MEPS HC-024:
1996 PERSON ROUND PLAN FILE

Agency for Healthcare Research and Quality
Center for Cost and Financing Studies

Contents

A. Data Use Agreement

Individual identifiers have been removed from the micro-data contained in the files on this CD-ROM. Nevertheless, under sections 308 (d) and 903 (c) of the Public Health Service Act (42 U.S.C. 242m and 42 U.S.C. 299 a-1), data collected by the Agency for Healthcare Research and Quality (AHRQ) and /or the National Center for Health Statistics (NCHS) may not be used for any purpose other than for the purpose for which it was supplied; any effort to determine the identity of any reported cases, is prohibited by law.

Therefore in accordance with the above referenced Federal Statute, it is understood that:

1. No one is to use the data in this data set in any way except for statistical reporting and analysis; and

2. If the identity of any person or establishment should be discovered inadvertently, then (a) no use will be made of this knowledge, (b) The Director, Office of Management AHRQ will be advised of this incident, (c) the information that would identify any individual or establishment will be safeguarded or destroyed, as requested by AHRQ, and (d) no one else will be informed of the discovered identity.

3. No one will attempt to link this data set with individually identifiable records from any data sets other than the Medical Expenditure Panel survey or the National Health Interview Survey.

By using this data you signify your agreement to comply with the above stated statutorily based requirements with the knowledge that deliberately making a false statement in any matter within the jurisdiction of any department or agency of the Federal Government violates 18 U.S.C. 1001 and is punishable by a fine of up to $10,000 or up to 5 years in prison.

The Agency for Healthcare Research and Quality requests that users cite AHRQ and the Medical Expenditure Panel Survey as the data source in any publications or research based upon these data.

B. Background

This documentation describes one in a series of public use files from the Medical Expenditure Panel Survey (MEPS). The survey provides a new and extensive data set on the use of health services and health care in the United States.

The Medical Expenditure Panel Survey (MEPS) is conducted to provide nationally representative estimates of health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian non-institutionalized population. MEPS also includes a nationally representative survey of nursing homes and their residents. MEPS is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS).

MEPS comprises four component surveys: the Household Component (HC), the Medical Provider Component (MPC), the Insurance Component (IC), and the Nursing Home Component (NHC). The HC is the core survey, and it forms the basis for the MPC sample and part of the IC sample. The separate NHC sample supplements the other MEPS components. Together these surveys yield comprehensive data that provide national estimates of the level and distribution of health care use and expenditures, support health services research, and can be used to assess health care policy implications.

MEPS is the third in a series of national probability surveys conducted by AHRQ on the financing and use of medical care in the United States. The National Medical Care Expenditure Survey (NMCES, also known as NMES-1) was conducted in 1977, the National Medical Expenditure Survey (NMES-2) in 1987. Beginning in 1996, MEPS continues this series with design enhancements and efficiencies that provide a more current data resource to capture the changing dynamics of the health care delivery and insurance system.

The design efficiencies incorporated into MEPS are in accordance with the Department of Health and Human Services (DHHS) Survey Integration Plan of June 1995, which focused on consolidating DHHS surveys, achieving cost efficiencies, reducing respondent burden, and enhancing analytical capacities. To accommodate these goals, new MEPS design features include linkage with the National Health Interview Survey (NHIS), from which the sampling frame for the MEPS HC is drawn, and continuous longitudinal data collection for core survey components. The MEPS HC augments NHIS by selecting a sample of NHIS respondents, collecting additional data on their health care expenditures, and linking these data with additional information collected from the respondents' medical providers, employers, and insurance providers.

1.0 Household Component

The MEPS HC, a nationally representative survey of the U.S. civilian non-institutionalized population, collects medical expenditure data at both the person and household levels. The HC collects detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments, access to care, satisfaction with care, health insurance coverage, income, and employment.

The HC uses an overlapping panel design in which data are collected through a preliminary contact followed by a series of five rounds of interviews over a 2 ½-year period. Using computer-assisted personal interviewing (CAPI) technology, data on medical expenditures and use for 2 calendar years are collected from each household. This series of data collection rounds is launched each subsequent year on a new sample of households to provide overlapping panels of survey data and, when combined with other ongoing panels, will provide continuous and current estimates of health care expenditures.

The sampling frame for the MEPS HC is drawn from respondents to NHIS, conducted by NCHS. NHIS provides a nationally representative sample of the U.S. civilian non-institutionalized population, with oversampling of Hispanics and blacks.

2.0 Medical Provider Component

The MEPS MPC supplements and validates information on medical care events reported in the MEPS HC by contacting medical providers and pharmacies identified by household respondents. The MPC sample includes all hospitals, hospital physicians, home health agencies, and pharmacies reported in the HC. Also included in the MPC are all office-based physicians:

- Providing care for HC respondents receiving Medicaid.
- Associated with a 75-percent sample of HC households receiving care through an HMO (health maintenance organization) or managed care plan.
- Associated with a 25-percent sample of the remaining HC households.

Data are collected on medical and financial characteristics of medical and pharmacy events reported by HC respondents, including:

- Diagnoses coded according to ICD-9-CM (9th Revision, International Classification of Diseases) and DSM-IV (Fourth Edition, *Diagnostic and Statistical Manual of Mental Disorders*).
- Physician procedure codes classified by CPT-4 (Common Procedure Terminology, Version 4).
- Inpatient stay codes classified by DRGs (diagnosis-related groups).
- Prescriptions coded by national drug code (NDC), medication names, strength, and quantity dispensed.
- Charges, payments, and the reasons for any difference between charges and payments.

The MPC is conducted through telephone interviews and mailed survey materials.

3.0 Insurance Component

The MEPS IC collects data on health insurance plans obtained through employers, unions, and other sources of private health insurance. Data obtained in the IC include the number and types of private insurance plans offered, benefits associated with these plans, premiums, contributions by employers and employees, eligibility requirements, and employer characteristics.

Establishments participating in the MEPS IC are selected through four sampling frames:

- A list of employers or other insurance providers identified by MEPS HC respondents who report having private health insurance at the Round 1 interview.
- A Bureau of the Census list frame of private sector business establishments.
- The Census of Governments from Bureau of the Census.
- An Internal Revenue Service list of the self-employed.

To provide an integrated picture of health insurance, data collected from the first sampling frame (employers and insurance providers) are linked back to data provided by the MEPS HC respondents. Data from the other three sampling frames are collected to provide annual national and State estimates of the supply of private health insurance available to American workers and to evaluate policy issues pertaining to health insurance.

The MEPS IC is an annual panel survey. Data are collected from the selected organizations through a prescreening telephone interview, a mailed questionnaire, and a telephone follow up for nonrespondents.

4.0 Nursing Home Component

The 1996 MEPS NHC was a survey of nursing homes and persons residing in or admitted to nursing homes at any time during calendar year 1996. The NHC gathered information on the demographic characteristics, residence history, health and functional status, use of services, use of prescription medications, and health care expenditures of nursing home residents. Nursing home administrators and designated staff also provided information on facility size, ownership, certification status, services provided, revenues and expenses, and other facility characteristics. Data on the income, assets, family relationships, and care-giving services for sampled nursing home residents were obtained from next-of-kin or other knowledgeable persons in the community.

The 1996 MEPS NHC sample was selected using a two-stage stratified probability design. In the first stage, facilities were selected; in the second stage, facility residents were sampled, selecting both persons in residence on January 1, 1996, and those admitted during the period January 1 through December 31.

The sample frame for facilities was derived from the National Health Provider Inventory, which is updated periodically by NCHS. The MEPS NHC data were collected in person in three rounds of data collection over a 1 ½-year period using the CAPI system. Community data were collected by telephone using computer-assisted telephone interviewing (CATI) technology. At the end of three rounds of data collection, the sample consists of approximately 815 responding facilities, 3,100 residents in the facility on January 1, and 2,200 eligible residents admitted during 1996.

5.0 Survey Management

MEPS data are collected under the authority of the Public Health Service Act. They are edited and published in accordance with the confidentiality provisions of this act and the Privacy Act. NCHS provides consultation and technical assistance.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports and microdata files. Summary reports are released as printed documents and electronic files. Microdata files are released on CD-ROM and/or as electronic files. A catalog of all MEPS products released to date is provided in Section F of this document.

Printed documents and CD-ROMs are available through the AHRQ Publications Clearinghouse. Write or call:

AHRQ Publications Clearinghouse
Attn: (publication number)
P.O. Box 8547
Silver Spring, MD 20907
800/358-9295
410/381-3150 (callers outside the United States only)
888/586-6340 (toll-free TDD service; hearing impaired only)

Be sure to specify the AHRQ number of the document or CD-ROM you are requesting. Selected electronic files are available from the Internet on the MEPS home page: http://www.meps.AHRQ.gov/.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Cost and Financing Studies, Agency for Healthcare Research and Quality.

C. Technical Information

1.0 Overview

This public use data file contains data for each person with private health insurance reported in rounds 1, 2, and 3 of the 1996 Medical Expenditure Panel Survey Household Component (MEPS HC). Released as an ASCII file with SAS format statements and in SAS transport format, this public use file provides information collected on a nationally representative sample of the civilian noninstitutionalized population of the United States during the calendar year 1996. The HC-024 file contains records for persons insured through establishments providing hospital/physician, medigap, dental, presciption medication, or long-term care coverage and includes variables pertaining to managed care and satisfaction with plan coverage.

2.0 Data File Description

The Person-Round-Plan (PRPL) file for 1996 is a complex file of privately insured persons and their private health insurance plans and links to the jobs providing insurance. The PRPL file is designed to facilitate research on the sometimes complex and dynamic relationships between consumers and their private insurance. It is not a person-level file, and linking the PRPL file to a person-level file (such as HC-001 and HC-012) requires users making analytic decisions based on understanding the complexity of the PRPL file.

Records contain the following types of information (see Figure 1):

- Covered person
  - → Flags for whether the person is the policyholder or a dependent
  - → Whether enrolled at time of interview
  - → Months enrolled during the reference period for the interview

- Interview Round

- Policyholder

- Establishment providing insurance
  - → Type of establishment (employer, union, insurance agent, etc.)
  - → Types of coverage (hospital/physician, medigap, dental, prescription medication, long term care, COBRA, single or family)[1]
  - → Out-of-pocket premium (only for Round 1 and only when either the plan **is not** through a current employer or union, or the plan **is** from a previous employer)
  - → Links to the Health Insurance Plan Abstraction (HIPA) file (HC-017), when available

- Plan (for hospital/physician and Medicare supplemental insurance coverage only)

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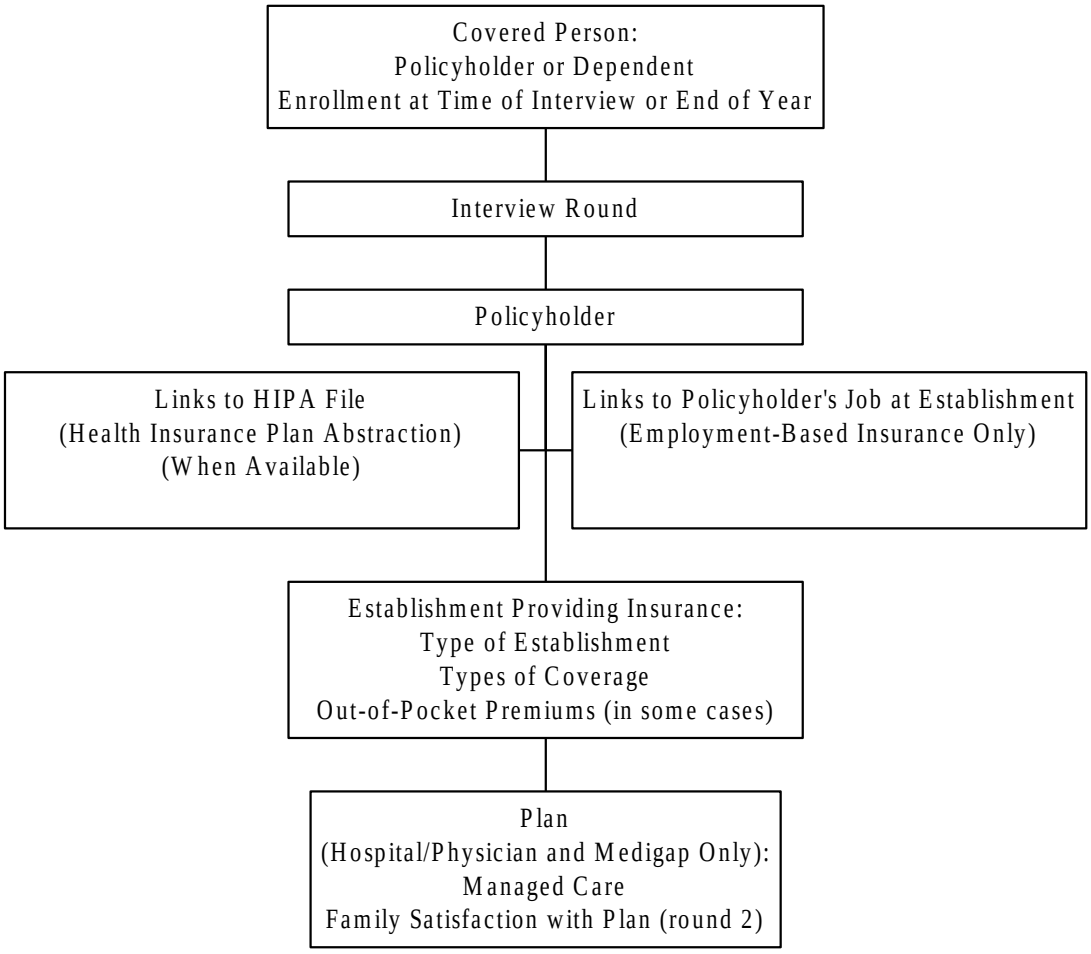
[1]No effort has been may to validate variables representing type of coverage with external sources.

FIGURE 1

CONCEPTUAL OVERVIEW OF PRPL



- → Household reports of managed care
- → Family satisfaction with plan (collected in round 2 only)

- Links to the job providing insurance (for employment-based insurance only, HC-007)

On the records for dependents, variables link to the *policyholder's* job providing insurance, rather than the dependent's job.

"Establishment" refers the organization through which the policyholder obtains private insurance. The establishment may be an employer, a union, an insurance agent, an insurance company, a professional association, or another type of organization. Many questions in the MEPS HC instrument are asked in reference to the establishment providing insurance to the policyholder. For example, the MEPS HC asks about the "types of health insurance" or covered services, such hospital/physician and dental coverage, the policyholder gets through the establishment.

For each establishment, a "plan" is "the insurance company or HMO" or self-insured company "from which (POLICYHOLDER) receives" hospital/physician or Medicare supplemental (Medigap) coverage. For some focused analyses, it may be important to recognize that information collected at the establishment level does not necessarily pertain to the plan level. For example, if a policyholder obtains from the establishment two separate plans, a hospital/physician plan and a dental plan, then the dental plan may not have the same managed care characteristics as the hospital/physician plan.

2.1 Complex File Structure with Examples

The PRPL file is designed to reflect the sometimes complex and dynamic relationships between people and their private insurance. It allows maximum flexibility for researchers, but it also requires that they make analytical decisions in their research.

The PRPL file is a person-round-policyholder-establishment-level file. There is one unique record for each unique combination of establishment (source of private insurance), policyholder, interview round, and covered person (policyholder or dependent). Thus, the PRPL file contains at least one record for each person in each round with private health insurance, or 50,778 total records. The PRPL file contains records for persons insured through establishments providing hospital/physician, medigap, dental, prescription medication, or long-term care coverage.

In most cases in this file, one person in the family has insurance from his or her employer, and this insurance covers everyone in the family. In this case, there is one record for each family member in each round, and each record flags the policyholder's current main job and links to the one job record in HC-007. However, other cases are more complex, and some hypothetical examples follow.

Multiple Establishments

- Juan and Maria are both employed parents, both have health insurance through their employers, and both parents choose family coverage. In this case, there are two PRPL records for each family member in each round.

- John and Jane are both employed parents. John has single coverage from his employer. Jane has family coverage from her employer. In this case, Jane and the children each have one PRPL record for each round. John has two records for each round.

- Jamie has Medicare and Medicare supplemental insurance. In this case, Jamie has one PRPL record in each round for the Medicare supplemental insurance. There is no record for Medicare, because it is public insurance.

- Arlene is a child living with her mother. Both have Medicaid. Arlene's father, who does not live with them, has private insurance that covers Arlene. Arlene has one PRPL record in each round for the private insurance. There is no record for Medicaid, because it is public insurance.

No Private Insurance

- Paul is uninsured. In this case, Paul does not have any PRPL records.

- Mary has Medicaid instead of private coverage. In this case, Mary does not have any PRPL records.

Sources of Insurance: Employers and Other Establishments

- Dexter is an employed parent with family coverage through his current main job. In this case, each family member's PRPL record flags Dexter's current main job as the source of insurance, and each family member's PRPL record links to that job record in PUF HC-007.

- Claire is employed, but she does not have insurance through her job. Instead she buys a plan directly from an HMO. In this case, Claire's PRPL records do not flag her current main job, nor do they link to any job records in PUF HC-007.

- Fred has hospital/physician insurance through his employer, and he buys long term care insurance through an insurance agent. In this case, Fred has two PRPL records, and only the employment-based insurance flags his current main job and links to a job record in PUF HC-007.

Policyholders Not in the Household

- Edith is a widow and has retiree insurance from her former husband's former job. In this case, Edith's PRPL record does not link to any employment information in the MEPS. There is also a PRPL record for Edith's former husband, where he is flagged as the policyholder and flagged as deceased, but this record does not link to any records on any PUFs.

- Matilda's parents are divorced. She lives with her father, but her insurance is through her mother's job. In this case, Matilda's PRPL record does not link to any employment information in the MEPS. There is also a PRPL record for Matilda's mother, where she is

flagged as the policyholder and not residing in the RU, but this PRPL record does not link to any records on any PUFs.

Changes in Insurance

- Bob changes jobs between January 1st, 1996 and the date of his MEPS round 1 interview, and both jobs provided health insurance. In this case, Bob has two PRPL records for round 1. EVALCOVR shows whether one or both plans covered Bob on the interview date.

- Julie quits her job in round 1 but pays her previous employer to continue her health insurance while she looks for another job in round 2. In this case, Jane's round 1 PRPL record flags her current main job as the source of his insurance and links to a job record in PUF HC-007. Julie's round 2 PRPL record does not flag her current main job as the source of his insurance, but it links to the same job record from round 1. Thus, the jobs variables from round 1 are no longer current in round 2, but the link exists for users.

2.2 Identifiers

Each record contains the following ID variables:

DUPERSID is the person identifier (either a dependent or a policyholder).

RN is the round of the interview in which the enrollment data were collected

PHLDRIDX is the person identifier of the policyholder

ESTBIDX is an ID number for the establishment–employer, union, insurance company or other–that is the source of insurance coverage on the record.

EPRSIDX is a combination of ESTBIDX and the PHLDRIDX, and it uniquely identifies the insurance coverage that a policyholder obtains from an individual establishment.

EPCPIDX is a combination of DUPERSID, RN, and EPRSIDX, and it uniquely identifies each record.

JOBSIDX is a combination of the PHLDRIDX a round identifier (RN) and a job number (JOBSN), and it uniquely identifies the policyholder's job at the establishment that provided insurance (for employment-based coverage)

For each person covered by a policyholder-establishment combination, the PHLDRIDX, ESTBIDX, and EPRSIDX appear on each plan record for that coverage.

A person (DUPERSID) can be listed more than once on this file (1) if they are covered (as a policyholder or a dependent) by insurance policies from more than one establishment, or (2) if they are covered in more than one round. Establishment-policyholder pairs (EPRSIDXs) can be listed

more than once (1) if the health plan a policyholder obtains from a given establishment also covers his/her dependents, or (2) if the health plan a policyholder obtains from a given establishment covers the anyone in more than one interview round. As noted above, there is a PRPL record for each unique combination of establishment (source of insurance), round, and covered person (policyholder or dependent). The following table presents a hypothetical example that illustrates the relationship between the ID variables on this file.

ESTBIDX	DUPERSID	PHLDRIDX	EPRSIDX	RN	EPCPIDX	JOBSIDX
11	42	42	1142	1	1142142	42101
11	42	42	1142	2	1142242	42201
11	42	42	1142	3	1142342	42301
22	53	53	2253	1	2253153	53101
33	53	53	3353	1	3353153	
44	61	61	4461	1	4461161	61101
44	62	61	4461	1	4461162	61101
44	63	61	4461	1	4461163	61101
55	71	71	5571	1	5571171	71102
55	71	71	5571	2	5571271	71102

The first three rows of the table represent a situation where a person (DUPERSID=42) is listed thrice in the PRPL file because she obtains insurance from the same establishment in all three rounds. Since the person is the policyholder, her DUPERSIDX is the same as the PHLDRIDX, which is repeated in the EPRSIDX, EPCPIDX, and JOBSIDX.

In the fourth and fifth rows of the table represent a situation where a person (DUPERSID=53) is listed twice in the PRPL file because she obtains insurance from more than one establishment. In this example, the second establishment is not an employer or union, so JOBSIDX is inapplicable.
The sixth, seventh, and eighth rows of the table represent a situation where a policyholder and two dependents obtain coverage through the policyholder's employer (a unique establishment-policyholder pair, EPRSIDX=4461). The policyholder's PHLDRIDX appears in the EPRSIDX and the JOBSIDX for all three covered persons.

The last three rows of the table represent a situation where a person is retired and has retiree insurance through a job that ended prior to 1996. In round 1, the respondent reported the job from which the sample member retired, and MEPS does not ask about that job again. However, in each round we ask about the health insurance. So in round 2 the JOBSIDX contains round number 1, when the jobs data were last collected.

Finally, note that EPCPIDX uniquely identifies each record on the file.

In order to conduct person-level analyses, it is necessary to identify all policies that cover each individual either as a policyholder or as a dependent. Since each *person* in the PRPL file is uniquely identified by the variable DUPERSID, person-level analyses can be conducted by examining all PRPL records containing each DUPERSID.

2.3 Adding the Characteristics of Covered Persons

The DUPERSID allows you to link on the age, sex, race, health status, or other person-level variables from the other HC files. However, this will result in multiple records per person, and estimates will not be nationally representative unless there is one record per person and weights are used.

2.4 Adding the Policyholder's Characteristics

The PHLDRIDX allows you to link characteristics of the policyholder onto the records of every person covered by the plan. For example, suppose you wanted to study persons whose private employment-based insurance is through an employee in a union at a current main job as of the round 1 interview. Then you would select PRPL records matching HC-001 (PUF1FLG=1) where the insurance is through a current main job (CMJINS=1) and RN=1. From HC-001, select the DUPERSID and INUNION variables and rename DUPERSID to PHLDRIDX. Merge INUNION onto the PRPL file by PHLDRIDX.

Some policyholders do not have records on HC-001 or HC-012. These include deceased policyholders and policyholders residing outside the RU. For these policyholders, PUF1FLG and PUF12FLG may be equal to 2, depending on when the policyholder left the RU. All of the covered person records for these establishment-policyholder pairs are flagged with DECPHLDR, OUTPHLDR, or NOPUFLG equal to 1. Deceased policyholders complicate the estimation of nationally representative statistics on active policies. For these establishment-policyholder pairs, users must choose a covered person with a positive weight. However, establishment-policyholder pairs where the policyholder resides outside the RU should not be included in estimates, because this will result in double counting, as RU members covering those outside the RU are already included.

2.5 Choosing PRPL Records for Your Research Question

In order to produce estimates from the data in this file, researchers must use the person (or family) level weights released in either of two previously released PUFs, HC-001 or HC-012. Researchers must consult the documentation for these PUFs for guidance on creating nationally representative estimates for different time periods.

Note that if there are multiple records per person (DUPERSID) when you merge on weights, you will double count some people, and your estimates will not be nationally representative. There are two solutions: select only one record per person, or aggregate information across PRPL records.

How you develop your analytical file depends on your research question. The PRPL file is designed to help answer a wide variety of research questions. AHRQ cannot anticipate all these questions, so this section provides examples of how to use the PRPL file for four research questions.

How many people were covered by two or more private hospital/physician insurance plans at the end of 1996?

Select the round 3 records with PRIVCAT>0 and MSUPINS ne 1 and EVALCOVR=1. Count the number of records for each person (DUPERSID). Create one person-level record for each DUPERSID that has the number of plans (PRPL records). Merge the count variable onto PUF HC-012 and use weights, strata, and PSUs to create nationally representative estimates.

How many people reported private dental coverage at the end of 1996?

Select the round 3 records with DNTLINS=1 and EVALCOVR=1. Among these records, select one record for each person (DUPERSID). For each record, merge on weights, strata, and PSUs from PUF HC-012 to create nationally representative estimates.

How satisfied are families with their private health insurance?

Select the records from round 2 (when the satisfaction questions were asked) for persons eligible to be asked the satisfaction with plan questions (SATELIG=1). For persons with multiple records, choose one record. For each person record, merge on round 2 weights, strata, and PSUs from PUF HC-012 to create nationally representative estimates.

At the time of the first interview, how many private insurance policies for hospital/physician were not employment-based?

Select the round 1 records with PRIVCAT in (2,3,99) and EVALCOVR=1. Select one record for each policyholder-establishment pair (EPRSIDX). To have a positive weight for the final count, we recommend choosing the covered person record of the policyholder (PHOLDER=1), unless the policyholder is deceased (DECPHLDR=1), in which case then the researcher should choose a different covered person's record. For each record, merge on weights, strata, and PSUs from PUF HC-001 to create nationally representative estimates.

3.0 Data File Contents

3.1 ID Variables

In the MEPS Household Component, the definitions of Dwelling Units (DUs) and Group Quarters are generally consistent with the definitions employed for the national Health Interview Survey. The dwelling unit ID (DUID) is a five-digit random ID number assigned after the case was sampled for MEPS. The person number (PID) uniquely identifies all persons within the dwelling unit. The variables DUPERSID is the combination of the variables DUID and PID. The MEPS - HC - PRPL file can be linked to other person-level public use files such as MEPS HC001: 1996 Panel Round 1 Population Characteristics by using the DUPERSID.

PHLDRIDX is the person identifier (DUID + PID) of the policyholder of the private health insurance plan. Generally, the characteristics of the policyholder can be linked from other person-level public use files by using the PHLDRIDX to match the DUPERSID on the other files. However, when the

policyholder is deceased or resides outside the RU, then there are no person-level variables on public use files (unless the policyholder was alive and resided in the household at some point during the time periods covered by the interviews).

ESTIBIDX is an ID number assigned to place of employment and to sources of insurance.

EPRSIDX is a combination of ESTBIDX and PHLDRIDX. The DUPERSID and EPRSIDX can be used to link on data from the Health Insurance Plan Abstracts (HIPA) public use file (HC-017).

JOBSIDX is a combination of the PHLDRIDX, a round identifier (RN), and a job number (JOBSN), and it uniquely identifies the policyholder's job at the establishment that provided insurance (for employment-based coverage). The round identifier imbedded in JOBSIDX is the round in which the job was last reported, which is not necessarily the round in which the insurance was last reported (for example, when the job ended but the insurance continued). JOBSIDX can be used to link on characteristics of the policyholder's job providing insurance from the Jobs public use file (HC-007).

3.2 Person Variables

There are four person-level variables. Binary variables indicate whether the person is the policy holder (PHOLDER) or a dependent (DEPNDNT) on the coverage through the establishment. The variable PUF1FLG indicates whether the person has a record on HC-001, and PUF12FLG indicates whether the person has a record on HC-012.

There are 13 person-round-level variables. EVALCOVR is a binary variable indicating whether the person was covered by insurance from the establishment at the time of interview (for rounds 1 and 2) or on December 31 (for round 3). The variables STATUS1-STATUS12 indicate whether the respondent reported the person was covered by insurance from the establishment for at least one day during the month. Coverage is reported only for the interview reference period. For example, if a person was first interviewed in February and reported she was covered in January and February, and then in the second interview in August she reported she was covered from March through August, then the PRPL record for the first round will have STATUS1 and STATUS2 set to 1 and the rest set to inapplicable, and the PRPL for the second round will have STATUS3 through STATUS8 set to 1 and the rest set to inapplicable.

3.3 Policyholder Variables

The values of two variables describing the policyholder do not vary across the records of the persons covered by the plan, regardless of whether the covered person is the policyholder. The variable DECPHLDR indicates the policyholder is deceased. The variable OUTHLDR indicates the policyholder resides outside the. In each case, there are no person-level records on the PUFs, even though the PRPL file has a record for the policyholder as a covered-person (that is, a record where PHOLDER=1). The purpose of these flags is to explain any difficulty users may have linking policyholder information onto the PRPL file. These variables do not, however, measure mortality or policyholders' leaving household, which should instead be obtained from the PSTATUS variables on the person-level files. (For example, policyholders who die between round 1 and the end of 1996 will have records on HC-001 and HC-012, and PUF1FLG and PUF12FLG will be set to 1.)

3.4 Establishment Variables

The values of establishment-level variables do not vary across the records of the persons insured through the policyholder-establishment pair.

3.4.1 Employers and Other Establishments

The type of establishment providing coverage (TYPEFLAG) is on the record. For employment-based coverage through *both* an employer and a union (such as insurance through a labor-management committee), information about only one of the establishments, usually the employer, is on the record. (These cases are identifiable through the PROVDINS variable on the JOBS file.)

3.4.2 Types of Coverage through the Establishment

The establishments in the PRPL file provide private health insurance covering hospital/physician, Medicare supplemental insurance, dental, prescription medication, or long term care insurance. The variable PRIVCAT identifies the type of source for hospital and physician **or** Medicare supplemental insurance. HOSPINSX and MSUPINSX are edited establishment-policyholder flags for whether the policyholder has physician/hospital and medigap coverage, respectively, through the establishment. However, even when PRIVCAT indicates there is either hospital/physician or medigap coverage, both HOSPINSX and MSUPINSX may have missing values. Note also that both HOSPINSX and MSUPINSX may be coded "yes" on the same record. DENTLINS, PMEDINS, VISIONIN, and LTCINS flags indicate the establishment provides coverage for dental care, prescription medications, and long-term care, respectively. Below are examples of how to use these variables to identify types of insurance:

Identifying Types of Insurance	Variable and Values
Hospital and physician **or** Medicare supplemental insurance	PRIVCAT in (1,2,3,4,5,99)
Medicare supplemental insurance	MSUPINSX = 1
Hospital and physician insurance	PRIVCAT in (1,2,3,4,5,99) & MSUPINSX ne 1
Dental insurance	DNTLINS = 1

The variable COBRA is a flag for whether the respondent reported the coverage was obtained through the requirements of the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986. This act requires that certain employers allow some former employees to continue their employment-based coverage by paying the employer the premium (U.S. Department of Labor 1999). This flag does not, however, indicate all the coverage through former employers, which can be determined using TYPEFLAG and links to former jobs in the JOBS file. COBRA is set to "yes" if any of the three following conditions are met:

1. The respondent said insurance from a previous job is the source of coverage and the respondent answered yes to either HP14 or OE14 (depending on when the job ended):

   Some employer insurance can be continued after leaving the company by continuing to pay the premium. This is sometimes referred to as a COBRA plan.

   Is (POLICYHOLDER)'s (ESTABLISHMENT) insurance like that?

   Or

   Did that health insurance continue through COBRA?

2. The respondent said COBRA is the source of insurance through a self-insured firm with firm-size one (HX03)

3. The respondent said COBRA is the source of insurance not elsewhere reported (HX23)

COBRA is set to "no" when the insurance was not COBRA coverage. COBRA is set to inapplicable when the coverage was not employment-based, and when the coverage was through a current job. COBRA is set to "not ascertained" for retirement jobs first reported in the employment section in round 1 (EM80), retirement jobs first reported in the employment section for new RU members (EM80), and insurance through unions reported in the insurance section (HX23).[2] In a few cases, self-employed persons with firm size = 1 reported buying coverage through a previous job, and these cases are coded as yes or no, while other insurance through self-employment with firm size = 1 is coded "inapplicable."

The variable COVTYPIN flags whether coverage was single or family, based on the number of persons covered in the RU, whether the establishment's insurance covers someone outside the household, and whether the policyholder is outside the household. For rounds 1 and 2, the number of covered persons was measured at the time of the interview, and for round 3 as of December 31st.

3.4.3 Out-of-Pocket Premiums

The variable OOPPREM is the edited monthly out-of-pocket premium paid by the policyholder for coverage through the establishment as of Round 1, when the establishment was not a current employer or union, coverage was through a self-employed job with firm size 1, or COBRA coverage. OOPELIG flags these covered-person-policyholder-establishment triples. OOPPREM was created using the out-of-pocket amount reported and the frequency of payments (HX61, HX62, HX620V1):

> For the coverage through (ESTABLISHMENT), does anyone in the family pay all of the premium or cost, some of the premium or cost, or none of the premium or cost?

[2]In these three cases, the survey was not designed to ascertain whether the coverage was COBRA or not, but the variable is coded as "not ascertained" to help analysts.

[Do not include the cost of any copayments, coinsurance or deductibles anyone in the family may have had to pay.]

How much {(do/does)/did} (POLICYHOLDER) pay for the (ESTABLISHMENT) coverage?

PROBE: {Is/Was} that per year, per month, per week, or what?

OOPPREM is coded as zero for those who reported paying none of their premium, which often happened with out-of-household coverage. OOPPREM is coded "inapplicable" when the establishment was a current employer or union, coverage was not through a self-employed job with firm size 1, and not COBRA coverage. Premiums were reported only in Round 1, and in all other rounds OOPPREM is coded "inapplicable."

PREMLEVX shows whether OOPPREM was the full premium or part of it. When the respondent reported they paid some or none of the premium, the variables BYFED BYSTATE BYLOCAL BYSOMGOV BYEMPL BYUNION BYOTHER indicate who paid the rest of the premium.

For all nine variables (PREMLEVX OOPPREM BYFED BYSTATE BYLOCAL BYSOMGOV BYEMPL BYUNION BYOTHER), the same values are reported on the records of each person covered through the establishment, but the policyholder paid only once per establishment-policyholder.

Users should note that a few respondents reported zero, very low, or very high premiums, and some respondents said they paid all or some of their premium but reported an amount of zero. There was no attempt to resolve these inconsistencies, because it is not clear what could be done.

3.5 Plan Variables

The values of plan-level variables do not vary across the records of the persons insured through the policyholder-establishment pair. The PRPL file contains managed care and satisfaction variables for hospital/physician and Medicare supplemental plans. For all other plans, these variables are set to "inapplicable."

3.5.1 Household Reports of Managed Care

The variable UPRHMO identifies records for HMO coverage when the household respondent reported that the insurance was purchased through an HMO, reported the insurance company was an HMO, or described the plan as an HMO. In all cases the respondent answered a question using the term "HMO." UPRHMO is set to "yes" if any of the three following conditions are met:

1. If the respondent reported purchasing the insurance directly through an HMO (HX03, HX23)

2. If the respondent identified the type of insurance company as an HMO (HX49, HX51, HX54)

3. If the respondent answered yes to the following question (MC01):

> Now I will ask you a few questions about how (POLICYHOLDER)'s health insurance through (ESTABLISHMENT) works for non-emergency care.
>
> We are interested in knowing if (POLICYHOLDER)'s (ESTABLISHMENT) plan is an HMO, that is, a Health Maintenance Organization. With an HMO, you must generally receive care from HMO physicians. For other doctors, the expense is not covered unless you were referred by the HMO or their was a medical emergency. Is (POLICYHOLDER)'s (INSURER NAME) an HMO?

UPRHMO is set to "no" when the plan was not an HMO. UPRHMO is set to inapplicable when the plan was not hospital/physician or Medicare supplemental coverage.

The variable UPRMNC identifies records for gatekeeper plans. The household respondent has not identified the plan as an HMO but has identified a characteristic of the plan that requires plan members to sign up with a gatekeeper for all routine care (the exact question is given below). In 1996, this gatekeeper feature was associated with HMO plans and with some PPO plans. Users of the data can decide how to classify these persons. UPRMNC is set to "yes" if the following condition is met:

> If the respondent answered "no" to the HMO question (MC01) and "yes" to the following question (MC02):
>
> > (Do/Does) (POLICYHOLDER)'s insurance plan require (POLICYHOLDER) to sign up with a certain primary care doctor, group of doctors, or a certain clinic which (POLICYHOLDER) must go to for all of (POLICYHOLDER)'s routine care?
> >
> > Probe: Do not include emergency care or care from a specialist you were referred to.

UPRMNC is set to "no" when the plan does not require a gatekeeper and when the plan is an HMO. UPRMNC is set to "inapplicable" when the plan is not hospital/physician or Medicare supplemental coverage.

For plans other than HMOs and those with gatekeepers, the variable DRLIST identifies records for plans that the household respondent said had a book or list of doctors. The household respondent has not identified the plan as a PPO but has identified a plan characteristic associated with PPO plans. The respondent was asked MC03:

> Is there a book or list of doctors associated with the plan?

if both the following conditions were met:

1. If the person did not say the plan is an HMO (HX03, HX23, HX49, HX51, HX54, MC01)
2. If the respondent answered "no" to the gatekeeper question (MC02)

DRLIST is set to "inapplicable" when the plan is not hospital/physician or Medicare supplemental coverage, when the plan is an HMO, or when the plan requires a gatekeeper.

For with gatekeepers and lists of doctors, the variable VISTPAYX identifies records for plans that the household respondent said paid for out-of-network visits. The household respondent has not identified the plan as an PPO or a POS plan but has identified a plan characteristic associated with PPO and POS plans. VISTPAYX has the responses to MC04:

> Will (POLICYHOLDER)'s plan pay for any of the costs of visits to doctors who are **not** associated with (POLICYHOLDER)'s plan, even if (POLICYHOLDER) (do/does) **not** have a referral?

when both the following conditions are met:

1. If the person did not say the plan is an HMO (HX03, HX23, HX49, HX51, HX54, MC01)

2. If the respondent answered "yes" to the gatekeeper question (MC02) or answered "yes" to the list of doctors question (MC03)

VISTPAYX is set to "inapplicable" when the plan is not hospital/physician or Medicare supplemental coverage, when the plan is an HMO, or when the plan does not require a gatekeeper and does not have a list of doctors.

An additional managed care question (MC05) was asked to differentiate between HMOs and POS plans, but due to an error in the skip logic of the questionnaire, the data were not collected for all relevant plans, and this variable will not be publicly released.

3.5.2 Family Satisfaction with Plan

Satisfaction with plan questions were asked at round 2 for families where at least one member was covered by the plan at the time of the round 2 interview. The variable SATELIG indicates whether the policyholder-establishment was eligible for the Round 2 Satisfaction with plan questions. Records with SATELIG=2 should be excluded from estimates made with the Round 2 Satisfaction with Plan data. Respondents were eligible for the satisfaction with plan questions if someone in the RU was covered by the plan on the date of the interview and the insurance was hospital/physician or Medicare supplemental coverage.

The satisfaction with plan variables are APPT, CHANPROV, COSTQUAL, CUSTSRV, DIFFREF, PAIDLESS, PLANREF, PLANSAT, RECPLAN, SATAMT, SATCHOIC, SATCOVH, SATCOVMH, SATCOVP, SATCOVPM, SATCS, SATPAPER.

When multiple RU members were covered by the same private plan, the respondent answered the questions once and described satisfaction for the policyholder and family members. These family-level responses are on each round 2 covered person-policyholder-establishment record for the

policyholder-establishment and do not vary across covered persons.

3.5.3 Change in Plan Name

The variable NAMECHNG indicates whether the name of the plan obtained through the establishment changed from the prior round. For rounds 2 and 3, NAMECHNG is set to "yes" if someone in the RU had coverage through the establishment in the prior round and still had coverage at the time of the interview, and the respondent answered yes to the following question (OE09, OE23, OE35):

> Since (START DATE), has there been any change in the plan name of the health insurance (POLICYHOLDER) has through (ESTABLISHMENT)?

If the respondent answered no, then NAMECHNG is coded no. If no one in the RU had coverage through the establishment in the prior round, no one had coverage at the time of the interview, or it is a round 1 record, then NAMECHNG is set to "inapplicable."

When the respondent answered yes, then MEPS HC asked about types of benefits and managed care, which are updated on the PRPL file.

There are two important caveats to this variable. First, changes in plan name do not necessarily imply the plan itself changed. For example, the plan may have merely changed its name for marketing purposes. Second, the variable NAMECHNG pertains only to changes in plan names at the same establishment; a policyholder may switch plans if she or he switches the establishment (including employer) through which he or she obtains insurance. Switches in EPRSIDs and ESTBIDs between rounds indicate those other types of changes.

3.6 Links to Job Providing Insurance

For employment-based insurance, there are two variables linking the insurance to details about the jobs through which the insurance was obtained, CMJINS and JOBSIDX.

Most people with employment-based insurance have it through current main jobs. The variable CMJINS indicates whether the insurance is through a current main job. When the insurance is not employment-based, then CMJINS is set to "inapplicable." Generally, many edited and imputed variables describing policyholders' current main jobs are available on HC-001 and HC-012. If CMJINS =1 and the policyholder has a PUF record (PUF1FLG or PUF12FLG), then edited and imputed current main jobs variables are available on the indicated PUF.

For other types of jobs (for example, former jobs), the JOBS file (HC-007) contains edited variables describing the job. JOBSIDX is the link to the record for the job in the JOBS file that is the source of coverage. This link is slightly complicated, because one self-employed person with firm size one has two physician/hospital plans, and both plans link to the same JOBS file record. In addition, the variable JOBSINFR indicates links that were inferred, rather than obtained directly from the respondent. Links were inferred because when persons reported employment-based health insurance at the end of the insurance section (HX23), the plan is not always easily linked to a specific job. Most

of these cases were directly linked by establishment IDs, but others required inferences based on whether the insurance was through a current or former job (HP12), and some could not be linked at all.

4.0 References

U.S. Department of Labor. Pension and Welfare Benefits Administration. 1999. Health Benefits Under the Consolidated Omnibus Budget Reconciliation Act (COBRA). Washington, DC. [Available on-line at: http://www.dol.gov/ebsa/pdf/cobra99.pdf]

Appendix 1

Variable Source Crosswalk

VARIABLE TO SOURCE CROSSWALK
FOR MEPS PUBLIC USE FILE HC-024

HEALTH INSURANCE VARIABLES - SOURCE

Variable	Label	Source
PHOLDER	POLICY HOLDER	HP 9, 11
DEPENDNT	DEPENDENT OF POLICY HOLDER	PRIVCAT, PHOLDER
CMJINS	CMJ AS THE SOURCE OF PLAN: 1 YES, 2 NO	PRIVCAT, RJ01A, RJ0189A, EM08, EM14
EVALCOVR	COVERED @ INTERVIEW OR 12/31	HQ1, 2
STATUS1 - STATUS12	STATUS -MONTH 1 through STATUS -MONTH 12	HQ1, 2, 3, 4, 5
TYPEFLAG	TYPE OF ESTABLISHMENT	HX 3, 23; EM 6, 8, 12, 14, 19, 22, 23, 28, 31, 32, 41, 44, 45, 54, 57, 58, 71, 74, 75, 83, 86, 87, 118, 120
PRIVCAT	CATEGORY OF PRIVATE COVERAGE	HX 2, 3, 23, 48, 61, 63; HP 1, 2, 9, 11, 15, 16; EM 17, 18, 26, 27, 39, 40, 52, 53, 69, 70, 81, 82, 91, 92, 117
HOSPINSX	TYPE OF HI GOTTEN: HOSPITAL/HMO (EDITED)	HX48
MSUPINSX	TYPE OF HI GOTTEN: MEDIGAP (EDITED)	HX48
DENTLINS	TYPE OF HI GOTTEN: DENTAL	HX48
VISIONIN	TYPE OF HI GOTTEN: VISION	HX48
LTCINS	TYPE OF HI GOTTEN: LTC-NURSING HOME	HX48
PMEDINS	TYPE OF HI GOTTEN: PRESCRIPTION DRUG	HX48
COBRA	COBRA COVERAGE: 1=YES, 2=NO	HX 3, 23; HP12, 14 ; OE14; EM 8, 9, 14, 15, 22, 23, 24, 31, 32, 33, 44, 46, 57, 58, 74, 75, 76, 80, 85A, 86, 87, 88; RJ 1A, 189A; PRIVCAT

Variable	Label	Source
COVTYPIN	COVERAGE @INTVW: 1=SINGLE, 2=FAMILY	HP 15, 16, 17
OOPELIG	FLAG: POLICYHOLDER ESTB HAS PREMIUM	RN; TYPEFLAG; HX 3, 23; HP14
OOPPREM	MONTHLY OUT-OF-POCKET PREMIUM, R1 (ED)	HX 61, 62
PREMLEVX	HOW MUCH OF PREMIUM PAID BY FAM (ED)	HX 61, 62
BYFED	FEDERAL GOVT PAID FOR PRIV PLAN PREMIUM	HX63
BYSTATE	STATE GOVT PAID FOR PRIV PLAN PREMIUM	HX63
BYLOCAL	LOCAL GOVT PAID FOR PRIV PLAN PREMIUM	HX63
BYSOMGOV	SOME GOVT PAID FOR PRIV PLAN PREMIUM	HX63
BYEMPL	EMPLOYER PAID FOR PRIV PLAN PREMIUM	HX63
BYUNION	UNION PAID FOR PRIV PLAN PREMIUM	HX63
BYOTHER	OTHER PAID FOR PRIV PLAN PREMIUM	HX63
UPRHMO	HMO COVERAGE (FROM PRPL)	HX 3, 23, 49_02.TYPE, 50_02.TYPE, 54_02.TYPE; MC 1
UPRMNC	PLAN REQRD COVRD PERS USE GATEKEEPER	MC 2
DRLIST	DOES PLAN HAVE A BOOK/LIST OF DOCTORS?	MC 3
VISITPYX	PLAN PAY FOR NON-HMO, NON-REFER DR VISIT (ED)	MC 4
NAMECHNG	HAS THERE BEEN A CHANGE IN PLAN NAME	OE 9, 23, 35
SATELIG	ELIG. FOR SATIS. PLAN QUEST: 1=YES, 2=NO	PRIVCAT, RN, EVALCOVR

Variable	Label	Source
APPT	HOW DIFFICULT TO GET SPECIALIST APPT?	SP 7
CHANPROV	DID HAVE TO CHANGE PRIMARY CARE PROVIDER	SP 5
COSTQUAL	IMPORTANCE COST/QUALITY IN CHOOSING PLAN	SP 15
CUSTSRV	HAS CALLED CUSTOMER SERVICE/ADMIN OFFICE	SP 11
DIFFREF	HOW DIFFICULT TO GET SPECIALIST REFERRAL	SP 6
PAIDLESS	HAS PLAN PAID LESS THAN EXPECTED?	SP 10
PLANREF	PLAN REFUSED TO PAY FOR OR APPROVE CARE	SP 9
PLANSAT	SATISFACTION WITH INSURANCE PLAN	SP 2
RECPLAN	LIKELY TO RECOMMEND PLAN?	SP 3
SATAMT	SATISFIED WITH AMOUNT PAID	SP 14
SATCHOIC	HOW SATISFIED WITH CHOICE OF PROVIDER	SP 4
SATCOVH	HOW SATISFIED WITH HOSPITALIZATION?	SP 8_02
SATCOVMH	HOW SATISFIED WITH MENTAL HEALTH SERVICE	SP 8_04
SATCOVP	HOW SATISFIED W/ PREVENTIVE HEALTH CARE?	SP 8_01
SATCOVPM	HOW SATISFIED WITH PRESCRIPTION MEDS?	SP 8_03
SATCS	HAS CALLED CUSTOMER SERVICE/ADMIN OFFICE	SP 12
SATPAPER	SATISFIED W/ AMOUNT/DIFFICULTY PAPERWORK	SP 13