MEPS – HC OVERVIEW

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Who Uses MEPS?

- ☐ **Academic Researchers**
- ☐ **Policymakers (federal, state, local)**
- ☐ **Non-profit organizations**
- ☐ **For profit companies**
- ☐ **Media**
- ☐ **On average every year MEPS staff responds to several thousand requests for technical assistance**
- ☐ **On average there are about half a million visits to the MEPS web site (www.meps.ahrq.gov)**

MEPS OVERVIEW: Outline

- ❑ **What is MEPS:**
    - ❑ **Components**
    - ❑ **Purpose**
    - ❑ **Design and Sample**
- ❑ **What MEPS collects**
    - ❑ **Core and Supplemental Content**
    - ❑ **Supplemental CAPI sections & Questionnaires**
- ❑ **Data Dissemination**
    - ❑ **Data Files**
    - ❑ **Website and Web Tools**
    - ❑ **Data Center**

MEPS Survey Components

❑ **MEPS-HC: Household Component**

  ❑ **Annual Survey of 15,000 households**

  ❑ **Provides national estimates of health care use, expenditures, insurance coverage, sources of payment, access to care and health care quality**

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

  ❑ **Survey of medical providers linked to respondents of the HC**

❑ **MEPS-IC: Insurance Component**

  ❑ **An independent survey of employers and unions not linked to the household survey**

MEPS-HC Purpose & Uses

❑ **Provides nationally representative estimates of health care use, expenditures, sources of payment, and health insurance coverage for the U.S. civilian noninstitutionalized population.**

❑ **Estimates can be produced for individuals, families, and selected population subgroups and socio-economic characteristics.**

❑ **Used for policy-related and behavioral research on the determinants of health care use, spending, and insurance coverage**

❑ **Used in microsimulation models to analyze alternative health care delivery proposals**

MEPS-HC Survey Design

❑ **Each year a new panel of sample households is selected.**

❑ **MEPS-HC sample is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by NCHS.**

❑ **Sample is representative of the civilian non-institutionalized population of the USA.**

❑ **Sample reflects an oversample of households with Black and Hispanic persons in addition to Asian persons (starting in 2006).**

❑ **Data collected for two years of healthcare usage from each panel.**

MEPS-HC Survey Interviews

- ❑ **Five in-person interviews using CAPI technology.**

- ❑ **All data reported by a single household respondent.**

- ❑ **To collect two years of healthcare usage data, it can take up to two and half years.**

- ❑ **Interviews average 90 minutes with a range of one to four hours**

MEPS Panel Design: Data Reference Periods

	2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Panel 17												
Round 3												
Round 4												
Round 5												
Panel 18												
Round 1												
Round 2												
Round 3												
Round 4												
Round 5												
Panel 19												
Round 1												
Round 2												
Round 3												
Round 4												
Round 5												
Panel 20												
Round 1												
Round 2												
Round 3												
Sample Size	N = 35,068				N =33,162				N =33,893			

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

MEPS-HC SAMPLE SIZES

Year	Number of families	Number of persons
2015	13,800	33,893
2014	13,421	33,162
2013	13,936	35,068
2012	14,763	37,182
2011	13,449	33,622
2010	12,445	31,228
2009	13,875	34,920
2008	12,316	31,262
2007	11,615	29,370
2006	12,811	32,577
2005	12,810	32,320
2004	13,018	32,737
2003	12,860	32,681
2002	14,828	37,418
2001	12,852	32,122
2000	9,515	23,839
1999	9,345	23,565
1998	9,023	22,953
1997	13,087	32,636

MEPS-HC Core Content

❑ **Collected in every round (5x)**

  ❑ **Demographics**

  ❑ **Charges and Payments**

  ❑ **Medical Conditions**

  ❑ **Employment**

  ❑ **Health Status**

  ❑ **Health Insurance**

  ❑ **Utilization**

Core Interview Content

❑ **Demographics**
- ❑ **Age**
- ❑ **Sex**
- ❑ **Race and Ethnicity**
- ❑ **Language and English Proficiency**
- ❑ **Marital Status**
- ❑ **Foreign Born Status**
- ❑ **Student Status and Educational Attainment**
- ❑ **Military Service and Honorable Discharge**
- ❑ **Income and Poverty Status**

Core Interview Content

- ❏ **Charge and Payments (CP)**
  - ❏ **Tracks total charges and sources of payment for medical events reported in earlier sections.**

- ❏ **Conditions (CN)**
  - ❏ **Collects additional information about physical and mental health conditions.**

- ❏ **Employment (EM)**
  - ❏ **Covers questions about each person's employment or self-employment status.**

Core Interview Content

- ❑ **Health Insurance (HX)**
  - ❑ **Collects information about health insurance including private and public health insurance programs.**

- ❑ **Health Status (HE)**
  - ❑ **Assesses the physical and mental health status for both children and adults. For children it obtains additional information on childhood immunizations, limitations to school attendance etc.**

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

Supplemental Sections

Sections asked in rounds 2 and 4:

- ❑ Access to care
- ❑ Children's Health

Sections asked in rounds 3 and 5:

- ❑ Income
- ❑ Preventive Care
- ❑ Assets (round 5 only)

Round 2 and 4 Sections

- ❑ **Access to Care (AC)**
  - ❑ **Identifies whether each household member has a medical provider who provides the usual source of care (USC).**

- ❑ **Child Preventive Health (CS)**
  - ❑ **Collects information on general health status, special health care needs, potential behavioral problems, accessibility to health care, preventative care, height, and weight of any child in the family.**

❑

Round 3 and 5 Sections

- ## Income (IN)
  - ### Collects information about income and tax returns.

- ## Preventive Care (AP)
  - ### Collects information on any preventive care received (dental and physical check-ups, flu shots, and other preventative health exams).

- ## Assets (AS)
  - ### To supplement financial data collected in the Income section, the Assets section asks about household members' real estate, businesses, vehicles, investments, other assets, and debts.

Supplemental Questionnaires

❑ **Adult Self-Administered Questionnaire (SAQ)**

    ❑ **Given once a year (in rounds 2 and 4) to each adult 18 years old and older; total of 46 questions focus on self-reported opinions on one's physical and mental health, receiving care from specialists; communication and quality of health care received from providers.**

❑**Diabetes Care Survey (DCS)**

❑**Given once a year (in rounds 3 and 5) to each person identified as having diabetes; total 14 questions related to diabetes related testing and managing diabetes.**

Supplemental Questionnaires

❑ **Cancer Self- Administered Questionnaire**

    ❑ **The 2011 Cancer Self-Administered Questionnaire 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 same CSAQ is being administered in 2017**

Supplemental Questionnaires

- ❑ **The 2014 Preventive Care Self-Administered Questionnaire**
  - ❑ **First time fielded during Panel 18 Round 5 of the 2014 MEPS survey. The questionnaires were administered in early 2015.**
  - ❑ **Collects a variety of person-level preventive health care data for adults.**
  - ❑ **There are separate versions of the survey for males (30 questions) and females (35 questions).**
  - ❑ **Questionnaires and data files are on the MEPS website**

Supplemental Questionnaires

- ❑ **The 2015 Medical Organizations survey**
  - ❑ **Collects information on office-based usual source of care (USC) practice characteristics for MEPS sample persons who saw their office-based USC during the year**
  - ❑ **Funding provided by the Robert Wood Johnson Foundation**
  - ❑ **Support studies of association between practice characteristics and consumer access, service use, expenditures and quality of care.**
  - ❑ **Questionnaire located under MPC questionnaires**
  - ❑ **Data file is on the MEPS website**

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 accurately certain types of information**

    - ❑ **type of health plan**
    - ❑ **detailed event information**
    - ❑ **diagnoses**

MEPS-HC Data Files for Public Use (PUF's): Levels

❑ **Person Level - detailed person information**

  ❑ **Each record represents a person, has all of person's demographics, health, income, expenses, etc.**

❑ **Event Level - detailed event information**

  ❑ **Each record represents an event, such as a hospital visit, 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 (PUF's): Types

- ❑ **Full-year Files – Contain expenditure and utilization data for the calendar year from several rounds of data collection.**

- ❑ **Consolidated Data File**

- ❑ **Event File**

- ❑ **Medical Conditions File**

- ❑ **Jobs File**

- ❑ **Person Round Plan Public Use File**

- ❑ **Point-in-time Files - Data for the beginning of the year providing early glimpses of what full-year estimates will likely be.**

- ❑ **MEPS/NHIS Link Files - Cross-walk files that allow merging of Household Component files and NHIS files.**

MEPS-HC Data Files for Public Use (PUF's): supporting Documents

- ❑ **Documentation Files**
  - ❑ **Contain general information about MEPS**
  - ❑ **Contain survey information specific to each file**
  - ❑ **Discuss file variables**
  - ❑ **Contains variable-source crosswalk to link back to questionnaire items**
  - ❑ **Instructions on how to link files**

- ❑ **File Codebooks**
  - ❑ **Contains names and location of all variables**
  - ❑ **Provides formatted frequencies for all variables on the file**
  - ❑ **List both weighted and un-weighted estimates**

- ❑ **Users notes**
- ❑ **SAS Programming Statements**
- ❑ **SPSS Programming Statements**
- ❑ **STATA Programming Statements**
- ❑ **Data file in SAS transport and ASCII formats**
- ❑ **Sample code**

MEPS Web Site

- URL: **https://meps.ahrq.gov/mepsweb/**

- Materials on the MEPS Web site:
  - Micro Data Files - Public Use Files (PUF's)
  - Questionnaires
    - Core and Supplemental
  - Summary data tables
    - Expenditures by Health Care Service
    - Expenditures by Medical Condition
    - Health Insurance
    - Quality of Care
    - Prescription Drugs
    - State-Level Medical Expenditures
    - Access to Care
  - Publications
    - Statistical Briefs
    - Methodology Reports
    - Research Findings

MEPS Web Site

- ❑ **Data Center**
- ❑ **Discussion Forum**
- ❑ **Frequently Asked Questions (FAQs)**
- ❑ **MEPSnet Query Tools**
    - ❑ **MEPSnet/Household component**
    - ❑ **MEPSnet/Insurance component**
- ❑ **MEPS Topics**
- ❑ **Participants' Corner**
- ❑ **Mailing List and List Serve**
- ❑ **What's New**
- ❑ **Workshops and Events – workshops, webinars and seminars**

AHRQ Data Center (ADC)

- ❑ **Purpose**
  - ❑ **Provides researchers access to non-public use MEPS data (except directly identifiable information)**
- ❑ **Location**
  - ❑ **Secure room**
- ❑ **Access**
  - ❑ **Terminal connected to secure LAN**
  - ❑ **No internet connectivity**
- ❑ **Statistical software**
  - ❑ **SAS, STATA, SUDAAN, R**
- ❑ **Limited staff support by experts on:**
  - ❑ **Data**
  - ❑ **confidentiality issues**
  - ❑ **software**

Examples of Confidential Data Projects

- ❑ **_Fully Specified ICD-9 Codes_**
  - ❑ These codes allow medical conditions to be identified with greater specificity.

- ❑ **_Fully Specified Industry and Occupation Codes_**
  - ❑ These codes allow a worker's industry and occupation to be identified with greater specificity.

- ❑ **_State and County FIPS Codes:_**
  - ❑ These codes can be used to merge data from the Area Resource File, or any data at the State and/or County level, onto the MEPS data.

- ❑ **_Census Tract and Block-Group Codes_**
  - ❑ These codes can be used to merge data from the U.S. Census, or any data at the tract or block-group level, onto the MEPS data.

- ❑ **_Non-Public Use Data Elements_**
  - ❑ These are data elements from our questionnaires that are not directly identifiable data, but have yet to be edited or released, i.e., asset information and imputed NDC codes.

- ❑ **_Federal and State Marginal Tax Rates_**
  - ❑ Tax amounts and marginal tax rates have been computed for Federal, State and FICA taxes.

AHRQ Data Center: Procedures

- ❑ **Submit proposal to Data Center coordinator**
- ❑ **Review within 2 weeks for feasibility, and data availability**
- ❑ **Institutional Review Board (IRB) review required from users' institute**
- ❑ **Sign the Data Center agreement**
- ❑ **Run analysis – on or off-site – depending on the project**

AHRQ Data Center: Fees

❑ **User fee of $300 for approved projects to cover technical assistance and simple file construction,**

❑ **User fee waived for full-time graduate students working on dissertations or other degree requirements, and Federal Government agencies**

❑ **Fee is also waived if you use any of the Census Bureau's Remote Data Centers (RDC); user is responsible for any additional fees required by the Census Bureau**

AHRQ Data Center: Guidelines

- ❑ **Researcher may bring data in, but not out**

- ❑ **Researcher has access only to data needed for approved project**

- ❑ **All tabular data is reviewed for confidentiality before release from Center - only approved tables can leave the Center**

- ❑ **Center will store data files, foreign merge files, and all outputs needed for replication**

- ❑ **Limited remote access**

- ❑ **MEPS data can be accessed in many data centers across the country including Census Bureau and many universities.**

MEPS-HC References

- **Public Use File documentation**
- **Report titled "*Understanding and Analyzing MEPS Household Component Medical Condition Data*" Cohen, J. Design and Methods of the Medical Expenditure Panel Survey Household Component. MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. Rockville, MD. Agency for Health Care Policy and Research, 1997. http://meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.pdf**
- **Cohen, S. Sample Design of the 1996 Medical Expenditure Panel Survey Household Component. MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, MD. Agency for Health Care Policy and Research, 1997. http://meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.pdf**
- **Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. Medical Care, July 2003: 41(7) Supplement: III-5–III-12. CAHPS: https://cahps.ahrq.gov/cahps-database/about/index.html**
  - **http://meps.ahrq.gov/mepsweb/survey_comp/MEPS_condition_data.pdf**