



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



MEPS – HC Medical Conditions Data

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MEPS-HC CAPI Medical Condition Data Collection



Priority Conditions

- **13 specific condition questions**

Open-ended reporting

- **Medical Events**
- **Condition Enumeration (prior to 2018)**
- **Disability Days (prior to 2013)**

Priority Conditions

Ever told by health professional (18+)

- Hypertension/High Blood Pressure (HIBPDX, BPMLDX)
- 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_M18) – All ages
- Arthritis (ARTHDX)
- Asthma (ASTHDX)- All ages
- Attention Deficit Hyperactivity Disorder (ADHDADDX) – ages 5-17

Priority Conditions

During past 12 months, have you had

- **Chronic Bronchitis**
 - CHBRON31
- **Joint pain/aching/stiffness/swelling**
 - JTPAIN31_M18

Open-Ended Reporting of Conditions

Medical Events

- **Main source of condition data (100% 2018 onwards)**

Condition Enumeration

- **1996-2017 (discontinued in P21R5, P22R3)**

Disability Days

- **1996-2012 (discontinued in 2013)**

Open-Ended Reporting Questions

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 Events

Non-prescription events

- **“What conditions were discovered or led person to make this visit?”**

Medical Events

Prescription events

- **“What health problem is medicine prescribed for?”**

Medical Event Condition Questions

Question: What conditions were discovered or led person to make this visit?

- **Hospital Inpatient**
- **Hospital Outpatient**
- **Emergency Room**
- **Office Based**
- **Home Health**

Question: What health problem is medicine prescribed for?

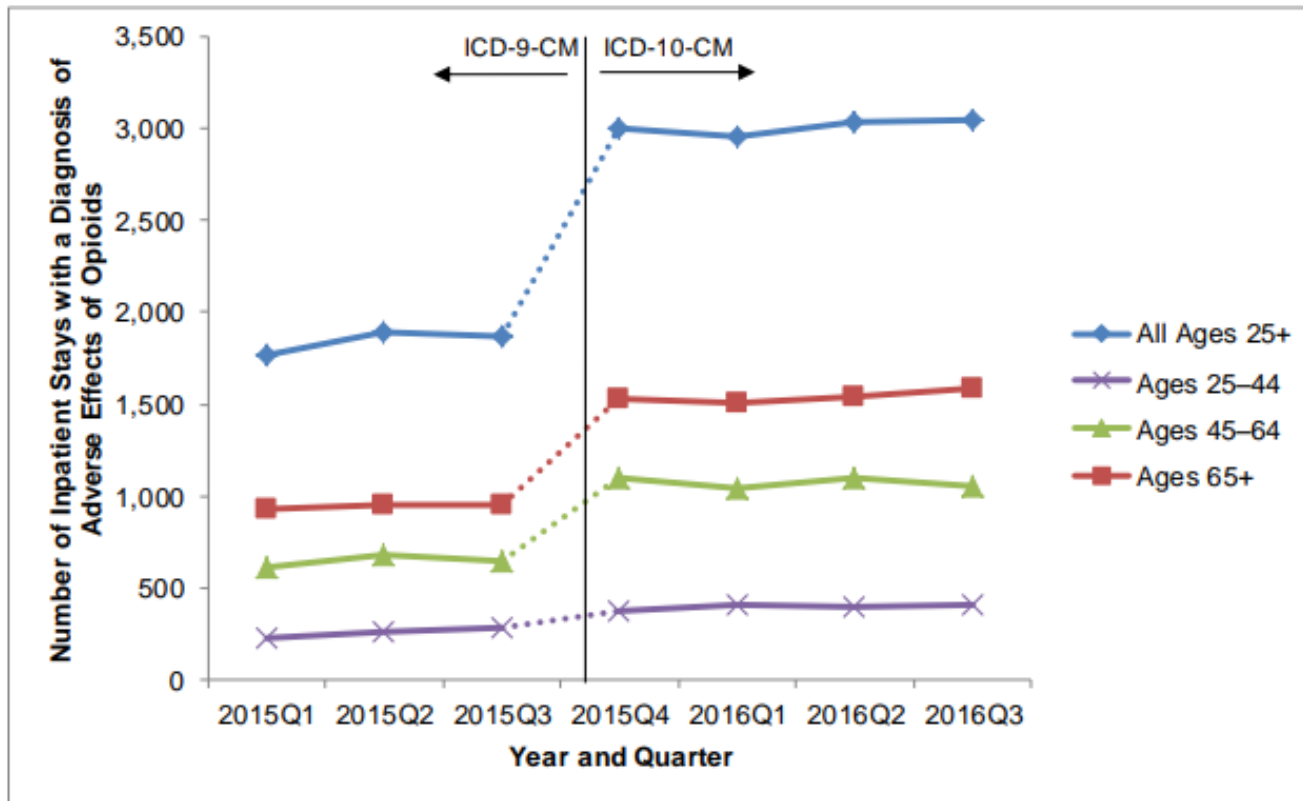
- **Prescribed Medicine purchases**

Condition Coding and Editing

Verbatim text recorded and coded to fully specified ICD codes

- Public Use files contain 3-digit codes.
- ICD-9: 1996-2015
 - Collapsed to Clinical Classification Codes – CCS (aggregation of ICD-9 codes into broad clinically meaningful categories)
- ICD-10: 2016 onwards
 - CCSR (Clinical Classification Software Refined) codes on the 2018 conditions file

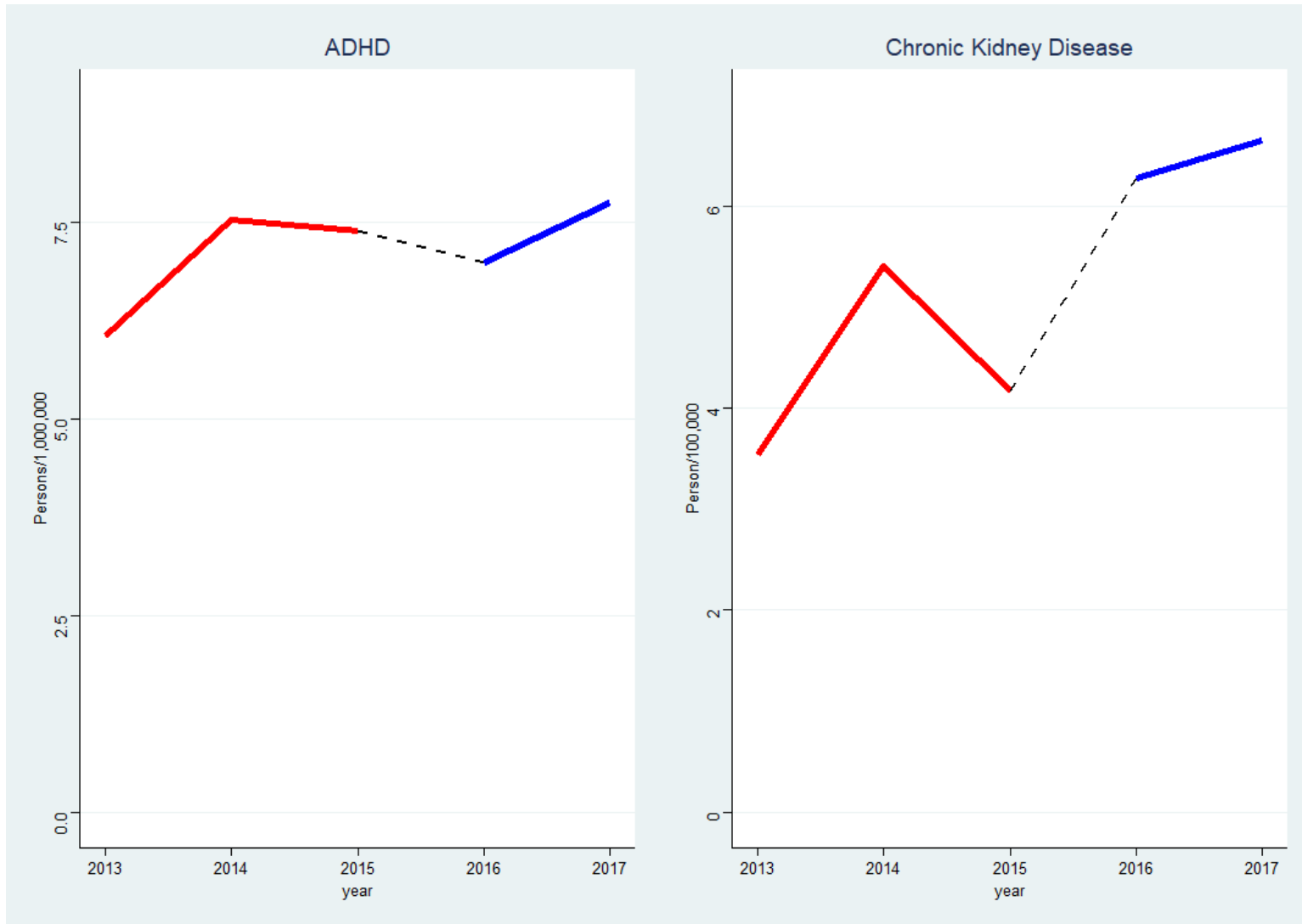
Showing Trends with ICD-10 Transition



Source: Agency for Healthcare Research and Quality, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, State Inpatient Databases for 2015 and quarterly inpatient data for 2016 from three States (Colorado, Kentucky, and Minnesota).

From: <https://www.hcup-us.ahrq.gov/datainnovations/ICD-10CaseStudyonOpioid-RelatedIPStays042417.pdf>

Showing Trends with ICD-10 Transition



Medical Conditions and Conditions Link Files

https://meps.ahrq.gov/mepsweb/data_stats/download_data_files.jsp

<ul style="list-style-type: none">What's NewMailing ListDiscussion ForumParticipants' Corner	<ul style="list-style-type: none"><input type="checkbox"/> Household Component Full-Year files ⓘ Expenditure and utilization data for the calendar year from several rounds of data collection.<ul style="list-style-type: none"><input type="checkbox"/> <u>Full-Year Consolidated Data files</u><input type="checkbox"/> <u>Full-Year Population Characteristics files</u><input type="checkbox"/> <u>Medical Conditions files</u><input type="checkbox"/> <u>Risk Adjustment Scores files</u><input type="checkbox"/> <u>Employment Variables file</u><input type="checkbox"/> <u>Jobs files</u><input type="checkbox"/> <u>Person Round Plan files</u><input type="checkbox"/> <u>Longitudinal Data files</u><input type="checkbox"/> <u>Supplemental Variables files (1996-2000)</u><input type="checkbox"/> <u>Health Insurance Plan Abstraction file (1996)</u><input type="checkbox"/> <u>Long Term Care file (1998)</u><input type="checkbox"/> Household Component Event files ⓘ Data for the calendar year on unique household-reported medical events.<ul style="list-style-type: none"><input type="checkbox"/> <u>Prescribed Medicines files</u><input type="checkbox"/> <u>Dental Visits files</u><input type="checkbox"/> <u>Other Medical Expenses files</u><input type="checkbox"/> <u>Hospital Inpatient Stays files</u><input type="checkbox"/> <u>Emergency Room Visits files</u><input type="checkbox"/> <u>Outpatient Visits files</u><input type="checkbox"/> <u>Office-Based Medical Provider Visits files</u><input type="checkbox"/> <u>Home Health files</u><input type="checkbox"/> <u>Appendix to MEPS Event files</u>
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Condition Files

Condition Link Files

Medical Conditions and Conditions Link Files

Conditions File

- Observations of unique person/condition pairs
- ICD-9 (1996-2015) and ICD-10 (2016-present)
- CCSs (1996-2015) and CCSRs (starting in 2018)
- Does NOT include priority conditions unless the condition is also reported as current (for 2018 onwards the condition must be associated with an event)
- Variables that indicate the number and type of event a condition links to (i.e., ERNUM)

Conditions Link File

- Condition ID (CONDIX) and Event ID (EVNTIDX) for linking conditions with events
- Event Type (EVNTYPE)

Linking Conditions to Events

Conditions File

Event Type and Counts

DUPERSID	CONDIDX	ICD10CDX	HHNUM	IPNUM	OPNUM	OBNUM	ERNUM	RXNUM
10001101	100011010021	J00	0	0	0	0	0	1
10001101	100011010031	M76	0	0	0	1	0	0
10001101	100011010041	H52	0	0	0	6	0	0

Link File

DUPERSID	CONDIDX	EVNTIDX	EVENTTYPE
10001101	100011010021	100011010211	8
10001101	100011010031	100011010351	1
10001101	100011010041	100011010291	1
10001101	100011010041	100011010301	1
10001101	100011010041	100011010311	1
10001101	100011010041	100011010321	1
10001101	100011010041	100011010331	1
10001101	100011010041	100011010341	1

OB File

DUPERSID	EVNTIDX
10001101	100011010351
10001101	100011010291
10001101	100011010301
10001101	100011010311
10001101	100011010321
10001101	100011010331
10001101	100011010341

Medical Conditions Data: Caveats and Limitations

Potential Under-reporting

- Respondent not aware or asked
- One respondent per household
- Sensitive conditions underreported in surveys
- Not salient or bothersome
- No medical care received

Some recorded text strings are not easily classified into ICD condition codes

Caveats and National Estimates of Condition Prevalence

Cannot use MEPS to produce overall disease prevalence estimates

- **See caveats on previous slide**

MEPS can be used to produce “treated prevalence”

- **From 2018 onwards, conditions (except priority conditions) are only linked to events**

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

Thank you!



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