SUPPORTING STATEMENT

Part A

MEPS Alternative Sampling Design Pilot Test

March 2022

Agency for Healthcare Research and Quality (AHRQ)

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A. JUSTIFICATION

1. Need for Information

The mission of the Agency for Healthcare Research and Quality (AHRQ) is to produce evidence to make health care safer, higher quality, more accessible, equitable and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used.

AHRQ shall promote health care quality improvement by collecting data on and producing measures of the quality, safety, effectiveness, and efficiency of American health care and health care systems; fostering the development of knowledge about improving health care, health care systems, and capacity; and partnering with stakeholders to implement proven strategies for health care improvement. Also, AHRQ shall conduct and support research and evaluations, and support demonstration projects, with respect to (A) the delivery of health care in inner-city areas, and in rural areas (including frontier areas); and (B) health care for priority populations, which shall include (1) low-income groups, (2) minority groups, (3) women, (4) children, (5) the elderly, and (6) individuals with special health care needs, including individuals with disabilities and individuals who need chronic care or end-of-life health care.

The MEPS survey consists of the following three components and has been conducted annually since 1996:

- Household Component (MEPS-HC): A sample of households participating in the National Health Interview Survey (NHIS) in the prior calendar year are interviewed 5 times over a 2 and one half (2.5) year period. These 5 interviews yield two years of information on use of, and expenditures for, health care, sources of payment for that health care, insurance status, employment, health status, and health care quality.
- Medical Provider Component (MEPS-MPC): The MEPS-MPC collects information from medical and financial records maintained by hospitals, physicians, pharmacies, and home health agencies named as sources of care by household respondents.
- Insurance Component (MEPS-IC): The MEPS-IC collects information on establishment characteristics, insurance offerings and premiums from employers. The MEPS-IC is conducted by the Census Bureau for AHRQ and is cleared separately.

This request is related to the MEPS-HC only. The OMB Control Number for the MEPS-HC and MPC is 0935-0118, which was last approved by OMB on November 20, 2020, and will expire on November 30, 2023.

This study is being conducted by AHRQ through its contractor (Westat) pursuant to AHRQ's statutory authority to conduct and support research on healthcare and on systems for the delivery of such care, including activities with respect to the cost and use of health care services and with respect to health statistics and surveys. 42 U.S.C. 299a(a)(3) and (8); 42 U.S.C. 299b-2.

The purpose of this request is to design and implement a sequential multimode pilot study of a screening instrument, with a mail "push-to-Web" screener followed by a paper screener mailed to nonrespondents. The pilot is part of a plan to develop a two-phase address-based (ABS) sampling approach using the USPS Computerized Delivery Sequence File as the sampling frame instead of the current method that uses respondents to the National Health Interview Survey (NHIS) as the frame. One of the primary goals of MEPS is to produce reliable estimates of medical expenditure totals. This places additional demands on the survey and distinguishes it from most household surveys like the NHIS that primarily produces estimates of means and proportions. The distribution of expenditures is very uneven, with most households having relatively low expenditures and a very small proportion having very large expenditures. The skewness of this distribution makes estimation of total expenditures dependent on having a large sample so that enough of the high expenditure households are included. In addition, the MEPS design has included oversampling race/ethnicity minority households to improve the precision of estimates in these domains. The proposed pilot of the web-based screening instrument will test this new design by selecting an address-based sample for a screener to collect demographics and measures that may help identify race/ethnicity minority households and to predict high medical expenditures. The questionnaire modes will be presented sequentially where Web is the only mode available initially, and then the paper questionnaire is introduced in nonresponse follow-up contacts.

2. How, by Whom, and for What Purpose Information Will Be Used

AHRQ will use the results of the pilot study to address some key design issues and assumptions, test data collection procedures, and evaluate the effectiveness of reaching race/ethnicity minority households and potential high expenditure cases through the two-phase ABS design. For example, we will evaluate the following aspects of the design using the pilot study data:

- The impact of incentives on the overall response rates, the percentage of respondents by web and by paper mode, and response rates by contact attempt (i.e., whether higher incentives motivated earlier response);

- The ability to oversample high expenditure and race/ethnicity groups through the two-phase design (and possibly integration of the Master Beneficiary Summary File (MBSF) data during the sampling process); and

- The potential impact on the design effect due to two-phase sampling (i.e., sampling screener respondents and nonrespondents at different rates for the Round 1 interview) and oversampling population subgroups.

3. Use of Improved Information Technology

The proposed pilot study will employ a multi-mode Web/Paper instrument for screening respondents from the ABS sample. In order to maximize use of the Web, we will send sample members an advance postcard, then an invitation letter encouraging them to complete the screener online. We will follow the invitation letter with a reminder postcard that will also direct sample members to the Web screener. After sample members receive these opportunities to

complete the screener online, we will send nonrespondents two mailings containing a paper questionnaire and return envelope. The push-to-Web strategy will shorten the data collection period and maximize response rates by giving respondents the choice to either complete the screener online or the paper version.

4. Efforts to Identify Duplication

No other survey meets all of the objectives of the MEPS, which employs a rotating panel design to collect all medical expenditures for a sample of the entire U.S. noninstitutionalized population for a two-year period. Changes to the current sample design, given the scope and scale of MEPS, must be conducted rigorously. No other research can inform AHRQ about the potential for the web design to serve as alternative to the NHIS as a sample source.

5. Involvement of Small Entities

The MEPS-HC collects information only from households. No small entities will be contacted through the proposed research.

6. Consequences if Information Collected Less Frequently

The proposed pilot study would be implemented only once, to test various approaches to recruiting respondents through an ABS sample. Less frequent collection would mean not collecting the information at all. The current NHIS sample frame has undergone numerous changes in recent years, and this pilot study seeks to explore alternative strategies that would be independent of NHIS and provide MEPS with more complete representation of households with high levels of medical expenses. If these data are not collected through the pilot study, additional changes to the current sampling strategy could have unforeseen consequences for MEPS estimates. The pilot study is needed to reduce the potential design risks in the future.

7. Special Circumstances

The MEPS-HC will fully comply with 5 CFR 1320.6, providing protection through the public by displaying the OMB approval information and indicating that completion of the screener will not affect any benefits they receive.

8. Federal Register Notice and Outside Consultations

8.a. Federal Register Notice

This proposed information collection is being submitted under AHRQ's generic clearance (OMB No. 0935-0124). Therefore, publication in the Federal Register is not required.

8.b. Outside Consultations

AHRQ worked with the MEPS-HC contractor during design of the pilot, including several experts in the area of statistical sampling and survey design.

9. Payments/Gifts to Respondents

As discussed above, the pilot is designed to assess the effect of incentive amount and timing on the screener. For prepaid incentives, three options will be tested: $0, $2, and $5. We do not recommend $0 for the main study if the alternative design is implemented, due to the expected reduction in response, but we have included this treatment as a baseline measure. Promised incentive amounts of $0 or $10 are proposed as well. Exhibit 1 below details the four incentive treatments proposed for the pilot, along with sample size and total incentive expense assumptions.

Exhibit 1. Incentive treatment groups for proposed pilot study

Incentive treatment group	Prepaid incentive	Promised incentive	Sample size for treatment group	Total Prepaid incentives	Total Promised Incentives	Total Incentives
1	$0	$0	2,900	$0	$0	$0
2	$2	$10	2,900	$5,800	$8,700	$14,500
3	$5	$0	2,900	$14,500	$0	$14,500
4	$5	$10	2,900	$14,500	$9,280	$23,780
Total			11,600	$34,800	$17,980*	$52,780

*Estimated “take up” of promised incentives

10. Assurance of Confidentiality

Confidentiality is protected by Sections 944(c) and 308(d) of the Public Health Service Act (42 U.S.C. 299c-3(c) and 42 U.S.C. 242m(d)). This research project will be carried out in compliance with these confidentiality statutes. Respondents will be told the purposes for which the information is being collected, that the confidentiality of their responses will be maintained, and that no information that could identify an individual or establishment will be disclosed unless that individual or establishment has consented to such disclosure.

11. Questions of a Sensitive Nature

The screener included as Attachment A includes demographic and health-related questions of respondents. The demographic questions are not considered sensitive. The health-related questions ask about the respondent’s general health and mental health (Questions 1 and 2, respectively), and about specific conditions, health status and functioning experienced by the individual and by anyone else in the household (Questions 3-6). Question 7, about mental health treatment, is potentially somewhat sensitive. This question is necessary to measure how well the proposed sampling method can identify households with high utilization of mental health services, which could inform changes to the MEPS main study sampling procedures. Although there is some relationship between this question and Question 2, the goal of conducting this pilot is not limited to making estimates of high utilization of mental health services at the household level, but to provide a better indicator of the likelihood of the household having greater expenditures. Asking only the household-level mental health services question would result in

the screener missing households that would otherwise indicate high expenditures. This would decrease the effectiveness of the screening, and we will not be able to quantify this under-representation. Even considering that some respondents may regard these questions to be sensitive, for the purposes of identifying incidence of high-utilization households from this sampling method it is vital to ask both the individual-level mental health status question and the household-level mental health utilization question.

12. Estimates of Annualized Burden Hours and Costs

Exhibit 2 shows the estimated annualized burden hours for respondents' time to participate in this research. The completion of the Web or paper screener is estimated to take an average of 10 minutes per completed screener, for a total of 567 burden hours for all respondents.

Exhibit 3 shows the estimated annualized cost burden associated with respondents' time to participate in this research. Based on the mean hourly wage for all occupations provided by BLS, the total cost burden to respondents is estimated to be $15,349.

Exhibit 2: Estimated annualized burden hours

Activity	Number of respondents	Number of responses per respondent	Hours per response	Total burden hours
Alternative Sampling Design Screener	3,393	1	.167	567
Total	3,393	n/a	n/a	567

Exhibit 3: Estimated annualized cost burden

Activity	Number of respondents	Total burden hours	Average hourly wage rate*	Total cost burden
Alternative Sampling Design Screener	3,393	567	$27.07	$15,349
Total	3,393	567	n/a	$15,349

* Mean hourly wage for All Occupations (00-0000) Source: Occupational Employment Statistics, May 2020 National Occupational Employment and Wage Estimates United States, U.S. Department of Labor, Bureau of Labor Statistics.

13. Estimates of Annualized Respondent Capital and Maintenance Costs

Capital and maintenance costs include the purchase of equipment, computers or computer software or services, or storage facilities for records, as a result of complying with this data collection. There are no direct costs to respondents other than their time to participate in the study.

14. Estimates of Annualized Cost to the Government

Exhibit 3 shows the estimated annualized cost to the Government, which is estimated at $21,548.
Exhibit 3. Estimated Annual cost to AHRQ for Project Oversite [AHRQ TO COMPLETE]

AHRQ Position	% Time	Annualized Cost
GS 15 Step-5	5%	$8,386
GS 14 Step 5	5%	$7,129
GS 13 Step 5	5%	$6,033
Total		$21,548

*Based on 2022 OPM Pay Schedule for Washington/DC area: https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2022/DCB.pdf

15. Change in Burden

This data collection effort is a new activity.

16. Time Schedule, Publication and Analysis Plans

The proposed pilot data collection is expected to be implemented between August and October 2022, with the analysis and reporting of results completed in May 2023.

17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

List of Attachments

Attachment A – Pilot Screener

Attachment B – Pilot Mailing Materials