MEPS-HC
Prescribed Medicines (PMED) File

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PMED File Structure

- **Each record represents a unique instance of prescribed medicine acquisition (fill or refill) and the characteristics of the drug.**

- **File includes medicines prescribed, obtained, and reported.**

- **The file incorporates data collected in the Household and Pharmacy Components (a subcomponent of the Medical Provider Component).**

Household Component (HC)

- **Medicine name**
- **Number of times acquired in the round**
- **Associated condition(s)**
- **Date first used**
- **Pharmacy information**

Pharmacy Component (PC)

- **Requires written permission from household members**

- **Involves telephone and mail contact with pharmacy**

- **Asks for "patient profile" to include:**

  - **Drug name**

  - **National Drug Code (NDC) number**

  - **Drug characteristics**

  - **Date filled**

  - **Payers and amounts of payment**

- **Includes in sample about 8,000 pharmacies per year**

Editing HC and PC Data

- **Household Component: Number of fills**

- **Pharmacy Component**
  - **Missing NDC number**
  - **Missing third-party payer (based on HC)**
  - **Missing or unrealistically low or high prices**
  - **Missing payments**

Combining HC and PC

- **No common identifier is shared by HC and PC.**
- **A code (Generic Product Identifier, or GPI) is assigned to each HC and PC drug to facilitate matching.**
    - **Machine (70%) and human coders (30%) for HC**
    - **NDC (95%) and human coders (5%) for PC**
- **Post-match editing is performed.**
- **Utilization is based on household data.**
- **Payments are based almost entirely on pharmacy data.**

Drug Characteristics (PC)

Characteristics included for each acquisition:

- **Medication name**
- **NDC number**
- **Quantity dispensed (10, 30, 50, . . .)**
- **Form (capsule, tablet, liquid, cream, . . .)**
- **Strength (10, 200, . . .)**
- **Unit of measurement for form (ounces . . .)**
- **Unit of measurement for strength (mg, mL, . . .)**

Other Variables

Additional information included for each acquisition

- Round
- When the drug was first taken
- Pharmacy type(s)
- Condition(s) associated with the drug (by linking with the medical conditions file)
- Days supplied (since 2010)
- Sources and amounts of payment
- Total payment

Record Identifier Variables

- **RXRECIDX—Unique identifier for each record in the file**

- **LINKIDX—Drug-round-level ID that can be used to link a prescribed medicine event to other MEPS event files and to the Medical Conditions Files**

- **DRUGIDX/RXNDC—Drug-level IDs**

DUPERSID	DRUGIDX	PURCHRD	LINKIDX	RXRECIDX
2310001101	2310001101002	1	2310001101002103	2310001101002103001
2310001101	2310001101002	1	2310001101002103	2310001101002103002
2310001101	2310001101002	2	2310001101002203	2310001101002203001

How to link PMED file with other files

Linking PMED file to Medical Conditions file

PMED File

DUPERSID	DRUGIDX	PURCHRD	LINKIDX	RXRECIDX
2310001101	2310001101002	1	2310001101002103	2310001101002103001
2310001101	2310001101002	1	2310001101002103	2310001101002103002
2310001101	2310001101002	2	2310001101002203	2310001101002203001

CLINK File

DUPERSID	CONDIDX	EVNTIDX	EVENTYPE
2310001101	2310001101001	2310001101002103	8
2310001101	2310001101001	2310001101002203	8
2310001101	2310001101002	2310001101200501	1

Medical Conditions File

DUPERSID	CONDIDX	ICD10CDX
2310001101	2310001101001	Z13
2310001101	2310001101002	I10

- **In Condition link file, EVNTIDX are the same as LINKIDX for PMED events (EVENTYPE=8)**
  - **Merge the link file with PMED file using the LINKIDX variable, after renaming EVNTIDX as LINKIDX in the link file.**
  - **Merge with the Medical Conditions file using the CONDIDX variable**

Linking PMED file to Other Event Files

PMED File

DUPERSID	DRUGIDX	PURCHRD	LINKIDX	RXRECIDX
2310001101	2310001101002	1	2310001101002103	2310001101002103001
2310001101	2310001101002	1	2310001101002103	2310001101002103002
2310001101	2310001101002	2	2310001101002203	2310001101002203001

RX Link File

DUPERSID	LINKIDX	EVNTIDX	EVENTTYPE
2310001101	2310001101002103	2310001101200501	1

OB File

DUPERSID	EVNTIDX	VSTCTGRY
2310001101	2310001101200501	2

- Merge RX Link File with PMED File using the LINKIDX variable
- Merge with other event files (OB file in the example above) using EVNTIDX

Multum Lexicon Variables

- **Each record has three types of Multum Lexicon variables:**
  - PREGCAT (pregnancy category)
  - TCn (therapeutic class: 1, 2, and 3)
    - TCnSn (therapeutic sub-class)
    - TCnSn_n (therapeutic sub-sub-class)
  - RXDRGNAM (beginning in 2013)
- **For 2013 and earlier, RXDRGNAM and corrected TC and PREGCAT variables can be found as an addendum file at the MEPS website (MEPS HC-068: Multum Lexicon Addendum Files to MEPS Prescribed Medicines Files 1996–2013).**

PMED File Peculiarities

- **Different meanings of imputation flags**
  - **RXFLG**
  - **PCIMPFLG**
  - **IMPFLAG**
  - **INPCFLG**

- **No total charge variable**
  - ► **No rebate or discount information**

- **No date of service**

Trend Analysis

- **Beginning in 1996, the PMED file has been released yearly.**

- **How to interpret year-to-year changes?**
    - **Policy change**
    - **Other changes (e.g., demographics)**
    - **Change in MEPS PMED data editing methodology (especially 2007–2008 and 2017)**
    - **MEPS instrument design change (since spring of 2018)**

Trend Analysis (continued)

- Be cautious with the types of comparisons you make before and after 2007/2008 and before and after 2017/2018.

- Consider techniques to smooth or stabilize trends, such as pooling time periods.

- Read the documentation for each year of data you are using.

- Read Methodology Report #29 (**https://www.meps.ahrq.gov/mepsweb/data_stats/Pub_ ProdResults_Details.jsp?pt=Methodology+Report&opt =2&id=1132**).

Statistical Reports and Applied Research

AHRQ regularly produces and posts findings from the PMED data.

- ### Statistical Briefs

  Ding, Y., and Miller, G. E. *Total Expenses, Total Utilization, and Sources of Payment for Outpatient Prescription Opioids in the U.S. Adult Civilian Noninstitutionalized Population, 2017.* Statistical Brief #529. April 2020. Agency for Healthcare Research and Quality, Rockville, MD. https://www.meps.ahrq.gov/data_files/publications/st529/stat529.pdf

  Carroll, W. A., Miller, G. E., and Hill, S. C. *Out-of-Pocket Spending for Retail Prescribed Drugs by Age and Type of Prescription Drug Coverage, 2009 to 2018.* Statistical Brief #532. December 2020. Agency for Healthcare Research and Quality, Rockville, MD. https://www.meps.ahrq.gov/data_files/publications/st532/stat532.pdf
  .

- ### Methodology Reports

  Hill, S. C., Roemer, M., and Stagnitti, M. N. *Outpatient Prescription Drugs: Data Collection and Editing in the 2011 Medical Expenditure Panel Survey.* Methodology Report #29. March 2014. Agency for Healthcare Research and Quality, Rockville, MD. https://www.meps.ahrq.gov/data_files/publications/mr29/mr29.pdf

- ### Working Papers

  Zodet, M., Hill, S. C., and Zuvekas, S. *Evaluating an Alternative Data Source for Editing MEPS Drug Prices.* Working Paper No. 12004. July 2012. Agency for Healthcare Research and Quality, Rockville, MD. https://www.meps.ahrq.gov/data_files/publications/workingpapers/wp_12004.pdf

Thank you!

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