



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



MEPS – HC PRESCRIBED MEDICINES FILE

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PMED File Structure

- Each record represents a unique prescribed medicine acquisition (fill or refill) and the characteristics of the drug
- File includes medicines prescribed, obtained, and reported
- Incorporates data collected in the household and pharmacy components

Household Component (HC)

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

Pharmacy Component (PC)



- Need written permission from the household members
- Telephone and mail contact with Pharmacy
- Ask for “patient profile” to include:
 - Drug name
 - National drug code (NDC)
 - Drug characteristics
 - Date filled
 - Payers and amounts of payment
- Sample of about 8,000 pharmacies per year

Editing HC and PC data

- **HC: number of fills**
- **PC**
 - missing NDC
 - 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 (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
- Utilization based on household data
- Payments based almost entirely on pharmacy data

Drug Characteristics (PC)



Characteristics included for each acquisition:

- Medication name
- National drug code (NDC)
- 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
- Type(s) of pharmacy
- 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** – Uniquely identifies each record on the file
- **LINKIDX** – Drug-round-level ID that can be used to link a PM event to other MEPS event files
- **DRUGIDX/RXNDC** – Drug-level IDs

Multum Lexicon Variables

- **Each record has 3 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 2012 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

- **Meaning of imputation flags is different**
 - **RXFLG**
 - **PCIMPFLG**
 - **IMPFLAG**
 - **INPCFLG**

- **No total charge variable**
 - ▶ **NO rebate or discount information**

- **No date of service**

Trend Analysis

- **PMED file released yearly beginning in 1996**
- **How will you interpret year-to-year changes?**
 - **Policy change**
 - **Other real change**
 - **Change in MEPS PMED data editing methodology (especially 2007-2008 and 2017)**
 - **MEPS Instrument design change (since Spring of 2018)**

Trend Analysis Caveats



- **Be cautious with the type 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**

Statistical Reports & Applied Research



AHRQ regularly produces and posts findings from the PMED data

■ Statistical Briefs

Ding Y, Miller GE. 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.

Carroll WA, Hill SC. Trends in Prescribed Medication Expenditures by Age and Type of Prescription Drug Coverage, 2009 to 2016 MEPS-HC. Statistical Brief #522. May 2019.

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■ Methodology Reports

Hill SC, Roemer M, Stagnitti MN. Outpatient Prescription Drugs: Data Collection and Editing in the 2011 Medical Expenditure Panel Survey. Methodology Report #29. March 2014.

■ Working Papers

Zodet M., Hill S.C., Zuvekas S., Evaluating an Alternative Data Source for Editing MEPS Drug Prices, Working Paper No. 12004, July 2012.

Thank you!



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