

## MEPS – HC PRESCRIBED MEDICINES FILE

Salam Abdus, Ph.D.
Salam.Abdus@AHRQ.hhs.gov



#### **PMED File Structure**

- Each record represents a unique prescribed medicine acquisition 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
- Whether obtained for free
- Self-filer status



## **Pharmacy Component (PC)**

- Need signed permission form
- Telephone and mail contact
- Ask for computer printout or "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
- Date the drug was first taken
- Type(s) of pharmacy
- Condition(s) associated with the drug
- Sources and amounts of payment
- Total payment



#### **Multum Lexicon Variables**

- Each record has 2 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)
- Multum Lexicon website:
  - www.multum.com/Lexicon.html



#### **PMED File Peculiarities**

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

■ No total charge variable

■ 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)



## **Trend Analysis Caveats**

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

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.

Research findings

Sarpong E. and Chevarley F. M., Trends in the Pharmaceutical Treatment of Asthma in Adults, 1998 to 2009. Research Findings No. 33. July 2012.

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.