



Methodology Report #23

Design, Methods, and Field Results of
the Medical Expenditure Panel Survey
Medical Provider Component (MEPS
MPC)—2006 Calendar Year Data



ABSTRACT

This report focuses on the Medical Provider Component (MPC) data collection effort that collected information from medical providers that provided medical care to Household Component (HC) sampled persons on health care events that took place between January 1, 2006, and December 31, 2006. This report describes the MPC sample design, survey methodology, procedures for data collection, sample sizes and response rates, as well as the relationship between the HC survey and the MPC survey. The report also describes developments in the U.S. health care system that have occurred over the past decade that have had significant effects on the MPC data collection effort.

Suggested Citation:

Stagnitti, Marie N., Beauregard, Karen, and Solis, Amy, *Design, Methods, and Field Results of the Medical Expenditure Panel Survey Medical Provider Component (MEPS MPC)—2006 Calendar Year Data*, Methodology Report No. 23. November 2008. Agency for Healthcare Research and Quality, Rockville, MD. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr23/mr23.pdf

* * *

The estimates in this report are based on the most recent data available at the time the report was written. However, selected elements of MEPS data may be revised on the basis of additional analyses, which could result in slightly different estimates from those shown here. Please check the MEPS Web site for the most current file releases.

Center for Financing, Access, and Cost Trends
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850
www.meps.ahrq.gov

Background

The Medical Expenditure Panel Survey (MEPS)

Household Component

The Medical Expenditure Panel Survey (MEPS) provides nationally representative estimates of health care use, expenditures, sources of payment, and health insurance coverage for the U.S. civilian noninstitutionalized population. The MEPS Household Component (HC) also provides estimates of respondents' health status, demographic and socio-economic characteristics, employment, access to care, and satisfaction with health care. Estimates can be produced for individuals, families, and selected population subgroups. The panel design of the survey, which includes five rounds of interviews covering two full calendar years, provides data for examining person level changes in selected variables such as expenditures, health insurance coverage, and health status. Using computer assisted personal interviewing (CAPI) technology, information about each household member is collected, and the survey builds on this information from interview to interview. All data for a sampled household are reported by a single household respondent.

The MEPS-HC was initiated in 1996. Each year a new panel of sample households is selected. Because the data collected are comparable to those from earlier medical expenditure surveys conducted in 1977 and 1987, it is possible to analyze long-term trends. Each annual MEPS-HC sample size is about 15,000 households. Data can be analyzed at either the person or event level. Data must be weighted to produce national estimates.

The set of households selected for each panel of the MEPS-HC is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics of the Centers for Disease Control and Prevention. The NHIS sampling frame provides a nationally representative sample of the U.S. civilian noninstitutionalized population and reflects an oversample of blacks, Hispanics, and, starting in 2006, Asians. MEPS oversamples additional policy relevant subgroups such as low income households. The linkage of the MEPS to the previous year's NHIS provides additional data for longitudinal analytic purposes.

Medical Provider Component

Upon completion of the household CAPI interview and obtaining permission from the household survey respondents, a sample of medical providers are contacted by telephone to obtain information that household respondents cannot accurately provide. This part of the MEPS is called the Medical Provider Component (MPC) and information is collected on dates of visit, diagnosis and procedure codes, charges, and payments. The Pharmacy Component (PC), a subcomponent of the MPC, does not collect charges or diagnosis and procedure codes but does collect drug detail information, including National Drug Code (NDC) and medicine name, as well as date(s) prescriptions are filled, sources, and amounts of payment. The MPC is not designed to yield national estimates. It is primarily used as an imputation source to supplement and/or replace household reported expenditure information.

Survey Management

MEPS-HC and MPC data are collected under the authority of the Public Health Service Act. Data are collected under contract with Westat. Data sets and summary statistics are edited and published in accordance with the confidentiality provisions of the Public Health Service Act and the Privacy Act. The National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention provides consultation and technical assistance related to the selection of the MEPS household sample.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports, micro data files, and tables via the MEPS Web site: www.meps.ahrq.gov. Selected data can be analyzed through MEPSnet, an on-line interactive tool designed to give data users the capability to statistically analyze MEPS data in a menu-driven environment.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850; 301-427-1406, or e-mail mepspd@ahrq.gov.

AHRQ Publications Clearinghouse
Attn: (publication number)
P.O. Box 8547 Silver Spring, MD 20907
800-358-9295
703-437-2078 (callers outside the United States only)
888-586-6340 (toll-free TDD service; hearing impaired only)

To order online, send an e-mail to: ahrqpubs@ahrq.gov.

Be sure to specify the AHRQ number of the document or CD-ROM you are requesting. Selected electronic files are available through the Internet on the MEPS Web site: <http://www.meps.ahrq.gov/>

For more information, visit the MEPS Web site or e-mail mepspd@ahrq.gov.

Table of Contents

Introduction	1
Relationship of MEPS Household Component (HC) to MEPS Medical Provider Component (MPC)	1
Objectives of MPC	1
Sample Selection: Design and Implementation.....	2
Instruments and Data Collection Procedures	4
Sample Size and Participation Rates.....	7
Use of MPC Data in Expenditure Estimation.....	8
MPC Developments.....	9
Summary	10
References	11

Design, Methods, and Field Results of the Medical Expenditure Panel Survey Medical Provider Component (MEPS MPC)—2006 Calendar Year Data

Marie N. Stagnitti, MPA and Karen Beauregard, MHA, Agency for Healthcare Research and Quality; and Amy Solis, BS, Westat

Introduction

The Medical Provider Component (MPC) of the ongoing Medical Expenditure Panel Survey (MEPS), conducted annually since 1997, is a voluntary survey designed to supplement and validate health care expenditure and source of payment data collected in the MEPS Household Component (HC). MPC data are collected a year after the household health care event information is collected to allow adequate time for billing transactions to be completed.

This report focuses on the MPC data collection effort that collected information from medical providers on health care events that took place between January 1, 2006, and December 31, 2006. This report describes the MPC sample design, survey methodology, procedures for data collection, sample sizes, and response rates as well as the relationship between the Household Component (HC) survey and the MPC survey. Westat was the prime contractor for this MPC data collection.

Relationship of MEPS Household Component (HC) to MEPS Medical Provider Component (MPC)

The HC of MEPS is designed to collect detailed information on the demographic characteristics, health status, health insurance, employment, and medical care use and expenditures of individuals and families in the United States. Beginning in calendar year 2006, the HC collected data from a nationally representative sample of 11,780 families, totaling 32,577 individuals—or sample persons—in 195 different communities (primary sampling units) across the country. Health care utilization, associated expenditures, and the names and addresses of providers who delivered care to these sample persons were collected over the course of three interviews that were conducted during calendar years 2006–2007 using computer assisted personal interviewing (CAPI). The medical providers that were identified during these interviews were eligible for inclusion in the MPC sample.

Objectives of MPC

The primary objective of the MPC data collection effort described in this report was to collect data from medical providers (hospitals, physicians, home care agencies, pharmacies, and long term health care facilities) on charges, payments, and sources of payments for specific health care services provided to HC sample persons from January 1, 2006, to December 31, 2006. MPC data were used to validate, supplement and/or replace expenditure data collected in the HC for selected persons and medical events.

More specifically, MPC data were used to:

- 1) Serve as an imputation source for item nonresponse to reduce the potential for bias in survey estimates of medical expenditures;
- 2) Serve as source of expenditure information on physician charges that are associated with hospital care but not billed by the hospital (e.g., separately billing doctors such as radiologists and lab technicians);
- 3) Serve as the primary source of expenditure information for Medicaid recipients;
- 4) Replace expenditure information reported in the HC with information reported by providers that is generally more complete and may be less prone to reporting errors, and;
- 5) Provide data that can be used to conduct methodological studies to validate the accuracy and completeness of household reported data.

The MPC was not designed to yield national estimates on its own, and it was not intended to be an independent sample of providers for estimation purposes. The 2006 MPC data were used solely for expenditure editing and imputation purposes and the data were not released as a stand-alone data file.

Sample Selection: Design and Implementation

The MPC sample for the calendar year 2006 data collection was derived from providers identified during HC interviews as having provided health care for reported medical events during calendar year 2006. Only providers for whom a signed permission form was obtained from the household authorizing contact were eligible for data collection in the MPC.

The categories of providers included:

- Office-Based Physicians: Office-based medical doctors (MDs), doctors of osteopathy (DOs), and other medical providers under the supervision of MDs and DOs
- Hospitals: Hospital facilities providing inpatient, outpatient, and emergency room care
- Health Maintenance Organizations (HMOs): Includes HMO hospitals and office-based physicians providing care in HMOs
- Separately Billing Doctors: Separately billing doctors are all individually identified physicians who treated the patient at the hospital, but who bill separately from the hospital facility
- Home care agencies
- Pharmacies
- Long term health care facilities

The MPC sample did not include dentists, optometrists, psychologists, podiatrists, chiropractors, and others not providing care under the supervision of an MD or DO. These types of providers were considered out of scope. Jails, prisons, and medical facilities or pharmacies outside the United States were also considered out of scope.

Office-Based Physicians (OBD)

The MPC office-based physician eligible sample included doctors of medicine (MDs) and osteopathy (DOs) as well as providers practicing under the direction or supervision of an MD or DO (e.g., physician assistants and nurse practitioners working in clinics). These types of providers of care in Health Maintenance Organizations (HMOs) were in scope for the MPC as well. Due to budget constraints, only a subsample of office-based physicians was selected for inclusion. Since household respondents are unable to report Medicaid payment data, all providers associated with a household who reported receiving Medicaid benefits were included in the sample. Moreover, all physicians associated with individual persons likely to have high expenditures were included in the sample as well. The subsampling rate for office-based physicians varies from year to year. For the calendar year 2006 MPC data collection, of the 27,620 office-based providers reported by household respondents, 14,147 providers were excluded after subsampling. Thus, the total number of office-based physicians eligible to be fielded for the MPC was 13,473 (48.8 percent of the initial sample).

Hospitals

All hospitals that were reported as the site of care for inpatient stays, outpatient department visits, and emergency room encounters for sample persons were included in the MPC. Hospitals were sampled with certainty because: 1) sample persons often do not know the total amounts for each source of payment for a hospital stay, 2) hospital-based medical events are high cost, and 3) a large percentage of national medical expenditures are associated with hospital care and getting the most accurate data was imperative. HMO hospitals were in scope for the MPC.

Separately Billing Doctors (SBDs)

All physicians identified by MPC sampled hospitals (not HC sample persons) as providing care to sample persons during the course of any hospital event in calendar year 2006, but whose charges were not contained in the hospital bill (e.g., anesthesiologists, pathologists, radiologists) were included in the MPC.

Many types of care provided to a person during a hospital stay are not included in the facility bill, but are billed separately by individual providers. Many times household respondents are not even aware of the services provided. Therefore, in the MPC data collection, hospitals are asked to identify all potential SBDs associated with a hospital medical event. Data are collected for these SBDs separate from the hospital data collection. To avoid duplication, SBDs identified by hospitals who had already been selected for the office-based physician sample are not included in the SBD sample.

Home Care Agencies

All home care agencies, hospitals, social service agencies, and other places identified as providing paid home care services were included in the MPC. However, self-employed and unpaid persons identified as providing home care were not considered in scope for the MPC.

Pharmacies and Other Sources of Prescribed Medicines

All pharmacies reported by HC respondents as places where they purchased or obtained outpatient prescription medicines were included. “Pharmacies”—or sources of prescribed drugs—included all establishments filling prescriptions for outpatient

prescription drugs including but not limited to: drug stores, grocery stores, discount stores, mail order pharmacies, online pharmacies, clinics, HMOs, and hospitals.

Long Term Health Care Facilities (nursing homes, assisted living facilities, etc.)

Long term health care facilities, which included nursing homes, assisted living facilities, rehabilitation facilities, as well as other health care facilities providing long term health care to a sample person (who for periods of time during calendar year 2006 resided in the community), were considered in scope for the MPC.

Instruments and Data Collection Procedures

MPC samples are fielded on an ongoing basis as health care provider data are collected in the MEPS-HC. More specifically, the MPC fielding is done in waves, as sample sizes from the HC become large enough to be fielded efficiently. The provider sample for the MPC collection of 2006 calendar year data was fielded in multiple waves during calendar year 2007 and 2008. Hospitals, long term health care facilities, office-based providers, home care providers, and HMO providers were all fielded as one group. The first wave of this group was fielded in February, 2007, and the last wave was fielded in August, 2007. Pharmacy providers were the second group, with the first wave fielded in May, 2007, and the last wave fielded in August, 2007. SBDs were the last provider group, with the first SBD wave fielded in November, 2007, and the last SBD wave fielded in March, 2008.

All providers fielded for the MPC were contacted via telephone by a data collection specialist (DCS). In order to facilitate efficient navigation through the provider's organization, the DCS followed a scripted contact guide. A separate contact guide was designed for each provider type (hospital, office-based provider, home care, pharmacy, separately billing doctor). Examples of contact guides will be made available upon request through the MEPS Project Director at mepspd@ahrq.gov. Following the contact guide, the DCS identified the appropriate respondent (source of data) with release of information authority, explained the nature of the study, gained cooperation, and determined the mode of data collection.

The sources of data are listed below for each provider type (please note, for the purposes of data collection, an event was defined as a distinct visit or stay on a specific date with a specific health care provider by a member of a participating household):

- Hospitals: There are typically three points of contact for hospital providers:
 - Health Information Management Department: This department houses all event level data, diagnostic, and procedural information, and records of physicians who provided services for these events.
 - Patient Accounts/Billing Department: This department houses all expenditure data for the events identified in the medical records. In some cases, hospitals and institutions outsource the billing function to an external billing service.
 - Medical Staff Office/Administrative Office: This department maintains additional information for locating separately billing doctors that may not be available from either the Health Information Management Department or the Patient Accounts Department.

- Health Maintenance Organizations: HMOs house their medical and billing data within administrative offices at the local, regional, or corporate levels.
- Office-based providers and SBDs: Office-based providers and SBDs either maintain a billing or patient accounts department internally, or outsource the claims administration/billing function to an external billing service.
- Home care agencies: Most home care providers maintain an internal billing or patient accounts department.
- Pharmacies: Since most pharmacies are part of a national or regional chain, there are three primary sources for prescription data (mail order pharmacies are captured in the first two sources mentioned):
 - Corporate level
 - Central or regional pharmacy office
 - Local retail pharmacy store

Once a provider was contacted and agreed to participate in the survey, a customized data collection instrument was used to collect the information. All 2006 calendar year data collection instruments were designed for paper-and-pencil data collection and were specific to a provider type (hospitals, office-based providers, home care providers, long term care providers, pharmacies, and separately billing doctors), allowing for the collection of data elements that are unique to the provider type, as well as a core set of data elements common to all provider types. An example of the hospital event form that was used to collect 2006 calendar year MPC data can be found at the following link:

http://www.meps.ahrq.gov/mepsweb/survey_comp/misc_survey/mpc/2006/HSP_06.pdf.

The instruments collected financial and medical characteristics about each event recorded in the provider's records for a sample person in calendar year 2006. As stated previously, for data collection purposes, an event was defined as a distinct visit or stay on a specific date with a specific health care provider by a member of a participating household; consequently, all events reported by MPC sampled providers from January 1, 2006, through December 31, 2006 were collected. The matching of the MPC data collected to the HC reported data was performed after all MPC data for a provider type was collected. Table 1 summarizes the data elements that were collected for each provider type.

There were two primary modes of data collection: (1) telephone interview and (2) abstraction:

Telephone interview: If the provider (or their staff) elected to participate in a telephone interview, a DCS trained in telephone interviewing conducted the interview, administering the data collection instrument specific to the provider type.

Abstraction: As an alternative to the telephone interview, providers were given the option to send medical and billing records. If the provider (or their staff) elected to send records, those records were reviewed by an abstractor trained in medical and billing chart review. The abstractor utilized the same data collection instrument that was used for telephone interviewing to extract the same set of data elements from the records.

Approximately 90 percent of hospital providers and 54 percent of office-based providers opted to send the medical and billing records for abstraction, as opposed to participating in a telephone interview. Additionally, 50 percent of home care providers and 49 percent of

SBDs elected to send medical and billing records for abstraction. When necessary, providers were reimbursed for copying and administrative fees.

The pharmacy data collection protocol is slightly different than the other provider types in that data collection focuses on the request for a patient profile (a computer generated listing of the prescriptions dispensed to a given customer). Upon request, nearly all pharmacies provide this computer generated profile for sample persons via fax or regular mail. The data collection specialist reviews the patient profile and identifies and records the pharmacy specific data items listed in table 1. Alternatively, pharmacies associated with chains—and potentially a large number of sample persons—provide the prescription data via electronic file.

Table 1: MPC Data Elements Collected by Provider Component

Data Elements	Hospital	Institution	Office-based physician	Home care	Pharmacy	SBD
Date of service	X	X	X	X	X	X
Setting of care	X		X			X
Medical condition	X	X	X	X		X
Type of personnel seen				X		
Prescribed medicine					X	
Quantity and dosage of medicine					X	
Procedures and services	X	X	X	X		X
Full established charge	X	X	X	X		X
Total charge	X	X	X	X		X
Payment amount	X	X	X	X	X	X
Payer source	X	X	X	X	X	X
Reason for discrepancy between total charge and total payments	X	X	X	X		X
SBDs	X	X				
Comparison of total number of events reported in MPC against total events reported in HC and explanation if discrepancy cannot be resolved	X	X	X	X		X

Sample Size and Participation Rates

Table 2 summarizes eligible sample sizes and participation rates stratified by provider type at the provider level. For data collection purposes, a provider was classified as a participant if health care event data were obtained for any of the provider's sampled patients during calendar year 2006. Each event reported by the provider was required to have—at minimum—a date of service, and a procedure or service. As the table illustrates, 94 percent of the 5,484 eligible hospital providers and nearly 87 percent of the 12,062 eligible office-based providers participated in the survey. Furthermore, 92 percent of the 238 eligible health maintenance organizations (HMOs), which can be a hospital or an office-based provider, participated in the survey. Eighty-two percent of SBD providers, nearly 80 percent of pharmacy providers, and 85 percent of home care providers also participated in the survey. Overall refusal rates ranged from 2.2 percent for hospital providers to nearly 15 percent for pharmacy providers. Providers classified as “other nonresponse” were primarily those who could not be located or who could be located, but had no record of providing care to the sampled patient.

Table 3 summarizes eligible sample sizes and participation rates by provider type at the provider-patient pair level (i.e., one provider may have multiple patients). Participation rates at the patient-provider pair level were generally similar or slightly lower than at the provider level—93 percent for hospitals, 86 percent for OBDs, 90 percent for HMOs, 80 percent for SBDs, 73 percent for pharmacies, and 84 percent for home care agencies. Initial (before subsampling) sample sizes and participation rates may be obtained via the MEPS Web site: www.meps.ahrq.gov.

Table 2: 2006 Sample Sizes and Participation Rates in the Medical Provider Component Sample by Provider Type—Provider Level

Provider	Final eligible sample	Participation rate	Refusal rate	Other non-participation rate
2006 Providers				
Hospitals	5,484	0.941	0.022	0.037
Office-based providers	12,062	0.869	0.074	0.057
HMOs	238	0.920	0.042	0.038
Home care providers	602	0.856	0.080	0.065
Institutions	78	0.808	0.115	0.077
SBDs	13,013	0.823	0.111	0.066
Pharmacies	7,489	0.799	0.149	0.052
Total	38,966			

Table 3: 2006 Sample Sizes and Participation Rates in the Medical Provider Component Sample by Provider Type—Pair Level

Provider	Final eligible sample	Participation rate	Refusal rate	Other non-participation rate
2006 Providers				
Hospitals	10,830	0.934	0.031	0.035
Office-based providers	15,274	0.861	0.082	0.056

HMOs	476	0.903	0.059	0.038
Home care providers	661	0.847	0.082	0.071
Institutions	78	0.808	0.115	0.077
SBDs	18,699	0.807	0.144	0.049
Pharmacies	17,418	0.734	0.196	0.070
Total	63,436			

Use of MPC Data in Expenditure Estimation

Data obtained from providers in the MPC were key to the development of MEPS expenditure estimates. Since insurance providers negotiate reimbursement rates with providers that are significantly less than the total established list price which appears on a billing statement, expenditures in the MEPS are defined as the sum of payments from all payer sources including out-of-pocket payments. While most household respondents can report with some degree of accuracy how much they pay out-of-pocket for medical care, including prescribed medicines, they do not always know the total payments made on their behalf by third-party payers. Providers generally have more complete information on reimbursement arrangements (capitation vs. fee-for-service) and how much was paid by payer source for care delivered to household respondents.

In general, the methodology used to develop 2006 MEPS medical expenditure estimates was based on merging medical events reported in the HC with data from the MPC using a probabilistic matching procedure. For all medical events except prescribed medicines, the first stage of the MEPS expenditure estimation methodology involved matching and obtaining the provider reported expenditure data in the MPC to the household reported medical event in the HC using dates and detailed information on conditions and procedures that were collected in both the HC and MPC. As a consequence of the matching, each medical event in the HC had expenditure data from both the MPC and HC, expenditure data from either the MPC or HC only, or expenditure data from neither source (i.e., missing payment data). Household reported event type may be different than provider reported event type, so some cross-event type matches were permitted. However, event type on the final files released to the public is defined according to the household classification. A hierarchical approach was used to develop complete expenditure data. When a match was found for a particular medical event, expenditure data from the MPC were substituted for household reported information. In certain cases, if MPC data were not available, and complete household payment data were available, the household data were used. A series of logical edits were applied to both the HC and MPC data to correct for several issues with the reported data (e.g., outliers, misreported data). For more information on the types of issues encountered and the logical edits applied, see Section 2.6.1.0—Utilization, Expenditures, and Source of Payment Variables, of the documentation for the file, MEPS HC-097: 2005 Full Year Consolidated Data File:

(http://www.meps.ahrq.gov/mepsweb/data_stats/download_data/pufs/h97/h97doc.pdf).

Where MPC or HC payment data were not available, either because of item non-response or the payment was not tied to a specific visit (as in capitation arrangements), the sum of payments (or individual components of payments) were imputed using a weighted sequential hot-deck procedure. Data collected in the MPC were also used to

impute expenditures for medical events that were missing both HC and MPC data. For a more detailed description of the use of MPC data in MEPS expenditure estimation and a summary of the methodology used for imputing missing data see (Cohen and Taylor, 1999 and Machlin and Dougherty, 2007).

For prescribed medicines, the general approach to matching prescription drug data was to merge information collected from MPC pharmacy providers to HC drug data. For people who filed their own insurance claims for prescribed drugs, information on payment sources was retained if these data were reported in the charge and payment section of the HC questionnaire. A matching program was developed to link drugs and drug information from MPC pharmacy data to HC reported drug data. To improve the quality of these matches, all HC drugs were assigned numeric codes (Generic Product Identifier or GPI) from a proprietary database (the Master Drug Data Base or MDDDB) on the basis of the medication names provided by the household. These codes were also assigned to the prescriptions in the MPC by using the NDC, when available, and medication names reported by the pharmacy providers. Software was developed that merged MPC drug data to the HC drug data by matching drug events from each file based on variables with both numeric characters (e.g., person ID, GPI, potential payment sources, age, sex, health status, and geographic location) and alpha characters such as the medication names. Considerable editing was done prior to the matching to correct data inconsistencies in both data sets and to fill in missing data and correct outliers on the MPC file. For HC events that did not have corresponding data in the MPC, the MPC data was used as the imputation source (Moeller, 2001).

MPC Developments

Over the last decade, there have been significant developments in the United States health care delivery system from HIPAA and the integration of electronic health records, to “modernizing Medicare”, to shifts in the way in which patients obtain their prescribed medicines. All of these developments have affected the way in which health care information is recorded, maintained, and released. This section describes how the MPC has evolved to respond to these developments, while maintaining the ability to compare data year to year.

Health Insurance Portability and Accountability Act (HIPAA)

The MPC survey is authorized by Federal Statute, Section 924(c) and Section 308(d) of the Public Health Service Act [42 U.S.C. 299c-3(c) and 242m(d)]. This law prohibits the release outside of the sponsoring agencies or their contractors of information that would permit identification of a patient or establishment without first obtaining authorization from the patient or establishment who gave the information.

Although the survey falls under the Public Health Service Act and not the HIPAA Privacy Rule enacted in 2003, the MPC data collection protocol does require that a signed authorization form be obtained from each HC sample person, in order to contact the person’s provider and request medical information. To avoid any confusion and possible refusals based on the HIPAA Privacy Rule, the authorization form was revised to incorporate features mandated by HIPAA for valid authorization forms, including prescribed elements of informed consent: a declaration of the patient’s right to revoke authorization to contact providers and the procedures for doing so; a statement of the consequences of refusing to sign an authorization; and information about the disclosure after release of information by the provider.

Pharmacy Data Collection

During the first year of the MPC, the collection of prescription medicine information from pharmacies was carried out as a mail survey, in an operation separate from hospital and office-based physician data collection. In subsequent years, however, the data collection protocol evolved to accommodate the collection of prescription data not only from retail pharmacy stores, but corporate pharmacy chains and pharmacy benefit management (PBM) companies. The data collection protocol for retail pharmacy stores is similar to that of the office-based physicians (i.e., data are obtained via a telephone survey or chart review and abstraction). The data collection protocol for a corporate pharmacy chain or PBM is different in that prescription data for sample persons are typically acquired for multiple patients in electronic format.

Increased Volume of Abstraction

Although the original methodology for data collection used telephone contact for collecting data, there has been an increased trend with providers opting to send copies of patient records rather than participate in a telephone interview. In fact, in the last three years of data collection (2004–2006), the percentage of hospital, office-based physician, and SBD providers sending patient records rather than participating in a telephone survey has increased from 82.8, 43.0, and 16.0 percent to 91.3, 54.2, and 49.0 percent, respectively. In response to this increase, the data collection protocol has been expanded to incorporate the receipt of medical and billing records from sampled providers, and the review of these records by a staff trained to abstract the core data elements for each provider type.

Home Care

In recent years, the MPC has adjusted the way it captures payment information when home care providers report Medicare as a payer. Under the Medicare Home Health Prospective Payment System that went into effect in October 2000, Medicare instituted the practice of paying for approved home care in 2-month increments. The original home care data collection instrument was designed to collect data in monthly increments. To handle the change in Medicare payments, the payments reported by the provider are divided, allocating an equal share to each of the two months covered by the payment.

Summary

The MEPS MPC is a voluntary survey designed to supplement and validate health care expenditure and source of payment data collected in the MEPS-HC. This report focuses on the MPC data collection effort that collected information from medical providers on health care events that took place between January 1, 2006, and December 31, 2006. This report is an update to and enhancement of *MEPS Methodology Report #9, Design, Methods, and Field Results of the 1996 Medical Expenditure Panel Survey Medical Provider Component*. This report describes the MPC sample design, survey methodology, procedures for data collection, sample sizes, and response rates as well as the relationship between the HC Survey and the MPC Survey.

References

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://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.shtml

Cohen, J, Taylor, A. The provider system and the changing locus of expenditure data: survey strategies from fee-for-service to managed care. *Informing American Health Care Policy: The Dynamics of Medical Expenditure and Insurance Surveys, 1977–1996 (Chapter 4)*, 57–62. The Jossey Bass Health Series—First Edition.

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://www.meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.shtml

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5–III-12.

Cohen S., and Carlson, B. A Comparison of Household and Medical Provider Reported Expenditures in the 1987 NMES. *Journal of Official Statistics*, Vol. 10, No. 1, 1994, p 3–29.

Ezzati-Rice, TM, Rohde, F., Greenblatt, J. *Sample Design of the Medical Expenditure Panel Survey Household Component, 1998–2007*. Methodology Report No. 22. Rockville, MD: Agency for Healthcare Research and Quality, 2008.

http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.shtml

Machlin, S.R., Dougherty, D.D. *Overview of Methodology for Imputing Missing Expenditure Data in the Medical Expenditure Panel Survey*. Methodology Report No. 19. Rockville, MD: Agency for Healthcare Research and Quality, 2007.

http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr19/mr19.shtml

Machlin, S.R., Taylor A.K. *Design, Methods, and Field Results of the 1996 Medical Expenditure Panel Survey Medical Provider Component*. MEPS Methodology Report No. 9. AHRQ Pub. No. 00-0028. Rockville, MD: Agency for Healthcare Research and Quality, 2000.

http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr9/mr9.shtml

Moeller J.F., et. al. *Outpatient Prescription Drugs: Data Collection and Editing in the 1996 Medical Expenditure Survey (HC-010A)*. MEPS Methodology Report No. 12. AHRQ Pub. No. 01-0002. Rockville, MD: Agency for Healthcare Research and Quality, 2001.

http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr12/mr12.shtml