



*Agency for Healthcare Research and Quality*

*Advancing Excellence in Health Care*

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# Medical Expenditure Panel Survey

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## SURVEY OVERVIEW



# MEPS History

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- **1977 National Medical Care Expenditure Survey**
- **1987 National Medical Expenditure Survey**
- **1996 Medical Expenditure Panel Survey**



# Medical Expenditure Panel Survey (MEPS-HC)

## 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

## Permits studies of:

- Distribution of expenditures and sources of payment
- Role of demographics, family structure, insurance
- Expenditures for specific conditions
- Trends over time



# MEPS Survey Components

- **MEPS-HC -- Household Component**
- **MEPS-MPC -- Medical Provider Component**
- **MEPS-IC -- Insurance Component**



# MEPS-Household Component (HC) Survey Design

- Sub-sample of respondents from the previous year's National Health Interview Survey (NHIS), sponsored by NCHS
- Representative of the civilian non-institutionalized population of the US
- 5 in-person interviews over 2 ½ year period using CAPI technology.
- Person and family level data collected
- Interviews average 90 minutes with a range of one to four hours



# Oversampling in MEPS

- **Blacks and Hispanics every year: carryover from NHIS**
  - Additional over sampling of blacks in 2004
  
- **1997: Selected subpopulations**
  - Functionally impaired adults
  - Children with activity limitations
  - Adults 18-64 predicted to have high medical expenditures
  - Low income
  - Persons 65 and older
  
- **Low income in 2002 and beyond**
  
- **Asians in 2002 and beyond**
  - Carryover from NHIS from 2007 and beyond



## MEPS Panel Design: Data Reference Periods

	2003				2004				2005			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Panel 7</b>												
Round 3												
Round 4												
Round 5												
<b>Panel 8</b>												
Round 1												
Round 2												
Round 3												
Round 4												
Round 5												
<b>Panel 9</b>												
Round 1												
Round 2												
Round 3												
Round 4												
Round 5												
<b>Panel 10</b>												
Round 1												
Round 2												
Round 3												
<b>Sample Size</b>	N = 32,681				N = 32,737				N = 32,320			

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





# MEPS-HC Sample Sizes

Year	Families	Persons
1996	8,655	21,571
1997	13,087	32,636
1998	9,023	22,953
1999	9,354	23,565
2000	9,515	23,839
2001	12,852	32,122
2002	14,828	37,418
2003	12,860	32,681
2004	13,018	32,737
2005	12,810	32,320



# MEPS-HC

## Core Interview Content

- Demographics
- Charges and Payments
- Health Status
- Conditions
- Utilization
- Employment
- Health Insurance



# MEPS- HC Supplemental CAPI Sections

Sections asked in rounds 2 and 4:

- Access to care
- Child preventive health
- Satisfaction with health plans & providers

Sections asked in rounds 3 and 5:

- Assets (round 5 only)
- Income
- Preventive Care
- Priority conditions



# Priority Conditions

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- **Diabetes**
- **Asthma**
- **Hypertension**
- **Ischemic Heart Disease**
- **Arthritis**
- **Stroke**
- **COPD**



# MEPS-HC Supplemental Paper Questionnaires

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- **Diabetes Care SAQ**
- **Adult SAQ**



# MEPS-HC Caveats and Limitations

- **Sample size limitations preclude some analyses**
- **Household respondents may not be able to report accurately certain types of information**
  - type of health plan
  - detailed event information
  - diagnoses
  - limited capacity to produce state level estimates



# Sub-national Analysis

- **Supports state estimates: Direct state level estimates of cost, coverage and use for the largest states. Tables for 2003 and 2004 can be found on the web site.**
- **Supports metro area estimates: Direct MSA level estimates of cost, coverage and use for the largest metropolitan areas.**



# Types of MEPS-HC Files

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- Full-year Files - calendar year data
- Point-in-time Files - snap shot first part of year





# Levels of MEPS-HC Public Use Files

- **Person Level - detailed person information**
- **Event Level - detailed event level information**
- **Condition Level - detailed condition information**
- **Job Level - detailed job information**



# MEPS Medical Provider Component (MPC) Sample

- All hospitals (and associated doctors), emergency rooms, and out-patient departments used by respondents
- All home health agencies
- All pharmacies
- A sample of office-based physicians



# MEPS Medical Provider Component (MPC) - Purpose

- **Compensate for household item non-response**
- **Accuracy and detail**
- **Imputation source**
- **Methodological studies**



# MEPS: Pharmacy Component

- **8000 pharmacies sampled**
  - data on prescribed medicines purchased by households
- **Data obtained:**
  - Medication Name
  - National Drug Code (NDC)
  - Quantity Dispensed
  - Strength and Form
  - Sources of Payment
  - Amount Paid by Each Source



## **MEPS Insurance Component (IC)**

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- **An independent survey of employers and unions not linked to the household survey**
- **The sample contains information from about 45,000 establishments drawn from a Census Bureau frame and supports national and state-level estimates for all 50 states.**
- **Data released in tabular form on the MEPS web site**



# MEPS-IC Purpose

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- **Employer-sponsored Health Insurance**
  - Availability
  - Enrollment
  - Benefit and payment provisions
  - Cost



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## DISSEMINATION OF INFORMATION AND DATA PRODUCTS



# MEPS Website

## [www.meps.ahrq.gov](http://www.meps.ahrq.gov)

- Overview of MEPS and Frequently Asked Questions (FAQs)
- Staff Reports using MEPS
  - Findings/Statistical Briefs/Chart books
- Data Tables of Estimates
- Public Use Files (microdata)
- MEPSnet Interactive Query Tool
- Survey Methodology Reports
- Survey Questionnaires and Other Collection Materials
- Data product availability and ordering information
- MEPS data workshop information and schedule
- Mailing list, List server and e-mail for technical assistance
- Data Center Information





## MEPS Medical Expenditure Panel Survey

### MEPS Home

#### About MEPS

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#### Survey Components

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#### Communication

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- :: [Discussion Forum](#)
- :: [Participants' Corner](#)

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.](#)

#### New to MEPS?

- Select a profile:
- [General user](#)
  - [Researcher](#)
  - [Policymaker](#)
  - [Survey participant](#)
  - [Media](#)

### MEPS Topics

- [Access to Health Care](#)
- [Children's Health](#)
- [Children's Insurance Coverage](#)
- [Chronic Conditions](#)
- [Dental](#)
- [Elderly](#)
- [Health Care Costs](#)
- [Health Care Disparities](#)
- [Health Insurance](#)
- [Medicare/Medicaid/SCHIP](#)
- [Mental Health](#)
- [Minority Health](#)
- [Obesity](#)
- [Prescription Drugs](#)
- [Projected Data](#)
- [Quality of Health Care](#)
- [State and Metro Area Estimates](#)
- [The Uninsured](#)
- [Women's Health](#)

### What's New Highlights

#### Upcoming Event

Registration is now open for a MEPS data users workshop featuring introductory lectures, programming exercises, and hands-on computer lab. The workshop will take place May 3-4, 2007, at the AHRQ Data Center, Rockville, MD. The registration period is March 15-April 16. Go to [Workshops & Events](#) to learn more details.

#### New Publications

While almost half of visits for office-based physician care were to doctors in general practice, family practice, internal medicine, or pediatrics, less than one-third of total expenditures were for visits to these types of physicians. — from [Statistical Brief 166: Expenses for Office-Based Physician Visits by Specialty, 2004](#)



## **MEPS** Medical Expenditure Panel Survey

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# Data User Workshops

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- Information will be posted on Workshops and Events section of web site
- For inquiries please e-mail:  
[Workshopinfo@ahrq.hhs.gov](mailto:Workshopinfo@ahrq.hhs.gov)



# Micro Data Files

- **Public Use Files (Microdata) – Available for downloading from web site (Household survey only)**
- **Restricted Access Files (Microdata)**
  - **MEPS-HC – Available for Use at AHRQ Data Center**
  - **MEPS-IC – Available for Use at Census Research Data Centers**

For more information go to  
[www.ces.census.gov](http://www.ces.census.gov)



# Contact Information

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- MEPS e-mail address -  
**[MEPSPD@ahrq.gov](mailto:MEPSPD@ahrq.gov)**
  
- MEPS Information Coordinator:
  - (301) 427-1406



# AHRQ Data Center

- Provides researchers access to non-public use MEPS data (except directly identifiable information)
- Located in Rockville, MD
- Applications/procedures on MEPS web site
- User fee of \$150.00 includes up to 2 hours of programming (fee waived for full-time students) Additional programming support available at \$80.00/hour.



# MEPS Data Available at Census Bureau RDC's

- Research Data Files will be accessible at the 9 regional Census Bureau RDC's (NY, NC, MI, IL, MD, CA, MA)
- AHRQ will approve projects
- Will require Census Bureau Special Sworn Status
- Census user fees will apply



# AHRQ Data Center Facilities

- Secure room
- Terminal connected to secure LAN
- SAS, STATA, GAUSS, Stat Transfer, SUDAAN, Limdep, EQS software available, and others upon request
- Limited staff support by people who know:
  - the data
  - the confidentiality issues
  - the software





# ADC Guidelines

- **Researcher may bring data in, but not out**
- **Researcher has access only to data needed for approved project**
- **All tabular data will be 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**



# ADC Limited Remote Access

- Once you have an established data center project, and have worked on site to develop and debug programs, jobs may be submitted to our Data Center Supervisor to run. Out-put will be reviewed for confidentiality and mailed to you.



# Examples of Confidential Data Available for ADC Projects

- **Linked MEPS-HC and Secondary Data**
- **Full geo-coding for 1996, 1997 and 2000-2004. FIPS codes for other years**
- **Fully specified industry/occupation and condition codes**
- **Selected State and MSA identifiers and estimation variables**
  - **30 largest states and 10 largest MSAs**



# Data Center Questions

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- **Contact Data Center Administrator by e-mail at:  
CFACTDC@AHRQ.HHS.GOV**