



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 methodology (especially 2007-2008 and 2017)**

# Trend Analysis Caveats



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

Miller GE, Moriya AS. Any Use and Frequent Use of Opioids among Non-Elderly Adults in 2015-2016, by Socioeconomic Characteristics. Statistical Brief #516. September 2018.

Stagnitti MN. Total Expenses, Total Utilization, Distribution by Source of Payment and Average Total and Out-of-Pocket Payments for Outpatient Prescription Opioids in the U.S. Adult Civilian Noninstitutionalized Population, 2015. Statistical Brief #505. November 2017.

### ■ 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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