## **SUPPORTING STATEMENT**

## Part B

# Pilot Test of the Revised Data Collection Method for the Medical Expenditure Panel Survey – Insurance Component

March 24, 2021

Agency for Healthcare Research and Quality (AHRQ)

# **Table of Contents**

B. STATISTICAL METHODS	3
Potential Respondent Universe and Sample Selection Method	3
2. Information Collection Procedures	
3. Methods to Maximize Response Rate	4
4. Tests of Procedures	4
5. Statistical Consultation and Independent Review	5

#### **B. STATISTICAL METHODS**

#### 1. Potential Respondent Universe and Sample Selection Method

#### **Pilot Test Participants**

Business establishments in this study will be selected from every State and the District of Columbia concurrently with the regular MEPS-IC annual sample to insure no duplication between the samples. To eliminate the chance of adding burden to larger firms, establishments will only be selected from the four smallest firm-size strata used by the regular sample. These strata, based on both firm size and establishment size, are shown in Table 1.

Table 1. Firm Size by Establishment Size Sampling Strata for the Pilot Test

Firm Size (Number of Employees)	Establishment Size (Number of Employees)
1 – 12	1 – 4
1 – 12	5 – 12
13 – 91	1 – 26
13 – 91	27 – 91

### **Pilot Test Sample Selection**

The frame for the pilot test will be the Census Bureau's Business Register, the same frame used by the regular MEPS-IC sample. The pilot test sample size of 4,896 establishments was chosen to allow for the selection of 24 establishments per strata per State (including the District of Columbia). Despite the expected higher nonresponse rate than the regular MEPS-IC survey, the number of responding pilot study establishments should be able to produce reliable national estimates of key survey figures by select firm size categories. These figures will be compared to the regular survey figures in a bias analysis to gauge the effects of eliminating certain data collection processes (research, telephone prescreener, and telephone follow-up) that would significantly reduce the overall cost of the survey.

The pilot test sample will be drawn concurrently with the regular MEPS-IC sample to avoid duplication of selected establishments. To select the sample, the regular MEPS-IC allocation for each state would be increased by 96 establishments (24 establishments per strata, 4 strata per State and the District of Columbia). Once the combined sample has been drawn using the sampling methodology used by the regular MEPS-IC survey, the pilot test establishments would be separated from the regular sample establishments and the pilot establishments would then be sent on a separate route through the data collection, data processing, and estimation operations. The pilot test establishments will not contribute to the imputation of regular survey establishment responses nor will they contribute to any regular survey estimates due to the unknown biases that may have been caused by their different methods of data collection and data processing.

#### 2. Information Collection Procedures

The regular MEPS-IC data collection procedures are:

- Research
- Telephone prescreener
- Internet (Web) data collection
- Mail data collection
- Telephone follow-up
- Problem resolution

During the research operation, analysts attempt to improve upon the address and contact information from the frame (Census Bureau Business Register). Analysts use the internet and other sources to determine the name and location of the optimal person to contact to respond to the survey. The telephone prescreener operation involves a brief call to the establishment to determine if health insurance is offered. If health insurance isn't offered, characteristics of the business are collected and the survey ends for that establishment. If health insurance is offered or if there is no contact during the prescreener operation, the establishment will receive an invitation to respond to the survey using the internet (Web). Follow-up letters and emails are sent to the business if warranted. If further follow-up is necessary or if the business places a request, the business will be mailed a survey form packet. After that, if the establishment continues to not respond to the survey, the business is sent to the telephone follow-up operation. Responses with conflicting or critical reporting errors will be addressed in the problem resolution operation.

The survey staff is examining opportunities to reduce costs and deliver estimates more quickly. By eliminating the research, telephone prescreener, and telephone follow-up operations, significant gains for both goals may be realized — at the possible cost of response, bias, and data quality. This pilot test will provide valuable information about the possible costs of eliminating these data collection processes.

The pilot test will use existing data collection methods and procedures to gather data from respondents. The only differences from the regular survey data collection will be the absence of the research, telephone prescreener, and telephone-follow-up procedures.

#### 3. Methods to Maximize Response Rate

Advance emails will inform establishments about the survey and notify them of the opportunity to respond using the internet (Web). Follow-up emails will be sent as necessary. If further follow-up is warranted, the business will be mailed a packet of survey forms with an informative letter on Census Bureau letterhead that is signed by a high-ranking Census Bureau official. Also in the survey packet will be a color brochure containing information about the survey, a key estimate produced by the survey from the prior year, and instructions on how to respond to the survey.

#### 4. Tests of Procedures

Other than the sampling, the procedures for this specific project are the same as for the regular annual survey. The Census Bureau has a great amount of experience with sampling and processing separate paths of MEPS-IC data from conducting three MEPS-IC longitudinal surveys (2013-2014, 2014-2015, and 2015-2016). For the longitudinal surveys, separate paths were incorporated to process the longitudinal data at the same time, but apart from the regular MEPS-IC data.

### 5. Statistical Consultation and Independent Review

The following Census Bureau statistical analysts developed both the study design and analytic plan for this project:

Marleen Livesay, Chief, Health Surveys Branch, Economic Reimbursable Surveys Division, U.S. Census Bureau

Julie Vesely, Chief, Business Register and MEPS Statistical Methods Branch, Economic Statistical Methods Division, U.S. Census Bureau

Matt Thompson, Mathematical Statistician, Business Register and MEPS Statistical Methods Branch, Economic Statistical Methods Division, U.S. Census Bureau

Brandon Flanders, Survey Statistician, Health Surveys Branch, Economic Reimbursable Surveys Division, U.S. Census Bureau

Ruiyi Li, Mathematical Statistician, Business Register and MEPS Statistical Methods Branch, Economic Statistical Methods Division, U.S. Census Bureau