



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



Medical Expenditure Panel Survey (MEPS) OVERVIEW

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MEPS OVERVIEW: Outline



☐ What is MEPS?

- ☐ Components
- ☐ Purpose
- ☐ Design and sample

☐ What MEPS collects?

- ☐ Core content - computer-assisted personal interviewing (CAPI) sections
- ☐ Self-administered questionnaires

☐ How are the data disseminated?

- ☐ Website
- ☐ Data files
- ☐ Web tools
- ☐ Agency for Healthcare Research and Quality (AHRQ) Data Center

MEPS Components

Medical Expenditure Panel Survey (MEPS)

Household
Component
(HC)

Medical Provider
Component
(MPC)

Insurance
Component
(IC)

MEPS Survey Components



☐ **MEPS-HC: Household Component**

- ☐ Collects healthcare use data from a sample of families and individuals in selected communities across the United States
- ☐ Annual survey of about 15,000 households since 1996

☐ **MEPS-MPC: Medical Provider Component**

- ☐ Survey of medical providers linked to respondents to the HC
- ☐ Collects data from a sample of providers who provided medical care to HC respondents
- ☐ Data not designed to yield national estimates; used solely for editing and imputation purposes related to the Household Component data

☐ **MEPS-IC: Insurance Component**

- ☐ Collects data from a sample of private- and public-sector employers on the health insurance plans they offer their employees
- ☐ An independent survey of employers and unions NOT linked to HC

MEPS-Household Component

Purpose & Uses



- ☐ **MEPS-HC is an annual survey of about 15,000 households fielded since 1996**
- ☐ **Collects data from a sample of families and individuals in selected communities across the United States**
- ☐ **Provides data collected from individual households and their members, which is supplemented by data from their medical providers**
- ☐ **Provides nationally representative estimates of healthcare use, expenditures, sources of payment, access to care, and health insurance coverage for the U.S. civilian noninstitutionalized population**
- ☐ **Allows estimates to be produced for individuals, families, and selected population subgroups and socioeconomic characteristics**
- ☐ **Is used for policy-related and behavioral research on the determinants of healthcare use, spending, and insurance coverage**

MEPS-HC Survey Design



- ☐ Since 1996, every year a new panel of sample households has been selected.
- ☐ The MEPS-HC sample is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics (NCHS).
- ☐ The sample is representative of the civilian noninstitutionalized population of the United States.
- ☐ Data are collected for 2 years of healthcare usage from each panel.

MEPS-HC Survey Interviews





















- ☐ There are five in-person interviews using CAPI technology.
- ☐ All data is reported by a single household respondent.
- ☐ To collect 2 years of healthcare usage data, it can take up to 2½ years.
- ☐ Interviews can last anywhere from 1 to 4 hours.

MEPS-HC Sample Sizes



Year	Number of families	Number of persons
<u>2019</u>	11,924	27,648
<u>2018</u>	12,475	29,415
<u>2017</u>	12,756	30,716
<u>2016</u>	13,587	33,259
<u>2015</u>	13,800	33,893
<u>2014</u>	13,421	33,162
<u>2013</u>	13,936	35,068
<u>2012</u>	14,763	37,182
<u>2011</u>	13,449	33,622
<u>2010</u>	12,445	31,228
<u>2009</u>	13,875	34,920
<u>2008</u>	12,316	31,262
<u>2007</u>	11,615	29,370
<u>2006</u>	12,811	32,577
<u>2005</u>	12,810	32,320
<u>2004</u>	13,018	32,737
<u>2003</u>	12,860	32,681
<u>2002</u>	14,828	37,418
<u>2001</u>	12,852	32,122
<u>2000</u>	9,515	23,839
<u>1999</u>	9,345	23,565
<u>1998</u>	9,023	22,953
<u>1997</u>	13,087	32,636
<u>1996</u>	8,655	21,571

MEPS Panel Design: Data Reference Periods

	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Panel 21												
Round 3												
Round 4												
Round 5												
Panel 22												
Round 1												
Round 2												
Round 3												
Round 4												
Round 5												
Panel 23												
Round 1												
Round 2												
Round 3												
Round 4												
Round 5												
Panel 24												
Round 1												
Round 2												
Round 3												
Sample Size	N = 30,716				N = 29,415				N = 27,648			

N is equal to the number of people with a positive weight on the file.

MEPS-HC Interview Content



- ☐ **Following is the list of sections that are asked using CAPI in all rounds:**
 - ☐ **Demographics**
 - ☐ **Utilization and Expenditures**
 - ☐ **Charges and Payments**
 - ☐ **Employment**
 - ☐ **Health Insurance**
- ☐ **Health Status (Rounds 1 – 4)**
- ☐ **Priority Conditions Enumeration (Rounds1 – 4)**

MEPS-HC: Interview Content (cont.)



☐ Demographics

- ☐ Collects demographic characteristics of each person. These characteristics include age, sex, race and ethnicity, Language and English proficiency, marital status, foreign-born status, student status and educational attainment, military service and honorable discharge and poverty status.

☐ Utilization and Expenditures

- ☐ Collects data in each round on use and expenditures for office- and hospital-based care, home healthcare, dental services, vision aids, and prescribed medicines. Data are collected for each sample person at the event level (e.g., doctor visit, hospital stay).

MEPS-HC: Interview Content (cont.)



- ☐ **Charges and Payments (CP)**
 - ☐ Tracks total charges and sources of payment for medical events reported in earlier sections.
- ☐ **Employment (EM)**
 - ☐ Covers questions about each person's employment or self-employment status.
- ☐ **Health Insurance (HX)**
 - ☐ Collects information about health insurance including private and public health insurance programs.

MEPS-HC: Interview Content (cont.)



- ❑ **Following are asked in rounds 1-4 only**
- ❑ **Health Status (HE)**
 - ❑ **Assesses physical and mental health status for both children and adults.**
- ❑ **Priority Conditions Enumeration (PE)**
 - ❑ **Obtains a summary assessment of each person's physical and mental health and collects information about a select group of highly prevalent conditions, called priority conditions.**

MEPS-HC: Interview Content (cont.)



- ☐ **Following sections are only asked once a year:**
 - ☐ **Access to Care (Rounds 2 and 4)**
 - ☐ **Child Health and Preventive Care (Rounds 2 and 4)**
 - ☐ **Income (Rounds 3 and 5)**
 - ☐ **Additional Health Questions (Rounds 3 and 5)**
 - ☐ **Assets (Round 5 ONLY)**

MEPS-HC: Interview Content

Rounds 2 and 4



☐ Access to Care (AC)

- ☐ Identifies whether each household member has a medical provider who serves as the usual source of care (USC), reasons why members without a USC do not have a USC, various aspects of satisfaction with usual care providers, and problems a household may have experienced in obtaining needed healthcare.

☐ Child Preventive Health (CS)

- ☐ Collects information on general health status, special healthcare needs, potential behavioral problems, access to healthcare, preventive care, and height and weight of any child in the family.

MEPS-HC: Supplemental Sections Rounds 3 and 5



☐ **Income (IN)**

- ☐ Collects information about income and tax returns.

☐ **Additional Health Questions (AH)**

- ☐ Questions assess the impact of physical illness, injury, or mental/emotional health on household members' attendance at work. The section also asks about smoking and engaging in vigorous exercise.

☐ **Assets (AS)**

- ☐ Questions ask about household members' real estate, businesses, vehicles, investments, other assets, and debts to supplement the financial data collected in the Income section.

MEPS-HC: Self-Administered Questionnaires



- ☐ **Diabetes Care Survey (DCS)**
- ☐ **Adult Self-Administered Questionnaire (SAQ)**
- ☐ **Veteran Self-Administered Questionnaire (VSAQ)**
- ☐ **The Preventive Care Self-Administered Questionnaire (PSAQ)**
- ☐ **Cancer Self-Administered Questionnaire (CSAQ)**
- ☐ **The 2015 Medical Organizations Survey (MOS)**

Diabetes Care Survey (DCS)



- ☐ The DCS is given once a year (rounds 3 and 5) to each person identified as having diabetes.
- ☐ Short survey with 14 questions.
- ☐ Question include the following:
 - ☐ Diabetes caused problems with your kidneys?
 - ☐ Diabetes caused problems with your eyes?
 - ☐ When did you have an eye exam in which your pupils were dilated?
 - ☐ When did you have a health professional check your feet for any sores or irritations?
 - ☐ How is your diabetes being treated?

Adult Self-Administered Questionnaire (SAQ)



- ❑ The SAQ was administered once a year (rounds 2 and 4) with follow-up collection of outstanding forms in rounds 3 and 5.
- ❑ Questions include the following:
 - ❑ Satisfaction with healthcare—Consumer Assessment of Healthcare Providers and Systems (CAHPS)
 - ❑ Health status—Veterans RAND 12-Item Health Survey (VR-12)
 - ❑ Nonspecific psychological distress—Kessler Psychological Distress Scale (K6)
 - ❑ Patient Health Questionnaire-2 (PHQ-2)
- ❑ The SAQ has been administered every other year since 2018.

Veteran Self-Administered Questionnaire (VSAQ)



- ☐ The VSAQ was administered to eligible veterans in rounds 3 and 5.
- ☐ VSAQ data is included in 2018 and 2019 consolidated data files.
- ☐ VSAQ has a total of 34 questions.
- ☐ Collected information related to the veteran's:
 - ☐ Health conditions
 - ☐ Any healthcare services used from the U.S. Department of Veterans Affairs (VA), outside of the VA, or neither
 - ☐ Veteran's choice of care, such as cost or location
 - ☐ Receipt of healthcare from specialists

The Preventive Care Self-Administered Questionnaire (PSAQ)



- ❑ The PSAQ was fielded for the first-time during Panel 18 Round 5 of the 2014 MEPS. The questionnaires were administered in early 2015.
- ❑ The PSAQ collects a variety of person-level preventive healthcare data for adults.
- ❑ There are separate versions of the survey for males and females.
- ❑ Since 2018, the PSAQ has been administered every other year in rounds 2 and 4.

Cancer Self- Administered Questionnaire (CSAQ)



- ❑ The 2011 CSAQ was developed and administered to the respondents identified as having cancer with questions about the burden of cancer, long-lasting effects of the disease, financial impacts, and employment outcomes for cancer survivors and their families (93 questions).
- ❑ The CSAQ was updated and administered for data year 2016 (62 questions).
- ❑ The 2016 version of the CSAQ was administered in 2017.

The 2015 Medical Organizations Survey (MOS)



- ☐ The MOS collected information on office-based USC practice characteristics for MEPS sample persons who saw their office-based USC during the year.
- ☐ Funding was provided by the Robert Wood Johnson Foundation.
- ☐ The MOS supports studies of associations between practice characteristics and consumer access, service use, expenditures, and quality of care.
- ☐ Questionnaire is located under MPC questionnaires.
- ☐ Data is publicly available.
- ☐ MOS was administered in 2015 and 2016.

MEPS-HC: Caveats and Limitations



- ❑ **Sample size limitations preclude some analyses.**
- ❑ **Typically, one respondent provides data for the entire household.**
- ❑ **Household respondents may not be able to report certain types of information accurately:**
 - **Type of health plan**
 - **Detailed event information**
 - **Diagnoses**

MEPS Website



☐ URL: <https://meps.ahrq.gov/mepsweb>

☐ Materials on the MEPS website:

- Microdata files—public use files (PUFs)
- Questionnaires
- Publications
- Workshops and events—workshops, webinars, and seminars
- Mailing list
- MEPS data tools

MEPS-HC: Data Files for Public Use (PUFs)



- ☐ **Full-Year Files**—Contain expenditure and utilization data for the calendar year from several rounds of data collection

- ☐ **Person Level**—Detailed person information
 - Each record represents a person and has all the person's demographics, health, income, expenses, etc.
- ☐ **Event Level**—Detailed event information
 - Each record represents an event, such as a hospital visit, and has all details on conditions, expenditures, etc., for that visit.
- ☐ **Condition Level**—Detailed condition information
 - Each record represents a condition; all details on that condition are on that record.
- ☐ **Job Level**—Detailed job information
 - Each record represents a job and all details associated with it.

MEPS-HC: Data Files for Public Use (PUFs): Supporting Documents



☐ Documentation files

- ☐ Contain general information about MEPS
- ☐ List and discuss file variables including variable-source crosswalk to link back to questionnaire items
- ☐ Include instructions on how to link files

☐ File codebooks

- ☐ Contain names and location of all variables
- ☐ Provide formatted frequencies for all variables in the file

☐ Programming statements

- ☐ SAS, SPSS, STATA, R (2017 onwards)

☐ Data File in following formats

- ☐ ASCII, SAS transport, Stata, SAS V9 and XLXS (2018 onwards)

☐ Industry and Occupation Codes

MEPS Data Tools

<https://www.meps.ahrq.gov/mepsweb>

MEPS Home		
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Communication		

The Medical Expenditure Panel Survey (MEPS) is a set of large-scale surveys of families and individuals, their medical providers, and employers across the United States. MEPS is the most complete source of data on the cost and use of health care and health insurance coverage. [Learn more about MEPS.](#)

MEPS Topics

• Access to Health Care	• Health Insurance	• Prescription Drugs
• Children's Health	• Medical Conditions	• Projected Data/Expenditures
• Children's Insurance Coverage	• Medicare/Medicaid/SCHIP	• Quality of Health Care
• Elderly Health Care	• Men's Health	• State and Metro Area Estimates
• Health Care Costs/Expenditures	• Mental Health	• The Uninsured
• Health Care Disparities	• Obesity	• Women's Health

[Click here for full topic list ...](#)

What's New Highlights

Upcoming Events

Registration is now OPEN for the **MEPS Data Users' Workshop**, April 10, 2018, Rockville, MD. [More details. . .](#)

Contact MEPS

New to MEPS?

Select a profile:

- [General user](#)
- [Researcher](#)
- [Policymaker](#)
- [Media](#)
- [Survey participant](#)

AHRQ Data Center (ADC)



☐ Purpose

- ☐ Provides researchers access to non-public use MEPS data (except directly identifiable information)
 - Examples: *State and County FIPS Codes, Non-Public Use Data Elements: Fully Specified ICD-9/10 Codes; Date of cancer diagnosis, etc.*

☐ Location and access

- ☐ Secure room with no internet connectivity; terminal connected to secure LAN
- ☐ Limited statistical software and staff support
 - ☐ SAS, Stata, SUDAAN, R

AHRQ Data Center: Procedures



- ☐ **Proposal and review—two weeks for feasibility and data availability.**
- ☐ **Requirements—institutional review board (IRB) review from users' institute; signing the data use agreement; and \$300 one-time fee to cover technical assistance.**
- ☐ **Access—researcher may bring data in, but not out; given access only to data needed for approved project; run analysis—onsite or offsite (rarely).**
- ☐ **All tabular data is reviewed for confidentiality before release from ADC—only approved tables can leave ADC.**
- ☐ **MEPS data can be accessed in many data centers across the country, including Census Bureau and many universities.**
- ☐ **ADC will store data files, foreign merge files, and all outputs needed for replication—may be accessed remotely in special circumstances.**

MEPS Contact Information



For any MEPS questions:

mepsprojectdirector@ahrq.hhs.gov

For AHRQ Data Center:

CFACTDC@AHRQ.HHS.GOV

For MEPS workshop or webinars:

WorkshopInfo@ahrq.hhs.gov

Thank you!



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