



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



MEPS – HC Medical Conditions Data

Jerrod Anderson, PhD

Jerrod.Anderson@ahrq.hhs.gov

MEPS-HC CAPI Medical Condition Data Collection



Priority Condition Enumeration

- 15 specific condition questions

Sections with Open-Ended Reporting

- Condition Enumeration
- Medical Events
- Disability Days
 - 1996-2012 (discontinued in 2013)

Priority Condition Enumeration (PE) Section

15 priority conditions determined by

- Prevalence
- Expenditures
- Policy relevance

Questions:

- “Ever been told by health professional” they had the condition (13 of the 15 conditions)
 - age at first diagnosis collected
- During past 12 months (2 of the 15 conditions)

Priority Conditions: Ever told by health professional (18+)



- Hypertension/High Blood Pressure (HIBPDX)
- Coronary Heart Disease (CHDDX)
- Angina (ANGIDX)
- Heart Attack/Myocardial Infarction (MIDX)
- Other Heart Disease (OHRTDX)
- Stroke/Transient Ischemic Attack (STRKDX)
- Emphysema (EMPHDX)
- High cholesterol (CHOLDX)
- Cancer/Malignancy (CANCERDX)
- Diabetes (DIABDX)
- Arthritis (ARTHDX)
- Asthma (ASTHDX)- All ages
- Attention Deficit Hyperactivity Disorder (ADHDADDX) – ages 5-17

Priority Conditions: During past 12 months

☐ Chronic Bronchitis

- ☐ (CHBRON31, CHBRON53)

☐ Joint pain/aching/stiffness/swelling

- ☐ (JTPAIN31, JTPAIN53)

Open-Ended Reporting of Conditions

☐ Condition could be reported in all or some of these sections and in one or more rounds:

- Condition Enumeration
- Medical Events

☐ Questions for Condition Enumeration:

- Between (START DATE) and (END DATE), did (PERSON) have any physical or mental health problems, accidents, or injuries?
- What did (PERSON) have?

Medical Event Sections

Event types

- Hospital Inpatient
- Hospital Outpatient
- Emergency Room
- Office Based
- Home Health
- Prescribed Medicine purchases

Condition question asked:

- All event types except prescribed medicines: What conditions were discovered or led person to make this visit?
- Prescribed medicine purchases: What health problem is medicine prescribed for?

Condition Coding and Editing

- ☐ Verbatim text recorded and coded to fully specified ICD-9 CM codes
 - some text not clear or easily coded
- ☐ Collapsed to 3 digits in public files to maintain confidentiality
- ☐ ICD-9 codes are used in the 1996-2015 files
- ☐ MEPS switched to ICD-10 codes for the 2016 data year

Condition Variables on Healthcare Event Files

☐ ICD9 (1996-2012) and CCC (through 2015) variables for conditions included on many event files

- Up to 3 condition variables for most event types (4 for inpatient file)
- No condition data on dental, home health or other medical event files

☐ Most events associated with only 1 condition

- No official “primary” condition if >1

☐ Can link to condition files to identify:

- Additional conditions associated with events (beyond 3 or 4)
- Conditions associated with Home Health events

Medical Conditions File

- ❑ Each record represents unique person/condition
- ❑ Condition Codes
 - 3-digit ICD9 (ICD9CODX)
 - Clinical Classification Codes (CCCODEX)
 - ICD-9 codes aggregated into broad clinically meaningful categories
 - Crosswalk included in documentation
- ❑ Priority condition question data not part of MEPS Medical Condition File

Medical Conditions File: Procedure Data

Procedures (ICD9PROX) not systematically collected


- only obtained if mentioned by respondent in medical events section(s)
- verbatim text recorded and coded to fully specified 4 digit ICD-9 CM codes
- collapsed to 2 digit codes on file

Limited analytic utility

Medical Conditions File: Linking to Event Files

- ☐ **CONDIDX (12 digit condition-level ID)**
 - Digits 1-8: DUPERSID
 - Digits 9-12: Condition ID
- ☐ **Merge with CLNK file (by CONDIDX) to get event ID (EVNTIDX)**
- ☐ **Link merged data to different event file types (by EVNTIDX)**
 - PMED linkage different (RXLINK)
- ☐ **A condition can link to >1 event and an event can link to >1 condition**

Medical Conditions File: Event Count Variables

 Indicates total number of medical events that can be linked to the condition record

- Home Health (HHNUM)
- Inpatient stays (IPNUM)
- Hospital outpatient (OPNUM)
- Office-based (OBNUM)
- Emergency room (ERNUM)
- Prescribed medicine purchases (RXNUM)

 Can link conditions to specific events

Medical Conditions Data: Limitations/Caveats

☐ Household-reported

- one respondent usually providing information for all family members
- more salient conditions tend to be better reported

☐ Many recorded text strings not easily classifiable into ICD-9 codes

☐ Procedures not systematically collected; limited in analytic utility

National Estimates of Condition Prevalence

- ❑ **Factors affecting condition underreporting:**
 - **respondent not aware**
 - **not salient or bothersome**
 - **no medical care received**

- ❑ **MEPS most appropriate for “treated prevalence” (i.e. linked to events)**
 - **most conditions reported in medical events section**

Condition Data References

- ❑ Public Use File documentation
- ❑ Report titled “*Understanding and Analyzing MEPS Household Component Medical Condition Data*”
 - http://meps.ahrq.gov/mepsweb/survey_comp/MEPS_condition_data.pdf