MEPS HC 248C:
2023 Other Medical Expenses

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A. Data Use Agreement

Individual identifiers have been removed from the micro-data contained in these files. 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 they were 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 dataset 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; and

3. No one will attempt to link this dataset with individually identifiable records from any datasets other than the Medical Expenditure Panel Survey or the National Health Interview Survey. Furthermore, linkage of the Medical Expenditure Panel Survey and the National Health Interview Survey may not occur outside the AHRQ Data Center, NCHS Research Data Center (RDC) or the U.S. Census RDC network.

By using these 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 Title 18 part 1 Chapter 47 Section 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

1.0 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 care. Estimates can be produced for individuals, families, and selected population subgroups. The panel design of the survey includes five rounds of interviews covering 2 full calendar years. Information about each household member is collected through computer-assisted personal interviewing (CAPI) technology 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. Historically, each annual MEPS HC sample consists of up to 15,000 households. Data can be analyzed at the person, the family, or the 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 (NCHS). The NHIS sampling frame provides a nationally representative sample of the U.S. civilian noninstitutionalized population. In 2006, NCHS implemented a new sample design for the NHIS, to include households with Asian persons in addition to households with Black and Hispanic persons in the oversampling of minority populations. In 2016, NCHS introduced another sample design that discontinued the oversampling of these minority groups.

2.0 Medical Provider Component

When the household CAPI interview is completed, and permission is obtained from the sample members to contact their medical provider(s), a sample of these providers is 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 it collects information on dates of visits, diagnosis and procedure codes, and charges and payments. The Pharmacy Component (PC), a subcomponent of the MPC, does not collect data on charges or on diagnosis and procedure codes, but it does collect detailed information on drugs, including the National Drug Code (NDC) and medicine name, as well as amounts of payment. The MPC is not designed to yield national estimates. It is primarily used as an imputation source to supplement/replace household reported expenditure information.

3.0 Survey Management and Data Collection

MEPS HC and MPC data are collected under the authority of the Public Health Service Act. The MEPS HC data are collected under contract with Westat, Inc. and the MEPS MPC data are collected under contract with Research Triangle Institute. Datasets and summary statistics are edited and published in accordance with the confidentiality provisions of the Public Health Service Act and the Privacy Act. The NCHS provides consultation and technical assistance.

As soon as the MEPS data are collected and edited, they are released to the public in stages of microdata files and tables via the MEPS website and datatools.ahrq.gov.

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, 5600 Fishers Lane, Rockville, MD 20857 (301-427-1406).

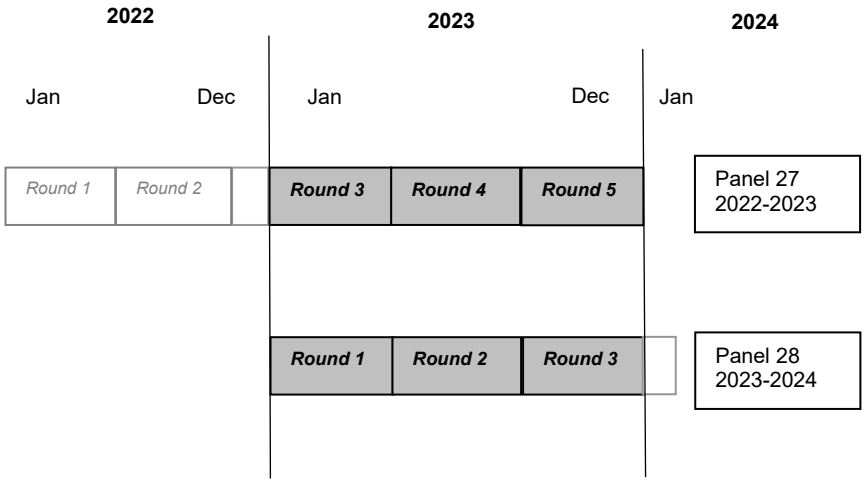
C. Technical and Programming Information

1.0 General Information

This documentation describes one in a series of public use event files from the 2023 MEPS HC. It was released as an ASCII data file (with related SAS, SPSS, R, and Stata programming statements and data user information) and as a SAS dataset, a SAS transport file, a Stata dataset, and an Excel file. The 2023 Other Medical Expenses public use event file (hereafter referred to as the OME PUF) provides information on the purchases of and expenditures for visual aids, medical equipment, supplies, and other medical items for a nationally representative sample of the U.S. civilian noninstitutionalized population. Data from the OME PUF can be used to make estimates of the Other Medical event expenditures associated with medical items for the calendar year 2023. The purchase of medical equipment, supplies, and other medical items is based entirely on household reports. They were not included in the Medical Provider Component (MPC); therefore, all expenditure and payment data on the OME PUF are reported by the household.

This file contains 23 variables and has a logical record length of 152 with an additional 2-byte carriage return/line feed at the end of each record. As illustrated below, this PUF consists of MEPS survey data obtained in the 2023 portion of Round 3 and all of Rounds 4 and 5 for Panel 27; and Rounds 1, 2, and the 2023 portion of Round 3 for Panel 28 (i.e., the rounds for the MEPS panels covering the calendar year 2023).

Full-year (FY) 2023 includes two panels of data.



The OME PUF contains one record for each type of medical item reported as being purchased or otherwise obtained by a household member during the specified reference period. It should be noted that prior to Panel 21 Round 5 and Panel 22 Round 3, questions regarding glasses/contact

lenses were asked in every round, and questions regarding other medical types were asked only in Round 3 and Round 5 for events incurred for the whole year. Starting in Panel 21 Round 5 and Panel 22 Round 3, all OM-type questions are asked in every round.

Other medical expense categories included in this file are:

- Glasses or contact lenses
- Ambulance services
- Disposable supplies
- Long-term medical equipment (such as mobility aids, hearing devices, equipment used at home and alterations/modifications, etc.)

Data from this event file can be merged with other 2023 MEPS HC data files to append person-level data, such as demographic characteristics or health insurance coverage, to each Other Medical record.

This file can also be used to construct summary variables of expenditures, source of payment, and related aspects of the purchase of medical items. Aggregate annual person-level information on expenditures for Other Medical equipment is provided on the MEPS 2023 Full Year Consolidated Data File where each record represents a MEPS sampled person.

This document offers a brief overview of the types and levels of data provided, and the content and structure of the file and the codebook. It contains the following sections:

- Data File Information (Section 2.0)
- Survey Sample Information (Section 3.0)
- Strategies for Estimation (Section 4.0)
- Merging/Linking MEPS Data Files (Section 5.0)
- Variable - Source Crosswalk (Section D)

For more information on the MEPS HC sample design, see Chowdhury et al (2019). A copy of the MEPS HC survey instrument used to collect the information in this OME PUF is available on the MEPS website.

2.0 Data File Information

The 2023 OME PUF consists of one event-level file. The file contains characteristics associated with the Other Medical event and imputed expenditure data.

The 2023 OME PUF contains 11,350 other medical (OM) expenditure records; of these records, 11,226 are associated with persons having a positive person-level weight (PERWT23F). This PUF includes records for all household members who resided in eligible responding households and were reported to have purchased or otherwise obtained at least one type of medical item such as medical equipment, glasses, ambulance services, etc. during the calendar year 2023. Some persons may have been reported to have obtained more than one type of medical item and, therefore, have several records on this file. On the other hand, persons who were not reported to have obtained a medical item in 2023 have no records on this file. These data were collected during the 2023 portion of Round 3, and all of Rounds 4 and 5 for Panel 27; and Rounds 1, 2, and the 2023 portion of Round 3 for Panel 28 of the MEPS HC. The persons represented in this PUF had to meet either (a) or (b) below:

a) Be classified as a Key in-scope person who responded for their entire period of 2023 eligibility (i.e., persons with a positive 2023 full-year person-level weight, PERWT23F > 0), or

b) Be an eligible member of a family whose Key in-scope members have a positive person-level weight (PERWT23F > 0). (Such a family consists of all persons with the same value for FAMIDYR.) That is, the person must have a positive full-year family-level weight (FAMWT23F > 0). Note that FAMIDYR and FAMWT23F are variables on the 2023 Full Year Consolidated PUF.

Persons with no Other Medical events for 2023 are not included on this event-level OM file but are represented on the person-level 2023 Full Year Population Characteristics PUF (hereafter referred to as the Population Characteristics PUF).

Each record includes the following: type of medical item obtained, imputed sources of payment, total payment and total charge for the medical item, and a full-year person-level weight.

To append person-level information such as demographic or health insurance coverage to each event record, data from this PUF can be merged with 2023 MEPS HC person-level data (e.g. Full Year Consolidated or Population Characteristics PUFs) using the person identifier, DUPERSID. Please see Section 5.0 or the Appendix to MEPS 2023 Event Files (hereafter referred to as the Appendix PUF) for details on how to merge MEPS data files.

2.1 Codebook Structure

For most variables on the OME PUF, both weighted and unweighted frequencies are provided in the accompanying codebook. The exceptions to this are weight variables and variance estimation variables. Only unweighted frequencies of these variables are included in the accompanying codebook file. See the Weights Variables list in Section D, “Variable-Source Crosswalk”.

The codebook and data file list variables in the following order:

- Unique person identifier
- Unique Other Medical expenses identifier

- Type of Other Medical expenses
- Imputed expenditure variables
- Weight and variance estimation variables

The person identifier corresponds to a unique person and the other medical expenses identifier corresponds to a unique event.

2.2 Reserved Codes

The following reserved code values are used in the OME PUF:

Table 1

Reserved Code Values and Definitions

Value	Label	Definition
-1	Inapplicable	Question was not asked due to skip pattern
-7	Refused	Question was asked and respondent refused to answer question
-8	Don't know	Question was asked and respondent did not know answer or the information could not be ascertained
-15	Cannot be computed	Value cannot be derived from data

The value -15 (Cannot be Computed) is assigned to MEPS constructed variables in cases where there is not enough information from the MEPS instrument to calculate the constructed variables. "Not enough information" is often the result of skip patterns in the data or from missing information stemming from the responses Refused (-7) or Don't Know (-8). Note that, in addition to Don't Know, reserved code -8 includes cases for which the information from the question was not ascertained.

Generally, values of -1, -7, -8, and -15 for non-expenditure variables have not been edited in this PUF. Analysts who would like to recode these values can find skip patterns in the HC survey questionnaire located on the MEPS website.

2.3 Codebook Format

The codebook describes an ASCII dataset and provides the programming identifiers below for each variable:

Table 2

Programming Identifiers for Each Variable in the Other Medical Events PUF

Identifier	Description
Name	Variable name
Description	Variable descriptor
Format	Number of bytes
Type	Type of data: numeric (indicated by NUM) or character (indicated by CHAR)
Start	Beginning column position of variable in record
End	Ending column position of variable in record

2.4 Variable Source and Naming Conventions

In general, the variable names reflect the content of the variable. All imputed/edited variables end with an "X".

As the collection, universe, or categories of variables were altered, some variable names have been appended with "_Myy", where "yy" indicates the collection year in which the alterations were made. Such alterations are described in detail throughout this document.

2.4.1 Variable - Source Crosswalk

Variables in this OME PUF were derived from the CAPI. The source of each variable is identified in Section D: "Variable-Source Crosswalk" in one of four ways:

1. Variables derived from CAPI or assigned in sampling are indicated as "CAPI derived" or "Assigned in sampling,"

2. Variables from one or more specific questions have those questionnaire sections and question numbers indicated in the "Source" column; questionnaire sections are identified as:

    - EV - Event Roster section
    - CP - Charge Payment section

3. Variables constructed from multiple questions by using complex algorithms are labeled "Constructed" in the "Source" column; and

4. Variables that have been edited or imputed are so indicated.

2.4.2 Expenditure and Source of Payment Variables

The names of the expenditure and source of payment variables follow a standard convention, are seven characters in length, and end in an "X", indicating that they were edited/imputed. Please note that imputed means that a series of logical edits, as well as an imputation process to account for missing data, were performed on the variable.

The total sum of payments and 10 source of payment variables are named in the following way:

The first two characters indicate the type of event:

IP - inpatient stay

ER - emergency room visit

HH - home health visit

OM - other medical equipment

OB - office-based visit

OP - outpatient visit

DV - dental visit

RX - prescribed medicine

In the case of the source of payment variables, the third and fourth characters indicate:

SF - self or family

MR - Medicare

MD - Medicaid

PV - private insurance

VA - Veterans Administration/CHAMPVA

OF - other federal government

SL - state/local government

WC - Workers' Compensation

OT - other insurance

TR - TRICARE

XP - sum of payments

In addition, the total charge variable is indicated by TC in the variable name.

The fifth and sixth characters indicate the year (23). The seventh character, "X", indicates whether the variable is edited/imputed.

For example, OMSF23X is the edited/imputed amount paid by self or family for 2023 other medical equipment and expenditures.

2.5 File Contents

2.5.1 Survey Administration Variables

Person Identifiers (DUID, PID, DUPERSID)

The definitions of Dwelling Units (DUs) in the MEPS Household Survey are generally consistent with the definitions employed for the NHIS. The dwelling unit ID (DUID) is a 7-digit number consisting of a 2-digit panel number followed by a 5-digit random number assigned after the case was sampled for MEPS. A 3-digit person number (PID) uniquely identifies each person within the DU. The variable DUPERSID is the combination of the variables DUID and PID. IDs begin with the 2-digit panel number.

For detailed information on dwelling units and families, please refer to the documentation for the 2023 Population Characteristics PUF.

Record Identifiers (EVNTIDX)

EVNTIDX uniquely identifies each Other Medical expense event (i.e., each record on this PUF). EVNTIDX begins with the 2-digit panel number and ends with the 2-digit event type number. For details on linking, see Section 5.0: Merging/Linking MEPS Data Files, or the MEPS 2023 Appendix PUF, HC 248I.

Round Indicator (EVENTRN)

EVENTRN indicates the round in which the Other Medical event was reported. Each record represents a summary of expenditures for items purchased or otherwise obtained for 2023. Starting with Panel 22, the Round 3 questions relating to the number of times glasses or contact lenses were obtained in each year of a panel have been eliminated due to design changes. Instead, if a person's reference period crosses between year one and year two of a panel, the question 'whether a particular OM type was purchased/used' for each of the four OM types (glasses/contacts, ambulance services, disposable supplies, and long-term medical equipment) is asked separately for each of two years of a panel. Please note: Rounds 3 (partial), 4, and 5 are associated with data collected from Panel 27; and Rounds 1, 2, and 3 (partial) are associated with data collected from Panel 28.

Panel Indicator (PANEL)

PANEL is a constructed variable used to specify the panel number for the person. PANEL will indicate either Panel 27 or Panel 28 for each person on the PUF. Panel 27 is the panel that started in 2022 and Panel 28 is the panel that started in 2023.

2.5.2 Other Medical Type Variable (OMTYPE_M18)

Other medical expenditures (OMTYPE_M18) include glasses or contact lenses, ambulance services, disposable supplies and long-term medical equipment. The OM type questions are asked in every round.

2.5.3 Condition Codes

Conditions data are not collected for Other Medical events; therefore, this PUF cannot be linked to the Conditions PUF.

2.5.4 Expenditure Data

Definition of Expenditures

Expenditures in this PUF refer to payments for the medical item. More specifically, expenditures in MEPS are defined as the sum of payments for each medical item that was obtained, including out-of-pocket payments and payments made by private insurance, Medicaid, Medicare and other sources. The definition of expenditures used in MEPS differs from its predecessors, the 1987 NMES and 1977 NMCES surveys, where "charges" rather than the sum of payments were used to measure expenditures. This change was adopted because charges became a less appropriate proxy for medical expenditures during the 1990s due to the increasingly common practice of discounting. Although measuring expenditures as the sum of payments incorporates discounts in the MEPS expenditure estimates, these estimates do not incorporate any payment not directly tied to specific medical care events, such as bonuses or retrospective payment adjustments paid by third party payers. Currently, charges associated with uncollected liability, bad debt, and charitable care (unless provided by a public clinic or hospital) are not counted as expenditures because there are no associated payments. While charge data are provided in this PUF, analysts should use caution when working with these data because a charge does not typically represent actual dollars exchanged for services or the resource costs of those services, nor are they directly comparable to the expenditures defined in the 1987 NMES. For details on expenditure definitions, see Monheit et al. (1999). AHRQ has developed factors to apply to the 1987 NMES expenditure data to facilitate longitudinal analysis. These factors are published in Zuvekas and Cohen (2002), and also can be accessed via the CFACT data center. For more information, see the Data Center section of the MEPS website. If examining trends in MEPS expenditures, please refer to Section C, sub-Section 3.5 for more information.

Data Editing and Imputation Methodologies of Expenditure Variables

The general methodology used for editing and imputing expenditure data is described below. The MPC did not include dental events or other medical expenditures (such as glasses, ambulance, and disposable supplies). Therefore, although the general procedures remain the same for dental and other medical expenditures, editing and imputation methodologies were applied only to household-reported data. Please see below for details on the differences between these

editing/imputation methodologies. Separate imputations were performed for simple (non-flat fee) events.

General Data Editing Methodology

Logical edits were used to resolve internal inconsistencies and other problems in the HC data. The edits were designed to preserve partial payment data from households and providers, and to identify actual and potential sources of payment for each household-reported event. In general, these edits accounted for outliers, copayments or charges reported as total payments. In addition, edits were implemented to correct for misclassifications between Medicare and Medicaid, and between Medicare HMOs and private HMOs as payment sources. These edits produced a complete vector of expenditures for some events and provided the starting point for imputing missing expenditures in the remaining events.

Imputation Methodologies

The predictive mean matching imputation method was used to impute missing expenditures. This procedure uses regression models (based on events with completely reported expenditure data) to predict total expenses for each event. Then, for each event with missing payment information, a donor event with the closest predicted payment with the same pattern of expected payment sources as the event with the missing payment was used to impute the missing payment value.

A weighted sequential hot-deck procedure was used to impute the missing total charges. This procedure uses survey data from donors to replace missing data while taking into account the donors' weighted distribution in the imputation process to ensure that the weighted distribution of recipients' expenditures reflects the weighted distribution of the donors' expenditures.

Other Medical Expenses Data Editing and Imputation

The CAPI instrument collects the total charge and out-of-pocket expenditures for disposable supplies (OMTYPE_M18=3) in a range format. The ranges were replaced with mean dollar amounts of respective expenditures reported in each range in prior years.

Table 3

Total Charge Expenditure Ranges and Mean Dollar Replacement Amounts

Total Charge Range for OMTYPE_M18=3	Mean Dollar Amounts
$0	$0
$1 - $10	$8.10
$11 - $30	$20.50
$31 - $100	$57.80
$101 or more	$1,571.70

Table 4

Out of Pocket Payment Ranges and Mean Dollar Replacement Amounts

Out of Pocket Payment Range for OMTYPE_M18=3	Mean Dollar Amounts
$0	$0
$1 - $10	$6.70
$11 - $30	$20.40
$31 - $100	$56.20
$101 or more	$442.60
-7, -8, -15	-8

Expenditures on other medical equipment and services were developed in a sequence of logical edits and imputations. The household edits were used to correct obvious errors in the reporting of expenditures, and to identify actual and potential sources of payments. Some of the edits were global (i.e., applied to all events). Others were hierarchical and mutually exclusive.

Logical edits were used to sort each event into a specific category for the imputations. Events with complete expenditures were flagged as potential donors for the predictive mean imputations, while events with missing expenditure data were assigned to various recipient categories based on the extent of their missing charge and expenditure data. For example, an event with a known total charge but no expenditure information was assigned to one category, while an event with a known total charge and partial expenditure information was assigned to a different category. Similarly, events without a known total charge and no or partial expenditure information were assigned to separate recipient categories.

The logical edits produced nine recipient categories for events with missing data. Eight of the categories were for events with a common pattern of missing data and a primary payer other than Medicaid. Medicaid events were imputed separately because persons on Medicaid rarely know the provider's charge for services or the amount paid by the state Medicaid program. As a result, the total charge for Medicaid-covered services was imputed and discounted to reflect the amount that a state program might pay for the care.

Separate predictive mean imputations were used to impute missing data in each of the eight recipient categories. The donor pool included "free events" because in some instances, providers are not paid for their services. These events represent charity care, bad debt, provider failure to bill, and third party payer restrictions on reimbursement in certain circumstances. If free events were excluded from the donor pool, total expenditures would be over-counted because the distribution of free events among complete events (donors) is not represented among incomplete events (recipients).

Imputation Flag Variable (IMPFLAG)

IMPFLAG is a six-category variable that indicates if the event contains complete HC or MPC data, was fully or partially imputed, or was imputed in the capitated imputation process (for OP and OB events only). The following list identifies how the imputation flag is coded; the categories are mutually exclusive.

IMPFLAG = 0 not eligible for imputation (includes zeroed out events)

IMPFLAG = 1 complete HC data

IMPFLAG = 2 complete MPC data (not applicable to OM events)

IMPFLAG = 3 fully imputed

IMPFLAG = 4 partially imputed

IMPFLAG = 5 complete MPC data through capitation imputation (not applicable to OM events)

Flat Fee Expenditures

A flat fee is the fixed dollar amount a person is charged for a package of health care services provided during a defined period of time. Other Medical service events cannot be reported as a flat fee group.

Zero Expenditures

Some respondents reported persons obtaining medical items where the payments were zero. This could occur when (1) the item or service was free or (2) bad debt was incurred. If all of the medical events for a person fell into one of these categories, then the total annual expenditures for that person would be zero.

Sources of Payment

In addition to total expenditures, variables are provided which itemize expenditures according to major source of payment categories. These categories are:

1. Out-of-pocket by User (self or family) - includes any deductible, coinsurance, and copayment amounts not covered by other sources, as well as payments for services and providers not covered by the person's insurance or other sources,
2. Medicare,
3. Medicaid,

4. Private Insurance,
5. Veterans Administration/CHAMPVA, excluding TRICARE,
6. TRICARE,
7. Other Federal Sources - includes Indian Health Service, military treatment facilities, and other care by the federal government,
8. Other State and Local Source - includes community and neighborhood clinics, state and local health departments, and state programs other than Medicaid,
9. Workers' Compensation, and
10. Other Unclassified Sources - includes sources such as automobile, homeowner's, and liability insurance, and other miscellaneous or unknown sources.

Other Medical Expenditure Variables (OMSF23X-OMTC23X)

Other medical expenditure data were obtained only through the HC Survey. For cases with missing expenditure data, Other Medical expenditures were imputed using the procedures described above.

OMSF23X - OMOT23X are the 10 sources of payment. OMTC23X is the total charge, and OMXP23X is the sum of the 10 sources of payment for the other medical expenditures. The 10 sources of payment are: self/family (OMSF23X), Medicare (OMMR23X), Medicaid (OMMD23X), private insurance (OMPV23X), Veterans Administration/CHAMPVA (OMVA23X), TRICARE (OMTR23X), other federal sources (OMOF23X), state and local (non-federal) government sources (OMSL23X), Workers' Compensation (OMWC23X), and other insurance (OMOT23X).

Rounding

Expenditure variables in the 2023 OME PUF have been rounded to the nearest penny. Person-level expenditure information to be released on the MEPS 2023 Consolidated PUF will be rounded to the nearest dollar. It should be noted that using the MEPS event PUFs to create person-level totals will yield slightly different totals than those found on the Consolidated PUF. These differences are due to rounding only. Moreover, in some instances, the number of persons with expenditures in the event PUFs for a particular source of payment may differ from the number of persons with expenditures in the person-level expenditure PUF for that source of payment. This difference is also an artifact of rounding only.

3.0 Survey Sample Information

3.1 Discussion of Pandemic Effects on Quality of MEPS Data

Modification to the MEPS sample design because of the pandemic ended in 2022. Concerns of potential bias due to these modifications should no longer apply to data collected in this PUF. However, like most other surveys, MEPS has been substantially affected by the pandemic. As a result of these changes, potential bias continues to be a concern. One effect of the pandemic is the significantly lower response rates (Section 3.2), and these lower rates might differentially exclude households more likely to experience IP stays. The demographic shifts on MEPS between 2019 and 2022 suggest a more educated, higher-income, older MEPS sample. (For more detail, see Section 3.1 of the 2020 Consolidated PUF, Section 3.1 of the 2021 Consolidated PUF, and Section 3.1.2 of the 2022 Consolidated PUF.)

Analyses undertaken to examine the quality of the MEPS FY 2023 data compare health care utilization and health insurance coverage for the MEPS target population between the panels fielded. These comparisons were undertaken for the full sample and the three age groups of 0-17, 18-64, and 65+. These comparisons found no abnormal differences between the two panels. Analyses across years also suggest a rebound to pre-pandemic utilization levels for most key event types.

The various actions taken in the development of the person-level weights for the MEPS FY 2023 data were designed to limit the potential for response bias. However, evaluations of MEPS data quality in 2020 through 2022 suggest that analysts of the MEPS FY 2023 Population Characteristics PUF should continue to exercise caution when interpreting estimates and assessing analyses based on data collected from these three calendar years. This includes the comparison of such estimates to those of other years and corresponding trend analyses.

3.2 Sample Weight (PERWT23F)

There is a single full-year person-level weight (PERWT23F) assigned to each record for each Key, in-scope person who responded to MEPS for the full period of time that they were in scope during 2023. A Key person was either a member of a responding NHIS household at the time of the interview or joined a family associated with such a household after being out of scope at the time of the NHIS (the latter circumstance includes newborns as well as those returning from military service, an institution, or residence in a foreign country). A person is in scope whenever they are a member of the civilian noninstitutionalized portion of the U.S. population.

3.3 Details on Person Weight Construction

The person-level weight PERWT23F was developed in several stages. First, a person-level weight for Panel 27 was created, including an adjustment for nonresponse over time and raking. The raking involved adjusting to several sets of marginal control totals reflecting Current Population Survey (CPS) population estimates based on six variables. The six variables used in

the establishment of the initial person-level control figures were: educational attainment of the reference person (three categories: no degree; high school/GED only or some college; bachelor's or a higher degree); Census region (Northeast, Midwest, South, West); MSA status (MSA, non-MSA); race/ethnicity (Hispanic; Black, non-Hispanic; Asian, non-Hispanic; and other); sex; and age (0-18, 19-25, 26-34, 35-44, 45-64, and 65 or older). (Note, however, that for confidentiality reasons, the MSA status variables are no longer released for public use.) The person-level weight for Panel 28 was created similarly. Secondly, a composite weight was formed by multiplying each weight from Panel 27 by the factor .40 and each weight from Panel 28 by the factor .60. The choice of factors reflected the relative effective sample sizes of the two panels, helping to limit the variance of estimates obtained from pooling both samples. Weights for the 2023 Population Characteristics PUF were then developed by raking the composite weight to the same set of CPS-based control totals.

The approach for establishing the 2023 Consolidated PUF weight is as follows. When poverty status information derived from MEPS income variables becomes available, a final raking is undertaken. The full sample weight appearing on the Population Characteristics PUF for a given year is re-raked, replacing educational attainment with poverty status while retaining the other five raking variables previously indicated. Specifically, control totals based on CPS estimates of poverty status (five categories: below poverty, from 100 to 125 percent of poverty, from 125 to 200 percent of poverty, from 200 to 400 percent of poverty, at least 400 percent of poverty) as well as age, race/ethnicity, sex, region, and MSA status are used to calibrate weights.

3.3.1 MEPS Panel 27 Weight Development Process

The person-level weight for MEPS Panel 27 was developed by using the 2022 full-year weight as a "base" weight for survey participants present in 2023.

For Key, in-scope members who joined an RU at some time in 2023 after being out of scope in 2022, the initially assigned person-level weight was the corresponding 2022 family weight. The weighting process also included an adjustment for person-level nonresponse over Rounds 4 and 5 as well as raking to the population control figures for December 2023 for Key, responding persons in scope on December 31, 2023. These control totals were derived by scaling back the population distribution obtained from the March 2024 CPS to reflect the December 31, 2023 estimated population total (estimated based on Census projections for January 1, 2024). Variables used for person-level raking included: education of the reference person (no degree, high school/GED only or some college, bachelor's or a higher degree); Census region (Northeast, Midwest, South, West); MSA status (MSA, non-MSA); race/ethnicity (Hispanic; Black, non-Hispanic; Asian, non-Hispanic; and other); sex; and age. (Note, however, that for confidentiality reasons, the MSA status variables are no longer released for public use.) The final weight for Key, responding persons who were not in scope on December 31, 2023 but were in scope earlier in the year was the nonresponse-adjusted person weight without raking.

Note that the 2022 full-year weight that was used as the base weight for Panel 27 was derived using the 2022 MEPS Round 1 weight and reflected adjustment for nonresponse over the remaining data collection rounds in 2022 as well as raking to the December 2022 population control figures.

3.3.2 MEPS Panel 28 Weight Development Process

The person-level weight for Panel 28 was developed using the 2023 Round 1 person-level weight as a "base" weight. The Round 1 weights incorporated the following components: the original household probability of selection for the NHIS and for the NHIS subsample reserved for the MEPS, an adjustment for NHIS nonresponse, the probability of selection for MEPS from the NHIS, an adjustment for nonresponse at the dwelling unit level for Round 1, and raking to control figures at the person level obtained from the March CPS of the corresponding year. For Key, in-scope members who joined an RU after Round 1, the Round 1 DU weight served as a "base" weight.

The weighting process also included an adjustment for nonresponse over the remaining data collection rounds in 2023 as well as raking to the same population control figures for December 2023 that were used for the Panel 27 weight for Key, responding persons in scope on December 31, 2023. The same six variables used for Panel 27 raking (education level of the reference person, Census region, MSA status, race/ethnicity, sex, and age) were also used for Panel 28 raking. Similar to Panel 27, the Panel 28 final weight for Key, responding persons who were not in scope on December 31, 2023 but were in scope earlier in the year was the nonresponse-adjusted person weight without raking.

3.3.3 The Final Weight for 2023

The final raking of those in scope at the end of the year has been described above. In addition, the composite weights of two groups of persons who were out of scope on December 31, 2023 were adjusted for expected undercoverage. Specifically, the weights of those who were out of scope on December 31, 2023, but in scope at some time during the year and were residing in a nursing home at the end of the year were poststratified to an estimate of the number of persons who were residents of Medicare- and Medicaid-certified nursing homes for part of the year (approximately 3-9 months) during 2014. This estimate was developed from data on the Minimum Data Set (MDS) of the Center for Medicare and Medicaid Services (CMS). The weights of persons who died while in scope were poststratified to corresponding estimates derived using data obtained from the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Provisional Mortality Statistics, 2018 through Last Week on CDC WONDER Online Database, released in 2024, the latest available data at the time. Separate decedent control totals were developed for the "65 and older" and "under 65" civilian noninstitutionalized populations.

Overall, the weighted population estimate for the civilian noninstitutionalized population for December 31, 2023 is 330,710,135 (PERWT23F >0 and INSC1231=1). The sum of person-level weights across all persons assigned a positive person-level weight is 334,530,273.

3.4 Coverage

The target population associated with MEPS is the 2023 U.S. civilian noninstitutionalized population. However, the MEPS sampled households are a subsample of the NHIS households interviewed in 2021 (Panel 27) and 2022 (Panel 28). New households created after the NHIS

interviews for the respective panels and consisting exclusively of persons who entered the target population after 2021 (Panel 27) or after 2022 (Panel 28) are not covered by the 2023 MEPS. Nor are previously out of scope persons who joined an existing household but are not related to the current household residents. Persons not covered by a given MEPS panel thus include some members of the following groups: immigrants, persons leaving the military, U.S. citizens returning from residence in another country, and persons leaving institutions. Those not covered represent a small proportion of the MEPS target population.

3.5 Using MEPS Data for Trend Analysis

For analysts using the MEPS data for trend analysis, we note that there are uncertainties associated with 2020, 2021, and 2022 data quality for reasons discussed throughout Section 3. Evaluations of important MEPS estimates suggest that they are of reasonable quality. Nevertheless, analysts are advised to exercise caution in interpreting these estimates, particularly in terms of trend analyses, since access to health care was substantially affected by the pandemic, as were related factors such as health insurance and employment status for many persons.

The MEPS began in 1996, and the utility of the survey for analyzing health care trends expands with each additional year of data; however, when examining trends over time using the MEPS, the length of time being analyzed should be considered. In particular, large shifts in survey estimates over short periods of time (e.g. from one year to the next) that are statistically significant should be interpreted with caution unless they are attributable to known factors such as changes in public policy, economic conditions, or the MEPS methodology.

With respect to methodological considerations, changes in data collection methods, such as interviewer training, were introduced in 2013 to obtain more complete information about health care utilization from MEPS respondents; the changes were fully implemented in 2014. This effort likely resulted in improved data quality and a reduction in underreporting starting in the second half of 2013 and continuing throughout the 2014 full year files; the changes have also had some impact on analyses involving trends in utilization across years. The changes in the NHIS sample design in 2016 and 2018 could also potentially affect trend analyses. The new NHIS sample design is based on more up-to-date information related to the distribution of housing units across the United States. As a result, it can be expected to better cover the full civilian noninstitutionalized population, the target population for MEPS, as well as many of its subpopulations. Better coverage of the target population helps to reduce the potential for bias in both NHIS and MEPS estimates.

Another change with the potential to affect trend analyses involved major modifications to the MEPS instrument design and data collection process, particularly in the events sections of the instrument. These were introduced in the spring of 2018 and thus affected data beginning with Round 1 of Panel 23, Round 3 of Panel 22, and Round 5 of Panel 21. Since the full year 2017 MEPS files were established from data collected in Rounds 1-3 of Panel 22 and Rounds 3-5 of Panel 21, they reflected two instrument designs. To mitigate the effect of such differences within the same full-year file, the Panel 22 Round 3 data and the Panel 21 Round 5 data were transformed to make them as consistent as possible with data collected under the previous design. The changes in the instrument were designed to make the data collection effort more

efficient and easier to administer. In addition, expectations were that data on some items, such as those related to health care events, would be more complete with the potential of identifying more events. Increases in service use reported since the implementation of these changes are consistent with these expectations. *Analysts should be aware of the possible impacts of these changes on the data and especially trend analyses that include the year 2018 because of the design transition.*

Process changes, such as data editing and imputation, may also affect trend analyses. For example, analysts should refer to Section 2.5.11: Utilization, Expenditures, and Sources of Payment Variables in the Consolidated PUF (HC 251) and, for more detail, to the documentation for the prescription drug file (HC 248A) when analyzing prescription drug spending over time.

As always, it is recommended that, before conducting trend analyses, analysts should review relevant sections of the documentation for descriptions of these types of changes that might affect the interpretation of changes over time.

To smooth or stabilize trend analyses based on the MEPS data, analysts may also wish to consider using statistical techniques such as comparing pooled time periods (e.g. 1996-1997 versus 2011-2012), working with moving averages, or using modeling techniques with several consecutive years of the data.

Finally, statistical significance tests should be conducted to assess the likelihood that observed trends are not attributable to sampling variation. In addition, researchers should be aware of the impact of multiple comparisons on Type I error. Without making appropriate allowance for multiple comparisons, conducting numerous statistical significance tests of trends will increase the likelihood of concluding that a change has taken place when one has not.

4.0 Strategies for Estimation

This file is constructed for estimation of utilization, expenditures, and sources of payment for Other Medical expenditures and to allow for estimates for the number of persons who obtained medical items in 2023.

4.1 Basic Estimates of Utilization, Expenditures, and Sources of Payment

This file contains round-specific expenditure data on purchases of each type of medical equipment, supplies, and services (see description below and OMTYPE_M18 variable in codebook for more details). Data are not collected on the actual number of purchases of the items/services represented on this file, so it is not possible to estimate the average expenditure per unit of service.

Records for purchases of insulin and diabetic supplies were included in the OME PUFs for 1996-2004. Beginning with the 2005 file, these records were excluded from the OME PUF since the expenditures have always been included on the Prescribed Medicines PUF. The Prescribed

Medicines file is a more appropriate source for estimates of both utilization and expenditures for insulin and diabetic supplies.

Each record on this file contains person-specific information on total expenditures during a specific round for a given category of medical equipment, services, and supplies (a maximum of 3 records per category of medical equipment for a sample person). Variables for annual expenditure data for each category of medical equipment, services, and supplies (obtained by cumulating across round-specific data in this file) are included on the annual Full Year Consolidated File.

Estimates of the total number of persons with expenditures for an item during the year are the sum of the weight variable (PERWT23F) across relevant records (e.g., for ambulance services, records where OMTYPE_M18 = 2). Estimates of expenditure variables must be weighted by PERWT23F to be nationally representative. For example, the estimate for the total expenditures for ambulance services paid out of pocket is produced by summing the product of the variables PERWT23F and OMSF23X across all the events in the file where OMTYPE_M18 = 2 as follows (the subscript 'j' identifies each event and represents a numbering of events from 1 through the total number of events in the file):

$\sum W_j X_j$, where

W_j = PERWT23F$_j$ (full-year weight for the person associated with event j) and

X_j = OMSF23X$_j$ (amount paid by self/family for event j) where OMTYPE_M18 = 2.

The estimate for the average expenditures for ambulance services paid out of pocket per person per round with that type of expense is produced as follows (the subscript 'j' identifies each event and represents a numbering of events from 1 through the total number of events in the file):

$(\sum W_j X_j)/(\sum W_j)$, where

W_j = PERWT23F$_j$ (full-year weight for the person associated with event j) and

X_j = OMSF23X$_j$ (amount paid by self/family for event j) where OMTYPE_M18 = 2.

This type of estimate and corresponding standard error (SE) can be derived using an appropriate computer software package for complex survey analysis such as SAS, Stata, SUDAAN, R, or SPSS. Variables are contained on the full-year annual file for aggregate expenditures across all of these types of services/items (OMTYPE_M18 = 1, 2, 3, or 4), but it is necessary to use this file to produce an annual estimate for a specific category of service. Small sample sizes make it advisable to pool multiple years of MEPS data to produce statistically reliable estimates for some of the items.

4.2 Variables with Missing Values

It is essential that the analyst examine all variables for the presence of negative values used to represent missing values. For continuous or discrete variables, where means or totals may be calculated, it may be necessary to set negative values to values appropriate to the analytic needs. That is, the analyst should either impute a value or set the value to one that will be interpreted as missing by the software package used. For categorical and dichotomous variables, the analyst may want to consider whether to recode or impute a value for cases with negative values or whether to include or exclude such cases in the numerator and/or denominator when calculating proportions.

Methodologies used for the editing/imputation of expenditure variables (e.g., sources of payment and zero expenditures) are described in "Data Editing and Imputation Methodologies of Expenditure Variables."

4.3 Variance Estimation (VARSTR, VARPSU)

To obtain estimates of variability in the MEPS estimates (such as the standard error of sample estimates or corresponding confidence intervals), analysts should consider the complex sample design of the MEPS for both person-level and family-level analyses. Several methodologies have been developed for estimating standard errors for surveys with a complex sample design, including the Taylor series linearization method, balanced repeated replication (BRR), and jackknife replication. Various software packages provide analysts with the capability of implementing these methodologies. MEPS analysts most commonly use the Taylor series approach. Although this PUF does not contain replicate weights, analysts can use the BRR methodology to construct replicate weights to develop variances for more complex estimators (see Section 4.3.2: Balanced Repeated Replication Method).

4.3.1 Taylor Series Linearization Method

The variables needed to calculate appropriate standard errors based on the Taylor series linearization method are included on this file as well as all other MEPS PUFs. Software packages that permit the use of the Taylor series linearization method include SUDAAN, R, Stata, SAS (version 8.2 and higher), and SPSS (version 12.0 and higher). For complete information on the capabilities of a package, analysts should refer to the user documentation for the software.

With the Taylor series linearization method, variance estimation strata and the variance estimation PSUs within these strata must be specified. The variables VARSTR and VARPSU on this OME PUF identify the sampling strata and primary sampling units required by the variance estimation programs. Specifying a "with replacement" design in one of the previously mentioned software packages will provide estimated standard errors appropriate for assessing the variability of the MEPS estimates. Note that the number of degrees of freedom associated with estimates of variability indicated by such a package may not appropriately reflect the number available. For variables of interest distributed throughout the country (and thus the MEPS sample PSUs), one

can generally expect to see at least 100 degrees of freedom associated with the estimated standard errors for national estimates based on this MEPS database.

Before 2002, the MEPS variance strata and PSUs were developed independently from year to year, and the last two characters of the strata and PSU variable names denoted the year. Beginning with the 2002 point-in-time PUF, the approach changed with the intention that variance strata and PSUs would be developed to be compatible with all future PUFs until the NHIS design changed. Thus, when pooling data across years 2002 through Panel 11 of the 2007 files, analysts can use the variance strata and PSU variables provided without modifying them for variance estimation purposes for estimates covering multiple years of data. There are 203 variance estimation strata, each stratum with either two or three variance estimation PSUs.

Beginning in Panel 12 of the 2007 files, a new set of variance strata and PSUs was developed because of the introduction of a new NHIS design. There are 165 variance strata with either two or three variance estimation PSUs per stratum. Therefore, there are a total of 368 (203+165) variance strata in the 2007 Population Characteristics PUF, as it consisted of two panels that were selected under two independent NHIS sample designs. Since both MEPS panels in the full-year files from 2008 through 2016 are based on the same NHIS design, there are only 165 variance strata. These strata (VARSTR values) have been numbered from 1001 to 1165 so that they can be readily distinguished from those developed under the former NHIS sample design if data are pooled for several years.

The NHIS sample design was changed again in 2016, effectively changing the MEPS design beginning with calendar year 2017. Beginning with Panel 22 of the 2017 files, a new set of variance strata and PSUs were developed. There are 117 variance strata with either two or three variance estimation PSUs per stratum. Therefore, there are a total of 282 (165+117) variance strata in the 2017 Population Characteristics PUF, as it consisted of two panels that were selected under two independent NHIS sample designs. To make the pooling of data across multiple years of the MEPS more straightforward, the numbering system for the variance strata was changed. The strata associated with the new design are numbered from 2001 to 2117.

The NHIS sample design was further modified in 2018, so the MEPS variance structure for the 2019 Population Characteristics PUF was also modified, reducing the number of variance strata to 105. Consistency was maintained with the prior structure in that the 2019 variance strata were also numbered within the range of values from 2001 to 2117, although there are now gaps in the values assigned within this range. Because of the modification, each stratum could contain up to 5 variance estimation PSUs.

For Panel 26 in the 2021 and 2022 Population Characteristics PUFs, an additional NHIS sample was used for the MEPS to account for increasing nonresponse during the pandemic (as discussed in Section 3.1). The additional sample was assigned to the existing variance strata, so the 2021 and 2022 Population Characteristics PUFs continued to have 105 variance strata, numbered 2001-2117, with a few gaps in the values in that range. In many cases, the additional sample was assigned to new variance estimation PSUs, so in the 2021 and 2022 Population Characteristics PUFs, each stratum contained up to eight variance estimation PSUs.

Additional NHIS samples were no longer needed in 2023, leading to fewer variance estimation PSUs than in the 2021 and 2022 Population Characteristics PUFs. The 2023 Population Characteristics PUF continues to have 105 variance strata, numbered 2001-2117, with a few gaps in the values in that range. Each stratum contains up to six variance estimation PSUs.

Some analysts may be interested in pooling data across multiple years of MEPS data. When doing so, analysts should note that, to obtain appropriate standard errors, it is necessary to specify a common variance structure. Before 2002, each annual PUF was released with a variance structure unique to the particular MEPS sample in that year. Starting in 2002, the annual PUFs were released with a common variance structure that allowed analysts to pool data from 2002 through 2018. However, analysts can no longer do this routinely because the variance structure had to be modified beginning with 2019.

To ensure that variance strata are identified appropriately for variance estimation purposes when pooling MEPS data across several years, analysts can proceed as follows:

1. When pooling any year from 2002 through 2018, use the variance strata numbering as is.

2. When pooling (a) any year from 1996 to 2001 with any year from 2002 or later, or (b) the year 2019 and beyond with any earlier year, use the pooled linkage PUF HC-036, which contains the proper variance structure. The HC-036 file is updated every year so that appropriate variance structures are available with pooled data. Further details on the HC-036 file are included in the public use documentation of the HC-036 file.

4.3.2 Balanced Repeated Replication Method

BRR replicate weights are not provided on this MEPS PUF for the purposes of variance estimation. However, a file containing a BRR replication structure is made available so that analysts can form replicate weights, if desired, from the final MEPS weight to compute variances of MEPS estimates using either BRR or Fay's modified BRR (Fay, 1989) methods. The replicate weights are useful for computing variances of complex nonlinear estimators for which a Taylor linear form is neither easy to derive nor available in commonly used software. For instance, it is not possible to calculate the variances of a median or the ratio of two medians by using the Taylor linearization method. For these types of estimators, analysts can calculate a variance using BRR or Fay's modified BRR methods. However, it should be noted that the replicate weights have been derived from the final weight through a shortcut approach. Specifically, the replicate weights are not computed starting with the base weight, and all adjustments made in different stages of weighting are not applied independently in each replicate. Thus, the variances computed by using this one-step BRR do not capture the effects of all weighting adjustments that would be captured in a set of fully developed BRR replicate weights. The Taylor series approach does not fully capture the effects of the different weighting adjustments either.

The dataset HC-036BRR, MEPS 1996-2021 Replicates for Variance Estimation File contains the information necessary to construct the BRR replicates. It includes a set of 128 flags (BRR1-BRR128) in the form of half sample indicators, each of which is coded 0 or 1 to indicate whether

the person should or should not be included in that particular replicate. These flags can be used in conjunction with the full-year weight to construct the BRR replicate weights. For an analysis of MEPS data pooled across years, the BRR replicates can be formed in the same way by using the HC-036, MEPS 1996-2021 Pooled Linkage Variance Estimation File. For more information about creating BRR replicates, analysts can refer to the documentation for the HC-036BRR pooled linkage file on the AHRQ website.

5.0 Merging/Linking MEPS Data Files

Data from this PUF can be used alone or in conjunction with other PUFs for different analytic purposes. Merging characteristics of interest from other MEPS PUFs expands the scope of potential estimates. For example, the medical event PUFs can be merged with the person-level Consolidated PUF to calculate event-level estimates for persons with specific characteristics (e.g., age, race, sex, and education).

Most of the event PUFs can also be linked to the Medical Conditions PUF by using the condition-event link (CLNK) PUF. When using the CLNK PUF, analysts should keep in mind that (1) conditions are household reported, (2) there may be multiple conditions associated with a medical event, (3) one condition may link to more than one event, and (4) not all medical events link to the Medical Conditions PUF.

In addition to linking to other MEPS PUFs, each MEPS panel can also be linked back to the previous year's NHIS public use files. This is because the set of households selected for MEPS is a subsample of those participating in the NHIS. For information on obtaining MEPS/NHIS link files please see the MEPS website.

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D. Variable-Source Crosswalk

FOR MEPS HC 248C: 2023 OTHER MEDICAL EXPENSES

Survey Administration Variables

Variable	Description	Source
DUID	Panel # + encrypted DU identifier	Assigned in sampling
PID	Person number	Assigned in sampling
DUPERSID	Person ID (DUID + PID)	Assigned in sampling
EVNTIDX	Event ID	Assigned in Sampling
EVENTRN	Event round number	CAPI derived
PANEL	Panel number	Constructed

Other Medical Events Variables

Variable	Description	Source
OMTYPE_M18	Other medical expense type	OM10, 30, 40, 50

Imputed Expenditure Variables

Variable	Description	Source
OMSF23X	Amount paid, family (Imputed)	CP Section (Edited)
OMMR23X	Amount paid, Medicare (Imputed)	CP Section (Edited)
OMMD23X	Amount paid, Medicaid (Imputed)	CP Section (Edited)
OMPV23X	Amount paid, private insurance (Imputed)	CP Section (Edited)
OMVA23X	Amount paid, Veterans/CHAMPVA (Imputed)	CP Section (Edited)
OMTR23X	Amount paid, TRICARE (Imputed)	CP Section (Edited)
OMOF23X	Amount paid, other federal (Imputed)	CP Section (Edited)
OMSL23X	Amount paid, state & local government (Imputed)	CP Section (Edited)
OMWC23X	Amount paid, workers' compensation (Imputed)	CP Section (Edited)
OMOT23X	Amount paid, other insurance (Imputed)	CP Section (Edited)
OMXP23X	Sum of OMSF23X-OMOT23X (Imputed)	Constructed

Variable	Description	Source
OMTC23X	Household reported total charge (Imputed)	CP Section (Edited)
IMPFLAG	Imputation status	Constructed

Weights Variables

Variable	Description	Source
PERWT23F	Expenditure file person weight, 2023	Constructed
VARSTR	Variance estimation stratum, 2023	Constructed
VARPSU	Variance estimation PSU, 2023	Constructed