integrating supplements, harmonize overlapping content with other federal health surveys, establish a long-term structure of ongoing and periodic topics, and incorporate advances in survey methodology and measurement. The redesigned questionnaire will consist of four components: the annual core, the rotating core, sustaining supplements, and periodic supplements. The annual core questionnaire will contain the same questions from year to year. The rotating core questionnaire consists of questions that will be included in the interview on some years with fixed periodicity. The core questions are sponsored by NCHS and reflect consistently high priority content areas. Supplements are questions funded by other federal agencies, included on a sustaining or periodic schedule. Sustaining sponsors are agencies that sponsor related content every year over multiple years; these supplements do not need to contain the same questions from year to year. Periodic supplements consist of sponsored content that will be included in the interview in one or more years, but not annually. Attachment 3a provides a visual depiction of the content and module structure. Additional details are provided in the following section.

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

The purposes of the NHIS are (1) to provide national data on an annual basis on the prevalence of chronic conditions and impairments, the extent of disability, the utilization of health care services, and other health-related topics; (2) to provide more detailed information on selected topics periodically and on a one time basis; and (3) to provide a sampling frame for the Medical Expenditure Panel Survey and other follow-back surveys. It is also a main provider of data for the Congressionally-mandated *Health, United States* report and provides data for many indicators used in monitoring progress toward current Healthy People goals and for detailing health disparities.

A major strength of the NHIS is its ability to display health characteristics by selected demographic and socio-economic characteristics of the U.S. civilian, noninstitutionalized population. NHIS data are typically used for program planning and evaluation, public health education and health promotion and epidemiological research. The redesigned NHIS questionnaire will continue to address these varied and important needs, while responding to and integrating advances in survey methodology, health profiles of the population, and data needs. NCHS is responsible for developing the questions. Input to the design of questions is solicited from experts in a variety of organizations within the federal government, and from outside researchers and public health professionals.

An overview and description of the questionnaire structure and content areas covered by the 2018 questionnaire and the redesigned questionnaire to undergo a dress rehearsal and systems test are provided in Attachment 3b. A summary of the need for each of the topic areas of the main 2018 NHIS Core Module is noted in Attachment 3c, and in Attachment 3d for the redesigned questionnaire. For the 2018 main questionnaire, the full set of questions included in the core and supplementary modules, as well as the

flashcards used in their administration and a description of the supplements are presented in Attachments 4a-f. For the redesigned questionnaire, the full set of questions that comprise the annual and rotating core, and sustaining and periodic supplements along with a description of the supplements are presented in Attachments 5a-d.

In addition to the principal questionnaires, like in past years, a small sample of respondents will be reinterviewed as a quality control measure; the reinterview questionnaires for the main and redesigned questionnaire are provided in Attachments 6a and 6b.

Past follow-back surveys and special projects served as methodological tests to expand the depth and breadth of information related to new topics, test the impact of respondent incentives, and assess the feasibility of using adaptive design in the NHIS. A brief description of these projects is included in Attachment 7. In summary, for 2018, smaller-scale special projects planned and begun in 2017 will continue. These include a series of short, web and/or mail assessments to test new and/or updated questionnaire items, evaluate the impact of different categorical response option formats on answer choices, and measure respondent comprehension of health care-related terms and concepts in various contexts. Also included among the methodological projects (and described in greater detail in the attachment) is a small-scale field or systems test that serves as the first of two steps in testing the redesigned NHIS questionnaire that is scheduled for full launch in January 2019.

Following this small scale (100-300 households) field test in June of 2018, a larger field test that splits the NHIS sample between the 2018 instrument and the redesigned instrument will begin in October and run for the entire last quarter of 2018. The redesigned instrument used in this split-sample test consists of annual and rotating core questions that are permanent fixtures on the redesigned NHIS questionnaire, as well as sponsored questions that comprise the scheduled sponsored content for the 2019 data collection year. We expect only minor changes between the redesigned instrument that is part of this field test and the redesigned instrument that will be fielded in 2019.

This large-scale field test has multiple objectives. The first objective is to give all Census interviewers an opportunity to gain experience with the instrument prior to full-scale implementation in 2019. We plan to hold interviewer debriefings with Census interviewers to learn about their experience and understand any issues they had with the instrument. A second objective is to identify any remaining systems issues with the new instrument. We will continue to evaluate the output from the instrument to ensure that the instrument will be working properly. The large-scale field test will also be the first test of additional systems that monitor contacts, call-backs, and completion of interviews with sample households.

A third objective is to analyze process data to understand the methodological impact of the redesign. This will include analysis of the survey response process by looking at overall and module-specific response rates, completed interview rates, sufficient partial interview rates, cooperation rates, refusal rates, and contact rates. We will also examine contact history data such as the number of contact attempts to understand differences in the level of effort between the 2018 NHIS and the redesigned survey. Other indicators of data quality will also be analyzed including item nonresponse rates, item response times, and survey break-offs. Overall timing measures will be used to better understand the impact of the redesign on the length of different survey modules in the redesigned instrument.

A fourth objective is to compare estimates from the 2018 main NHIS questionnaire and the redesigned NHIS questionnaire. The simultaneous fielding of the 2018 main and redesigned instruments will enable us to

analyze and interpret the data for any changes in key health estimates. We are generally concerned with two types of changes between the 2018 main and the redesigned survey. First, the redesigned survey does not include a family section of the instrument. Therefore, the location of some questions (e.g. health insurance) has moved from a family instrument where all persons in the family are asked a question to a sample adult instrument where one randomly selected individual from the household answers the question. Second, we have changed the wording of some questions, which may influence how respondents answer the questions.

The preliminary analysis plan for this fourth objective is to compare estimates between the 2018 main NHIS instrument and the redesigned instrument, focusing on variables that will be included as part of a report that presents estimates from the NHIS early release program. Our initial power analyses indicate that the split sample in the last quarter of 2018 would be large enough to detect differences of around 2% (with 80% power and type 1 error rate of .05) for a percentage around 9% like the estimate of uninsurance. We would be able to detect differences around 4% for estimates around 50%. We would prefer to be able to detect smaller differences; however, we feel that the sample size is adequate given the multiple objectives of the field test.

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

Like in past years, the survey will be conducted by Computer Assisted Personal Interview (CAPI), using Blaise software, which reduces the time required for collecting, transferring, processing, and releasing data. CAPI usually reduces the average duration of interviews compared to a paper questionnaire with identical content. Additional details about data collection procedures are outlined in Attachment 8.

In order to reduce burden on Spanish-speaking respondents, the NHIS questionnaire has been translated into Spanish (and programmed into the CAPI software in this version), thus allowing the survey to be conducted seamlessly by Spanish-speaking interviewers.

The redesigned questionnaire to be launched in January 2019 has been streamlined compared to past years' questionnaires. In addition, critical family-level content has moved from what had historically been collected in the family questionnaire to the sample adult and sample child questionnaires. This substantially reduces the amount of information collected about all household members. Together, these revisions result in reduced public burden while minimizing the loss of information to be collected.

The web-based methodological and cognitive testing activities planned for 2018 offer increased convenience and time savings to respondents while also reducing costs to the government through lower survey administration costs compared to other modes of administration. Thus, they reduce public burden—both to respondents and taxpayers.

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

NHIS is the primary source of information for DHHS regarding the U.S. noninstitutionalized civilian population's health status, health care access, health care coverage, and progress toward achieving national health objectives. Measures included on the NHIS are often used by other federal data collection systems for calibration. NHIS questions are intended to be consistent with those on other federal surveys, but the NHIS



does not duplicate detailed content collected in other topically-specialized federal surveys. At the same time, some overlap between NHIS core content and that covered by other surveys is needed. This is the only way to ensure that the NHIS collects an adequate number of covariates to allow for varied and meaningful analysis of the NHIS data.

During the process of redesigning the questionnaire, in most cases where NHIS content areas were found to overlap with those covered by other federal surveys, the terminology used in those surveys has been adopted into the new NHIS questionnaire to increase consistency in definitions. The specific surveys examined were:

- National Health and Nutrition Examination Survey (NHANES)
- Medical Expenditure Panel Survey (MEPS)
- National Survey of Drug Use and Health (NSDUH)
- Behavioral Risk Factor Surveillance System (BRFSS)
- National Survey of Children's Health (NSCH)
- American Community Survey (ACS)
- Survey of Income and Program Participation (SIPP)
- American Housing Survey (AHS)

In addition, NCHS has participated in interagency workgroups established to harmonize content across major DHHS surveys, including questions on mental health, sexual orientation, health insurance, and tobacco use. Results from past and ongoing harmonization efforts have been carried through into the redesigned questionnaire.

NCHS intends to continue its efforts to collaborate with other agencies that collect similar content or rely on our data for policy decisions. For example, cognitive testing results (which show how respondents interpret questions) may suggest minor revisions to specific questions to ensure they are appropriate to meet NHIS measurement objectives. These results will not only be made available on the NCHS Q-Bank website, but also will be shared with agencies that we have collaborated with in the redesign process. This may lead to discussions about the performance of the questions and about the fitness of the questions for specific measurement objectives, recognizing that NHIS objectives may differ from other agency's objectives. While we cannot assure the use of our specific questions by other agencies, we will make every effort to keep them informed of our rationale for making decisions about questions. Agencies who want to add follow-up questions to the NHIS to explore objectives in more detail than needed to meet NHIS measurement goals will be welcome to do so throughout the life of the new design.

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

Information collection for the NHIS does not involve small businesses or other small entities.

## **6. Consequences of Collecting the Information Less Frequently**

The continuous nature of the NHIS is necessary for several reasons. First, many of the data items collected in the NHIS are used for annual tracking of health events and circumstances, including the National Objectives for Health Promotion and Disease Prevention and the health status of minority populations. Second, the continuous design makes it possible to aggregate data over longer periods of time to include enough cases to

study rare events and small populations, such as population subgroups or persons with certain conditions. Third, the Medical Expenditures Panel Survey (Household Component and Medical Providers Component, OMB No. 0935-0118, expires 12/31/2018) now depends on the NHIS for their sample, and failure of the NHIS to collect data annually may cause this survey to be postponed or canceled. Fourth, a continuous survey is more cost-effective because it makes possible a stable interviewing staff, which increases the quality of the data and avoids start-up and shut-down costs. Reducing the frequency of data collection would undermine all of these desirable features of the NHIS. Fifth, NHIS quarterly data releases allow rapid assessment of important health topics.

The redesigned NHIS questionnaire will introduce a new content structure, according to which certain sections of the core content will rotate on and off of the survey with a fixed periodicity (see Attachment 3a). This allows the NHIS to monitor a greater number of health topics while reducing respondent burden within any given year. Reducing the frequency of the overall NHIS data collection to less than annual would disrupt this predetermined schedule of rotating core content, leading to health outcomes not being able to be examined in combination and/or with all the covariates of interest available.

There are no legal obstacles to reducing the burden.

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

This request fully complies with the regulations 5CFR 1320.5.

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

### **A. Public Comment**

A 60-day Federal Register Notice was published in the Federal Register on 8/21/2017, Vol. 82, No. 160, pp. 39586 (see Attachment 2a). Eight comments were received (see Attachment 2b) and the standard CDC response was sent.

### **B. Other Consultations Outside the Agency**

In 2008, the Board of Scientific Counselors (BSC) of NCHS commissioned a panel to review the NHIS. The panel issued a report, in which it states that, "The NHIS is the gold standard for U.S. survey data. The size, scope and the quality of the NHIS data set it apart from the vast majority of other U.S. health surveys." The full report may be found at: <http://www.cdc.gov/nchs/data/bsc/NHISFinalReportwithexecsumm112108.pdf>

A new sample design was implemented with the 2016 NHIS. Sample areas were reselected to take into account changes in the distribution of the U.S. population since 2006, when the previous sample design was first implemented. Commercial address lists were used as the main source of addresses, rather than field listing; and the oversampling procedures for black, Hispanic, and Asian persons that were a feature of the previous sample design were not implemented in 2016. For the 2016 NHIS sample redesign, sampling experts at NCHS collaborated with their counterparts at the U.S. Census Bureau to develop a timeline and procedures for implementing the new sample. Workgroups at NCHS and the Census Bureau conducted methodological and procedural research on approaches to creating a new sample, with specific focus on the

new source of sample addresses (e.g., accuracy, geocoding quality, coverage of college dormitories, etc.) and the anticipated flexibility to alter overall sample size and/or shift sample allocations between States from year to year.

For the redesigned NHIS questionnaire, a large-scale, multi-wave consultation effort was undertaken. It is described in detail in Attachment 9.

## **9. Explanation of Any Payments or Gifts to Respondents**

No payments will be made to respondents.

## **10. Protection of the Privacy and Confidentiality of Information Provided by Respondents**

The NCHS Privacy Act Coordinator has determined that the Privacy Act is applicable because information in identifiable form is being collected. The Privacy Act System of Records relevant to this data collection is entitled Health and Demographic Surveys Conducted in Probability Samples of the U.S. Population (09-20-0164). The Office of the Chief Information Security Officer (OCISO) has a current copy of the Privacy Impact Assessment.

Confidentiality assurances to respondents are shown in Attachment 1. The collection, transfer, processing, storage, and release of NHIS data are conducted in compliance with section 308(d) of the Public Health Service Act (42 USC 242m), the Confidential Information Protection and Statistical Efficiency Act (CIPSEA; PL-107-347), the Privacy Act of 1974, 5 U.S.C. § 552a, and the Federal Cybersecurity Enhancement Act of 2015. NCHS will use the data for statistical purposes only, and will grant data access to NCHS staff, contractors, and agents for this purpose only when required and with necessary controls.

All NCHS employees and agents who access NHIS data are subject to the confidentiality procedures set forth in section 513 of CIPSEA, 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.”

### Information in Identifiable Form

Information in identifiable form (IIF) is collected for linkage with other federal sources of data and to enable the MEPS and NHIS follow-back surveys to develop a sampling frame from NHIS data. All of these items have been routinely approved and collected in the past. The identifiable information includes:

- Name
- Date of birth
- State/Territory where born (if born in US)

- Last four digits of the Social Security Number and/or Medicare number
- Mailing address
- Phone numbers
- Medical information

The NHIS continues to collect, on a confidential basis, data needed to recontact respondents for additional information and for participation in the MEPS, NHIS follow-back surveys and other special projects, as well as to match respondents to administrative records such as the National Death Index. This ability to track respondents and match to other records greatly expands the usefulness of the data at very low cost and with no added respondent burden.

The collection of information in identifiable form requires strong measures to ensure that private information is not disclosed in a breach of confidentiality. Only those NCHS employees, those specially designated agents (including staff at the U.S. Census Bureau), and those NHIS research partners who must use the personal information for a specific purpose can use such data.

All NCHS employees as well as all contract staff, receive appropriate training and sign a “Nondisclosure Statement.” Staff from collaborating agencies are also required to sign this statement, and members of outside agencies are required to enter into a more formal agreement with NCHS. Everyone else who uses NHIS data can do so only after all identifiable information is removed (as described below). In addition, the Cybersecurity Act of 2015 permits monitoring information systems for the purpose of protecting a network from hacking, denial of service attacks and other security vulnerabilities.<sup>1</sup> Monitoring under the Cybersecurity Act may be done by a system owner or another entity the system owner allows to monitor its network and operate defensive measures on its behalf. The software used for monitoring may scan information that is transiting, stored on, or processed by the system. If the information triggers a cyber threat indicator, the information may be intercepted and reviewed for cyber threats. The cyber threat indicator or defensive measure taken to remove the threat may be shared with others only after any information not directly related to a cybersecurity threat has been removed. In addition, sharing of information can occur only after removal of personal information of a specific individual or information that identifies a specific individual.

To aid interviewers in guarding the confidentiality and security of data, all data collected for the NHIS will be collected on Census Bureau-furnished laptop computers that are secured with encryption software. This software encrypts data contained on the computer, and has two levels of password protection. In the event of computer theft or other loss of the computer, the software prevents unauthorized access to any data on the computer, thereby adding an extra layer of security and confidentiality to the data. The transmission of confidential data from the Census Bureau to NCHS will be protected through procedures such as encryption and carefully restricted access, as is the storage of confidential data on both agencies’ servers. In addition, a routine set of measures will be taken to safeguard confidentiality, including the following: all Census Bureau and NCHS staff who have access to confidential information are given instruction by NCHS staff on the requirement to protect confidentiality, and are required to sign a pledge to maintain confidentiality; only such authorized personnel are allowed access to confidential records, and only when their work requires it; and when confidential information is not in use, it is stored in secure conditions.

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

It is NCHS policy to make NHIS data available via public use data files to the scientific community. Publicly released data sets are available indefinitely on the NCHS website. A concerted effort is made to avoid any disclosures that may allow a researcher to go back and find individuals in the general population. To this end, prior to their release, the NHIS data files are reviewed by the NCHS Disclosure Review Board to evaluate hundreds of tabulations of data estimates along with the survey methods in order to determine where disclosure risks might arise and how to minimize them. Several techniques are used to minimize these risks, including collapsing categories, top and bottom coding, adding noise to variables, removing detailed geographic information that may allow someone to identify individuals in the general population, along with other statistically sound means. This results, for instance, in all personal identifiers being removed from the public release files; this includes participant name, address, survey location number, and so forth. Researchers wishing to conduct analysis on variables not available in the public use data files may submit a research proposal to use the NCHS Research Data Center. Procedures for submitting the proposal and other important information can be found here <http://www.cdc.gov/rdc/>.

The process of informing respondents of the procedures used to keep information confidential begins with the advance letter and information brochure mailed in advance (Attachments 10a and 10b), and will carry through to interviewer training and all communications with potential respondents. The advance letter includes all appropriate elements of informed consent, including the purpose of the data collection, the voluntary nature of the survey, with whom the information will be shared, and the effect upon the respondent for not participating. These mailings may be supplemented with other mailed material (postcards and letters) that are leveraged based on Census Regional Offices' need to establish contact with prospective respondents (Attachment 10c). After the interview, all respondents are mailed an official Thank You letter to express appreciation for their participation (Attachment 10d).

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

The 2018 NHIS was approved by the Institutional Review Board (the NCHS Research Ethics Review Board) on 05/10/2017 (Attachment 11).

Some of the NHIS research topics include potentially sensitive questions. With the exception of the set of questions pertaining to stressful life events for children, all these questions have been on the NHIS for a number of years. In the informed consent procedure, participants are advised of the voluntary nature of their participation in the survey or any of its components. Sample persons are informed that they can choose not to answer any questions they do not wish to answer and that they may stop the interview at any time.

The potential sensitivity of questions was an evaluation criterion in determining content of the survey. The multi-purpose nature of the NHIS makes it necessary to exclude topics so sensitive that they may interfere with participation.

Questions asked about the following topics are considered by some to be of a sensitive nature:

- Social Security and Health Insurance Claim Number (last four digits)
- Citizenship Status
- Sexual Orientation
- Stressful life events for children

**Social Security Number and Health Insurance Claim Number:** The last four digits of the social security number is asked on the NHIS questionnaire to allow linkage with administrative and vital records such as the National Death Index (NDI; OMB# 0920-0215, expires 12/31/2019). The NDI is a computerized central file of death record information. It is compiled from data obtained by NCHS from the State vital statistics offices. The data contain a standard set of identifying information on decedents from 1979 to the present. Records are matched using Social Security Number and other variables such as name, date of birth, sex, state of residence, and marital status. Of these, social security number is the most important identifier for successful matching. The last four digits has been shown to be nearly as effective for matching as the full number.

**Medicare beneficiaries are given a health insurance claim number. The NHIS asks for the last four digits of that number so that the NHIS data can be linked to Medicare claims information for purposes of statistical research.**

**Citizenship Status:** Health care coverage availability and offerings can differ by citizenship status. To best estimate the coverage status among those eligible, it is useful to obtain information about the citizenship status of NHIS sample persons.

**Sexual Orientation:** Beginning in 2013, questions on sexual orientation were added to the NHIS. Extensive testing occurred prior to this addition to examine the impact of the questions on interview break-off, nonresponse or refusals, and other possible negative reactions. Multiple rounds of cognitive testing and three rounds of field testing were conducted. Treating the questions as sensitive by offering ACASI administration did not alter the results. Since introducing the questions on the NHIS in January 2013, there have been no complaints from respondents or negative outcomes. These questions have been recommended for use by the interagency workgroup established to harmonize content across major DHHS surveys.

**Stressful life events for children:** Four questions pertaining to stressful life events will be included in the redesigned version of the child questionnaire. These questions have never before been asked in the NHIS and may be considered sensitive. However, these questions have been asked in previous iterations of the National Survey of Children's Health (NSCH), as well as the 2016 and 2017 NSCH (OMB# 0607-0990, expires 04/30/2019), without complaints from participants. The questions ask about events over the entire course of a child's life. Introductory text will be read to respondents before beginning these questions, which will inform respondents that some people may feel uncomfortable answering these types of questions and that they may skip any questions they do not want to answer.

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

### **A. Time Estimates**

This submission requests OMB approval for three years of data collection, to occur within the context of ongoing data collection activities (OMB# 0920-0214, expires 12/31/2019). The average burden for each survey component for one complete survey cycle is shown in the table below, and represents a reduction of 1,265 hours compared to 2017.

The estimated overall average annual burden for 2018, including the core and supplemental questions (of both the main and redesigned questionnaires), the special projects, and the reinterview component, is 47,735 hours. The average annual burden for 2019 and 2020 is estimated to be comparable to this estimated

burden for 2018. Any future modification that might impact the instruments and/or burden estimates will be submitted as a nonsubstantive change request for OMB review, as applicable.

Lines 1-4 of the burden table (Attachments 4a-d) represent the different sections of the main 2018 questionnaire, and Lines 5-7 (Attachments 5a-c) represent the various sections of the redesigned questionnaire to be used in the dress rehearsal/systems test in the last quarter of 2018<sup>2</sup>. Line 8 covers the planned special projects encompassing web- and/or mail-based methodological and cognitive testing activities (Attachment 7). Small quality control resurveys of about 5,000 participating households (4,375 from the Main survey and 675 from the Redesigned Survey) are represented by lines 9 and 10 (Attachments 6a and 6b).

Estimated Annualized Burden Hours

Type of Respondent	Form Name	Number of Respondents	Number of Responses per respondent	Average Burden per Response (in hours)	Total Burden Hours
Adult Household Member	Main Household Composition and Family Core	39,375	1	23/60	15,094
Sample Adult	Main Adult Core	31,500	1	15/60	7,875
Adult Family Member	Main Child Core	12,250	1	10/60	2,042
Adult Family Member	Main Supplements	39,375	1	20/60	13,125
Adult Household Member	Redesigned Household Roster	5,625	1	5/60	469
Sample Adult	Redesigned Adult Questionnaire	4,500	1	39/60	2,925
Adult Family Member	Redesigned Child Questionnaire	1,750	1	27/60	788
Adult Family Member	Methodological Projects	15,000	1	20/60	5,000

<sup>2</sup> Note: The supplementary content of the redesigned questionnaire is seamlessly integrated into the adult and child modules of the questionnaire. Because the content cannot be separated out into standalone modules, as has been the case in the past, there is no separate line in the burden table for redesigned sponsored/supplemental questions.

Adult Family Member	Main Reinterview Survey	4,375	1	5/60	365
Adult Family Member	Redesigned Reinterview Survey	625	1	5/60	52
Total					47,735

Not all questions apply to each person, and the questionnaire instrument automatically skips over questions that do not apply, based on earlier information given by the respondent. Thus, no respondent is ever asked all of the questions in the questionnaire.

The estimate of response burden above is based on an average length of interview per household. Variations occur in individual household interview times primarily because of differing numbers of persons in the household and variations in the number of health conditions reported in the household.

The burden on any single member of a sample family also varies according to who is designated respondent for each module. In some sample families the same adult could be the respondent for all of the major components: Family, Adult, and Child; in other families there could be a different respondent for each of the Core Modules. In the first case, the total average burden on the single respondent would be about one hour; in all other cases the burden on a single respondent would be less.

For the 2018 NHIS, the average total burden is estimated to be about 47,735 hours. This represents a reduction of 1,265 hours from the estimated burden for the 2017 survey. The reason for this is that the redesigned household, adult, and child questionnaires that will be tested in the last quarter are approximately one quarter shorter in length compared to the main 2018 questionnaire fielded in the first three quarters of the year. The average annual burden for 2019 and 2020 is estimated to be comparable to this estimated burden for 2018, as it captures not only the shorter questionnaire, but potentially any additionally needed methodological testing as well.

## B. Cost to Respondents

At an average wage rate of \$21.00 per hour the estimated annualized cost for the 47,735 burden hours is \$1,002,435. (Wage rate information is from the Bureau of Labor Statistics: <http://www.bls.gov/ncs/ocs/sp/nctb1344.pdf>). This estimated cost does not represent an out of pocket expense, but represents a monetary value attributed to the time spent doing the interview. Estimated Annualized Burden Costs

Type of Respondent	Form Name	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
Adult Household Member	Main Family Core	15,094	\$21.00	\$316,974



Sample Adult	Main Adult Core	7,875	\$21.00	\$165,375
Adult Family Member	Main Child Core	2,042	\$21.00	\$42,882
Adult Family Member	Main Supplements	13,125	\$21.00	\$275,625
Adult Household Member	Redesigned Household Roster	469	\$21.00	\$9,849
Sample Adult	Redesigned Adult Questionnaire	2,925	\$21.00	\$61,425
Adult Family Member	Redesigned Child Questionnaire	788	\$21.00	\$16,548
Adult Family Member	Methodological Projects	5,000	\$21.00	\$105,000
Adult Family Member	Main Reinterview Survey	365	\$21.00	\$7,665
Adult Family Member	Redesigned Reinterview Survey	52	\$21.00	\$1,092
Total				\$1,002,435

**13. Estimates of Other Total Annual Cost Burden to Respondents or Record keepers**

None.

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

As shown in the table below, the total cost of the 2018 NHIS is estimated to be about \$42 million, the same as for the 2017 survey. This includes costs to NCHS directly and to its fieldwork contractor, the Bureau of the Census. For NCHS, the estimated cost for the 2018 data collection is about \$9 million. This cost includes work on survey design, evaluation, analysis, comparability studies, coding, processing, questionnaire design laboratory testing, field pretests, weighting, and estimation, printing of survey materials, and staff observation costs (travel and per diem). It is estimated that Census Bureau costs for survey planning, design, and data collection for the 2018 NHIS will be about \$33 million, which is transferred to the Census Bureau through an Interagency Agreement.

Total 2017 Survey Costs	42 million
U.S. Bureau of the Census (Interagency Agreement)	33 million
Sampling	4.5 million
Survey Management	1.5 million
Field Operations	23.5 million
Data Editing	1.5 million

Programming and IT

2.0 million

National Center for Health Statistics

9 million

Approximately \$9 million of these costs are provided to NCHS through Interagency Agreements with survey sponsors.

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

For the 2018 NHIS, the average total burden is estimated to be about 47,735 hours, representing a reduction of 1,265 hours compared to the 2017 survey. Compared to 2017, the 2018 burden table was further updated to reflect the dress rehearsal and systems test of the redesigned questionnaire that will take place in the last quarter of the year. Lines 5-8 were added to reflect the redesigned questionnaire to be rehearsed, and Lines 1-4 correspondingly reduced by the appropriate number of respondents and hours to reflect the splitting of the sample in the last quarter.

Program changes that do not affect the burden hours include: addition of previously-approved and removal of discontinued supplementary questions.

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

The following are key activities and projected completion dates for the 2016 NHIS:

<u>Activity</u>	<u>Projected Completion Date</u>
2018 data collection	Following OMB approval, for 12 months
Early release of selected estimates (Quarter 1)	Eight months after OMB approval
2018 data file available	18 months after OMB approval
Publication of Summary Statistics	Two years after OMB approval

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

N/A. Not requesting exemption.

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

There are no exceptions to the certification.