

## Attachment 6 - NHIS Methodological projects

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New rotating and supplemental content will be introduced to the NHIS in 2021. The NHIS team is currently in the process of designing these questions and considering the best way to ask these questions. To inform and support decision making for these types of development activities, a number of short, web- and/or mail-based, quick-turnaround methodological, cognitive and field testing projects are anticipated for 2021.

The aims of these projects are to test new and updated questionnaire items, evaluate the impact of different response options on response frequencies, and measure respondents' comprehension of health care-related terms and concepts. To this end, these projects will build on information learned in prior NHIS follow-back surveys and methodological research. We outline research below.

### **Research using a commercial web panel**

Respondents from commercial web panels can be used to test conceptual understanding of key terms in surveys. DHIS previously tested web panel respondents' comprehension of key terms related to health insurance through a brief web questionnaire that took approximately 10 minutes to complete. For example, respondents were asked questions to measure their understanding of deductibles, co-pays, and premiums. We would like to continue to use this method to aid in the development of new and revised content in the redesigned questionnaire.

### **Follow-back surveys with NHIS respondents to test new items**

NHIS respondents may be recontacted to participate in additional follow-back surveys where we can test new versions of survey questions. This would involve testing components of the full NHIS instrument with new or revised content, or penetration and uptake of different, innovative modes of collecting data. Specifically, we would use follow-back surveys to explore the following research questions:

1. How does alternate question wording affect respondent comprehension of the constructs to be measured?
2. What is the test/retest reliability of newly-developed questions?
3. What are preferred answer choices for categorical questions?
4. What probes (e.g., time frames or date ranges) work best to promote recall of medical visit dates?
5. What is the validity of new or existing questions and are there alternative methods to collect data? (e.g., do NHIS respondents use wearable activity monitors, are they willing to share access to data from those devices, and do the data correlate with reported physical activity?)

The sample for these projects will consist of current- and prior-year (2013-2020) NHIS respondents who are not in the MEPS sample.

### **Follow-back Surveys designed to augment information already collected**

Follow-back surveys can also be used to collect additional information on items already collected in the NHIS, for example, biomeasures which may include but are not limited to height, weight, waist circumference.

One follow-back survey under consideration is a follow-up with sample children in the 2021 NHIS by web, phone, or mail to ask them follow-up questions about topics that were already included in the NHIS. In the NHIS, one “sample child” aged 17 years or less will be randomly selected from each household (if any children live in the household) to be the subject of a detailed interview. Sample children do not self-report; instead a knowledgeable adult (typically a parent or guardian) answers questions about the sample child’s health. Because of this design, NCHS and survey sponsors are limited to asking questions on topics that parents can reliably report. This limits the ability of the current NHIS to explore some issues thought to be related to health, such as physical activity, sedentary activity, use of social media and electronic devices, eating habits, school activities, extracurricular activities, friendships, bullying, and risk behaviors (e.g. smoking, alcohol). Few existing surveys collect data directly from adolescents, and even fewer can link those data to extensive parent-reported data such as those collected by the NHIS. A follow-back survey could be conducted online or by mail with adolescents following their parents’ completion of the NHIS interview.

The National Health Interview Survey (NHIS) and the National Health and Nutrition Examination Survey (NHANES) programs, for example, is proposing to conduct a pilot study in 2020 to assess the feasibility of adding a health exam (including the collection of physical measurements and biospecimens) to the National Health Interview Survey (NHIS). The pilot will assess the willingness of NHIS participants to participate in this exam, by recruiting adult respondents aged 18 years and older. The exam will be conducted in respondents’ homes, and will consist of measuring anthropometrics (height, weight and waist circumference), blood pressure (systolic and diastolic), resting heart rate, and taking a venous

blood draw. Respondents will also be asked to provide a urine sample. The specific metrics to be evaluated are: a) the response rates for participation in the health exam; b) the feasibility of, and challenges to, scaling up pilot exam procedures to the full NHIS sample; and c) the quality of blood and urine samples obtained for laboratory testing.

**Lab and field pretesting** Cognitive testing will be used to understand how respondents interpret new and revised survey questions for the redesigned survey (e.g., stressful life events for children; adult pain management). DHIS uses the cognitive lab through the Collaborating Center for Question Design and Evaluation Research (CCQDER) at NCHS to conduct this testing. These and other similar cognitive testing projects typically involve recruiting 20-30 research participants through advertisements to visit the lab. An interviewer administers the questions and observes the participants' answers. The interviewer will then ask follow-up questions to understand how the participants processed the question and any problems that the respondent had answering the survey questions

Requests for continued permission to conduct developmental studies (such as pilot, feasibility, methodological and other developmental testing) for future NHIS will be submitted through non-substantive change requests. Special projects would be submitted for approval using a non-substantive change request or full revision, as appropriate.