



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



MEPS-HC: Linking Medical Conditions to Prescribed Medicines

Jim Kirby

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MEPS Panel Design: Data Reference Periods

	2019				2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Panel 23																
Round 3																
Round 4																
Round 5																
Round 6																
Round 7																
Round 8																
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Panel 24																
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Round 4																
Round 5																
Panel 27																
Round 1																
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Round 3																

MEPS Public Use Files

What's New

Mailing List

Discussion Forum

Participants' Corner

☐ **Household Component Full-Year files** ⓘ
Expenditure and utilization data for the calendar collection.

☐ **Full-Year Consolidated Data files**

☐ **Full-Year Population Characteristics files**

☐ **Medical Conditions files**

☐ **Risk Adjustment Scores files**

☐ **Employment Variables file**

☐ **Jobs files**

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☐ **Supplemental Variables files (1996-2000)**

☐ **Health Insurance Plan Abstraction file (1996)**

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☐ **Other Medical Expenses files**

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☐ **Office-Based Medical Provider Visits files**

☐ **Home Health files**

☐ **Appendix to MEPS Event files**

FYC file:

- person-level file: one record for each MEPS sample member
- unique person identifier is **DUPERSID**

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- each record is a medical condition for a person
- unique condition identifier is **CONDIDX**

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FYC file:

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Medical Conditions:

- each record is a medical condition for a person
- unique condition identifier is **CONDIDX**

PMED file:

- each record is a unique fill or refill of a prescribed medicine for a person
- unique (re)fill identifier is **RXRECIDX**
- unique drug identifier is **DRUGIDX**

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PMED file:

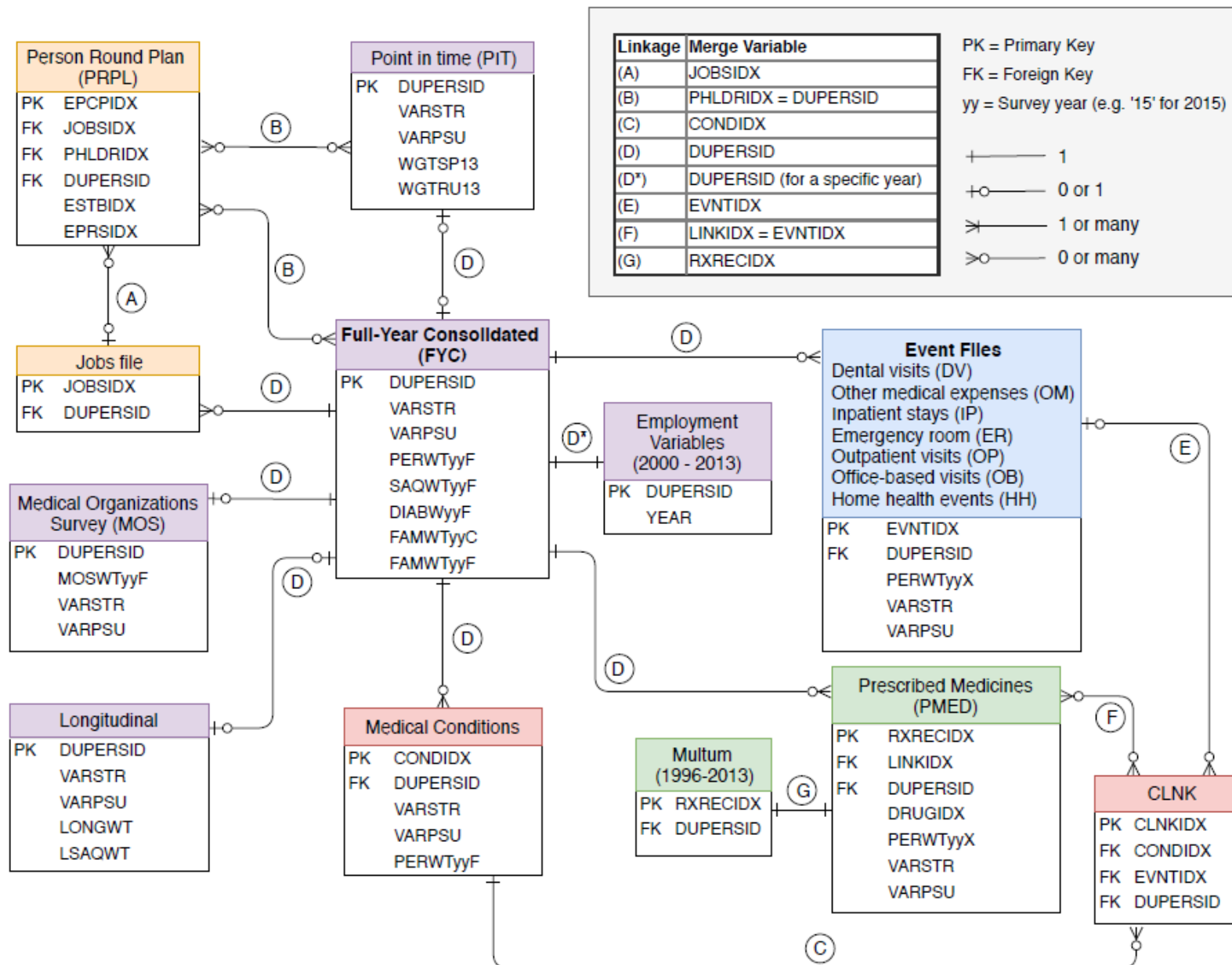
- each record is a unique fill or refill of a prescribed medicine for a person
- unique (re)fill identifier is **RXRECIDX**
- unique drug identifier is **DRUGIDX**

CLNK file:

- each record links a condition to a medical event or PMED (re)fill

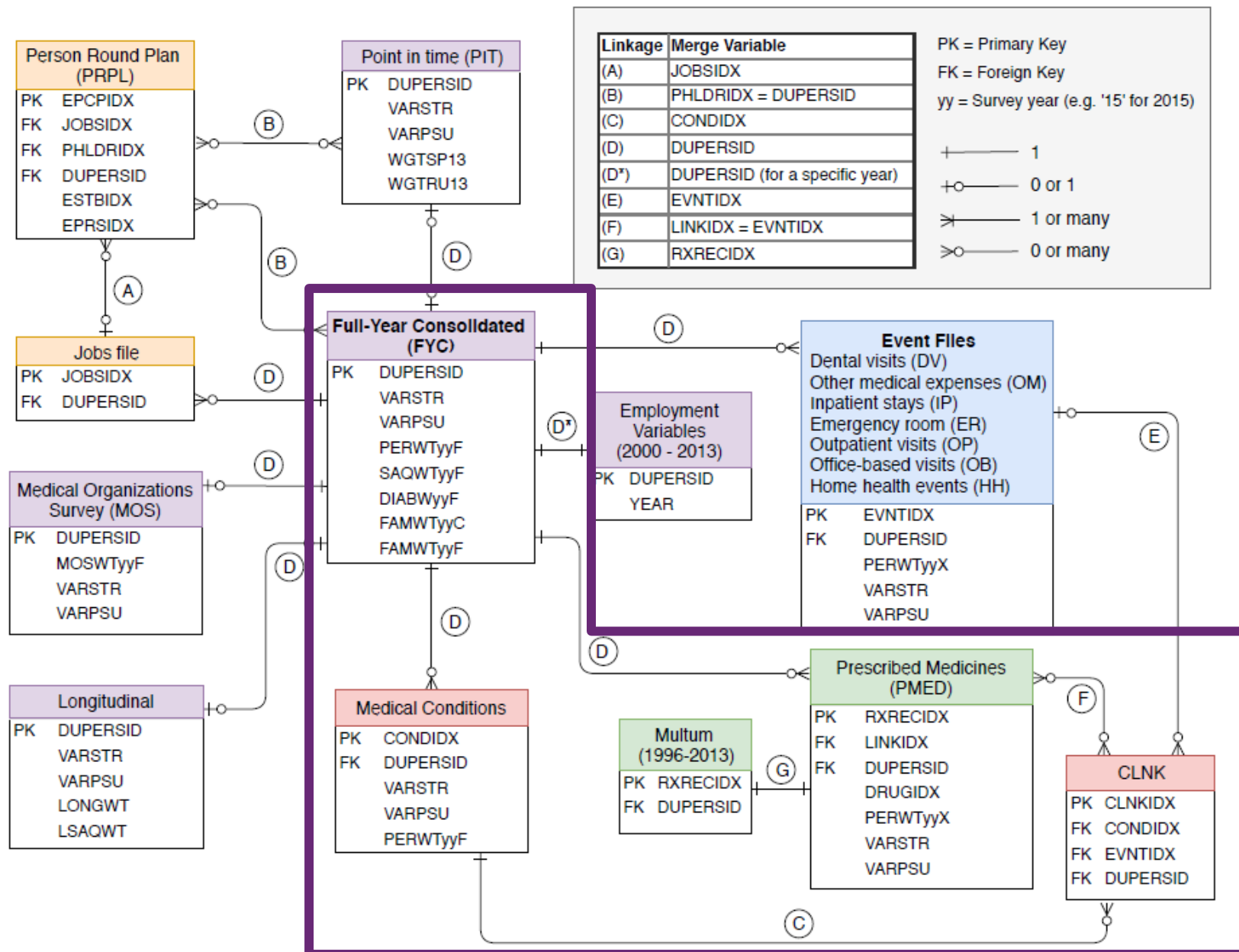
MEPS Public Use Files (PUFs)

Entity Relationship Diagram (ERD) with survey and linkage variables



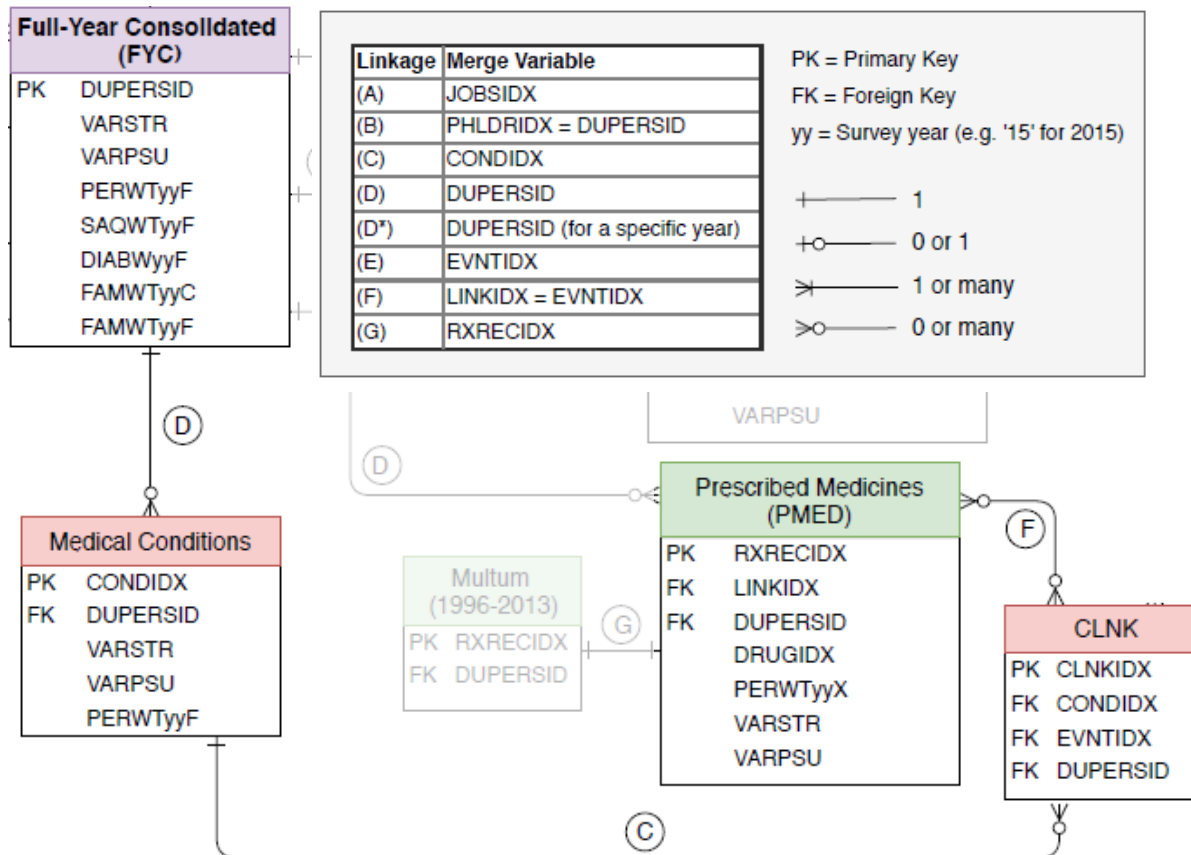
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Entity Relationship Diagram (ERD) with survey and linkage variables



Linking Conditions to PMEDs

Conditions-Event Link (CLNK) PUF: Crosswalk between medical conditions and medical events (including PMEDs)



- ▶ Not all conditions link to drugs
- ▶ Not all drugs link to conditions
- ▶ Not all MEPS sample members have reported drugs
- ▶ Not all MEPS sample members have reported conditions
- ▶ Merge EVNTIDX on CLNK to LINKIDX on PMED
- ▶ Many-to-many matching is possible
 - One drug can treat multiple conditions
 - One condition can be treated with multiple drugs

Linking Conditions to PMEDs

PMED File

DUPERSID	DRUGIDX	RXRECIDX	PURCHRD	LINKIDX	RXDRGNAM
2510001101	2510001101001	2510001101001103001	1	2510001101001103	ATORVASTATIN
2510001101	2510001101001	2510001101001103002	1	2510001101001103	ATORVASTATIN
2510001101	2510001101001	2510001101001203003	2	2510001101001203	ATORVASTATIN
2510001101	2510001101002	2510001101002203004	2	2510001101002203	AMOXICILLIN

'Lipitor'

Hyperlipidemia
(High Cholesterol)

CLNK File

DUPERSID	CONDIDX	EVNTIDX	EVENTYPE
2510001101	2510001101001	2510001101001103	8
2510001101	2510001101001	2510001101001203	8
2510001101	2510001101002	2510001101002203	8

Medical Conditions File

DUPERSID	CONDIDX	ICD10CDX	CCSR1X	CCSR2X
2510001101	2510001101001	E78	END010	-1
2510001101	2510001101002	J02	INF003	RSP006
2510001101	2510001101003	J00	RSP006	-1

Linking Conditions to PMEDs

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DUPERSID	DRUGIDX	RXRECIDX	PURCHRD	LINKIDX	RXDRGNAM
2510001101	2510001101001	2510001101001103001	1	2510001101001103	ATORVASTATIN
2510001101	2510001101001	2510001101001103002	1	2510001101001103	ATORVASTATIN
2510001101	2510001101001	2510001101001203003	2	2510001101001203	ATORVASTATIN
2510001101	2510001101002	2510001101002203004	2	2510001101002203	AMOXICILLIN

CLNK File

DUPERSID	CONDIDX	EVNTIDX	EVENTYPE
2510001101	2510001101001	2510001101001103	8
2510001101	2510001101001	2510001101001203	8
2510001101	2510001101002	2510001101002203	8

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2510001101	2510001101001	2510001101001103001	1	2510001101001103	ATORVASTATIN
2510001101	2510001101001	2510001101001103001	1	2510001101001203	ATORVASTATIN
2510001101	2510001101002	2510001101002203004	2	2510001101002203	AMOXICILLIN

Respondent Reports:

“Strep throat”

Code to ICD-10:

J02.0

CCSR codes:

INF003

RSP006

Included on PUF:

CLNK File

DUPERSID	DRUGIDX	RXRECIDX	PURCHRD
2510001101	2510001101001	2510001101001103	8
2510001101	2510001101001	2510001101001103	8
2510001101	2510001101002	2510001101002203	8

Medical Conditions File

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2510001101	2510001101002	J02	INF003	RSP006
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Resources



MEPS Website:

<https://meps.ahrq.gov/mepsweb/>

MEPS GitHub:

<https://github.com/HHS-AHRQ/MEPS/>

MEPS-HC Online Data Tools:

<https://datatools.ahrq.gov/meps-hc>

The Impacts of the COVID-19 Pandemic on the Medical Expenditure Panel Survey:

<https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2021.306534?journalCode=ajph>

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