



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



MEPS-HC: Linking Medical Conditions to Event files

Emily Mitchell, PhD

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																
Round 9																
Panel 24																
Round 1																
Round 2																
Round 3																
Round 4																
Round 5																
Round 6																
Round 7																
Round 8																
Round 9																
Panel 25																
Round 1																
Round 2																
Round 3																
Round 4																
Round 5																
Panel 26																
Round 1																
Round 2																
Round 3																
Round 4																
Round 5																
Panel 27																
Round 1																
Round 2																
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 year collection.

☐ Full-Year Consolidated Data files

☐ Full-Year Population Characteristics files

☐ Medical Conditions files

☐ Risk Adjustment Scores files

☐ Employment Variables file

☐ Jobs files

☐ Person Round Plan files

☐ Longitudinal Data files

☐ Supplemental Variables files (1996-2000)

☐ Health Insurance Plan Abstraction file (1996)

☐ Long Term Care file (1998)

☐ Household Component Event files ⓘ

Data for the calendar year on unique household-reported medical events.

☐ Prescribed Medicines files

☐ Dental Visits files

☐ Other Medical Expenses files

☐ Hospital Inpatient Stays files

☐ Emergency Room Visits files

☐ Outpatient Visits files

☐ 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**

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 year collection.

☐ Full-Year Consolidated Data files

☐ Full-Year Population Characteristics files

☐ Medical Conditions files

☐ Risk Adjustment Scores files

☐ Employment Variables file

☐ Jobs files

☐ Person Round Plan files

☐ Longitudinal Data files

☐ Supplemental Variables files (1996-2000)

☐ Health Insurance Plan Abstraction file (1996)

☐ Long Term Care file (1998)

☐ Household Component Event files ⓘ

Data for the calendar year on unique household-reported medical events.

☐ Prescribed Medicines files

☐ Dental Visits files

☐ Other Medical Expenses files

☐ Hospital Inpatient Stays files

☐ Emergency Room Visits files

☐ Outpatient Visits files

☐ 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

Medical Conditions:

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

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 year collection.

☐ Full-Year Consolidated Data files

☐ Full-Year Population Characteristics files

☐ Medical Conditions files

☐ Risk Adjustment Scores files

☐ Employment Variables file

☐ Jobs files

☐ Person Round Plan files

☐ Longitudinal Data files

☐ Supplemental Variables files (1996-2000)

☐ Health Insurance Plan Abstraction file (1996)

☐ Long Term Care file (1998)

☐ Household Component Event files ⓘ

Data for the calendar year on unique household-reported medical events.

☐ Prescribed Medicines files

☐ Dental Visits files

☐ Other Medical Expenses files

☐ Hospital Inpatient Stays files

☐ Emergency Room Visits files

☐ Outpatient Visits files

☐ 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

Medical Conditions:

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

Hospital and Office-based Medical visits:

- each record is a medical visit (an 'event')
- unique identifier is **EVNTIDX**

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 year collection.

☐ Full-Year Consolidated Data files

☐ Full-Year Population Characteristics files

☐ Medical Conditions files

☐ Risk Adjustment Scores files

☐ Employment Variables file

☐ Jobs files

☐ Person Round Plan files

☐ Longitudinal Data files

☐ Supplemental Variables files (1996-2000)

☐ Health Insurance Plan Abstraction file (1996)

☐ Long Term Care file (1998)

☐ Household Component Event files ⓘ

Data for the calendar year on unique household-reported medical events.

☐ Prescribed Medicines files

☐ Dental Visits files

☐ Other Medical Expenses files

☐ Hospital Inpatient Stays files

☐ Emergency Room Visits files

☐ Outpatient Visits files

☐ 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

Medical Conditions:

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

Hospital and Office-based Medical visits:

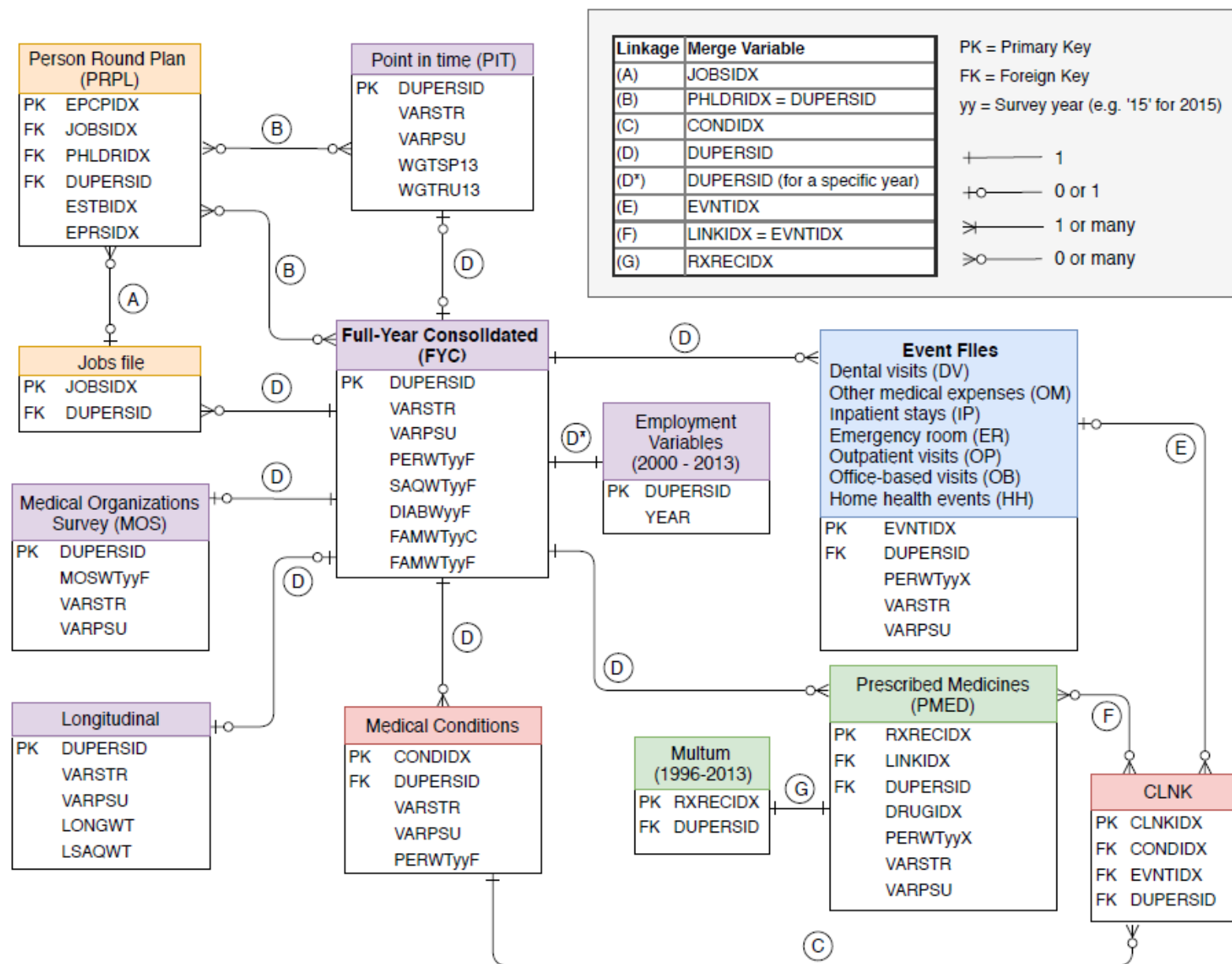
- each record is a medical visit (an 'event')
- unique identifier is **EVNTIDX**

CLNK file:

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

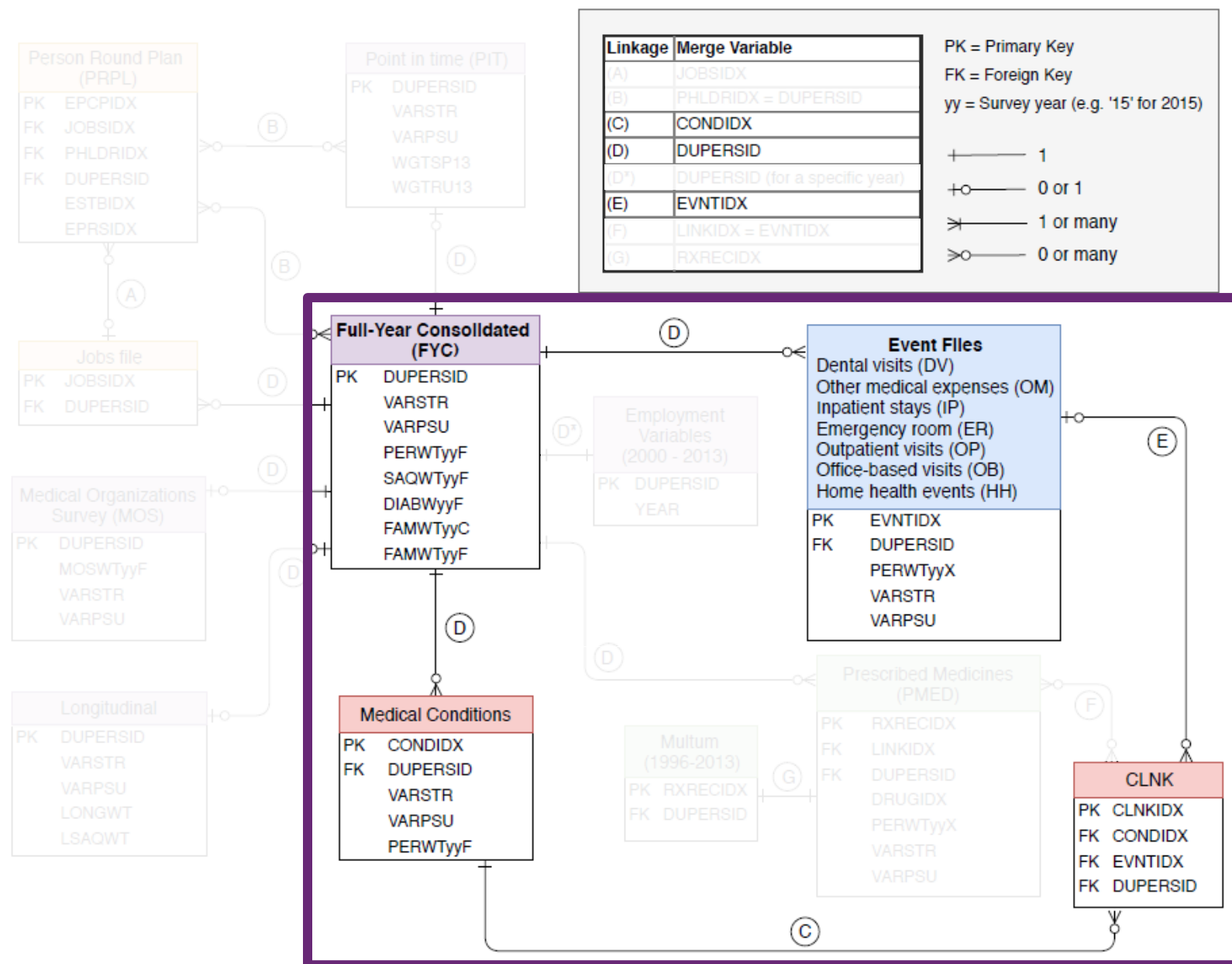
MEPS Public Use Files (PUFs)

Entity Relationship Diagram (ERD) with survey and linkage variables



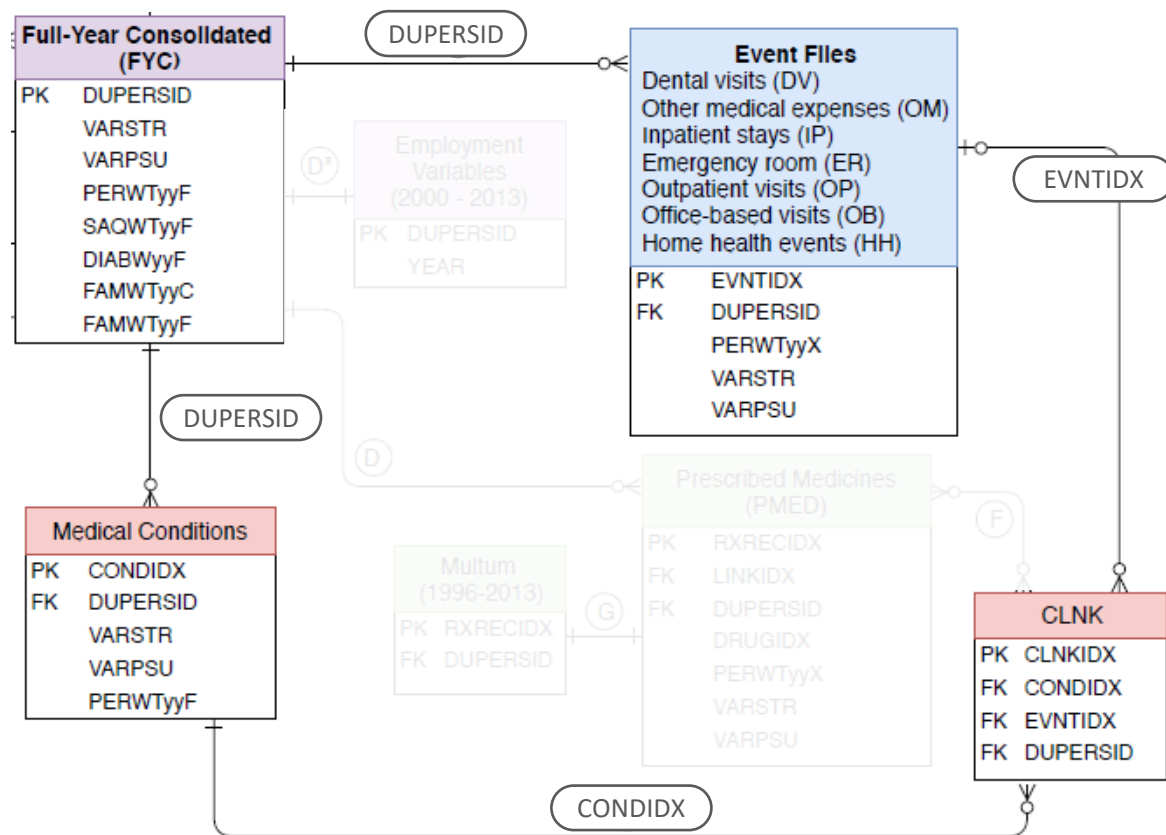
MEPS Public Use Files (PUFs)

Entity Relationship Diagram (ERD) with survey and linkage variables



Linking Medical Visits to Conditions

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



- ▶ Not all events link to conditions
- ▶ As of 2018, all conditions link to an event
- ▶ Not all MEPS sample members have an event
- ▶ Not all MEPS sample members have reported conditions
- ▶ Many-to-many matching is possible
 - One visit for multiple conditions
 - Multiple visits for one condition

Linking Medical Visits to Conditions

Office-based Medical Visits File

DUPERSID	EVNTIDX	EVENTRN	OBDATYR	OBDATEMM	DRSPLTY_M18	VSTCTGRY	OBXP20X
2322961101	2322961101217601	6	2020	1	6 [FAMILY PRACTICE]	5 [FOLLOW-UP OR POST-OP]	111.05
2322961101	2322961101218801	6	2020	5	6 [FAMILY PRACTICE]	5 [FOLLOW-UP OR POST-OP]	75.48

CLNK File

DUPERSID	CONDIDX	EVNTIDX	EVENTYPE
2322961101	2322961101010	2322961101217601	1
2322961101	2322961101025	2322961101217601	1
2322961101	2322961101010	2322961101218801	1
2322961101	2322961101025	2322961101218801	1

Medical Conditions File

DUPERSID	CONDIDX	CONDRN	ICD10CDX	CCSR1X
2322961101	2322961101010	1	F41	MBD005
2322961101	2322961101025	6	F43	MBD007

Anxiety

Stress

Linking Medical Visits to Conditions

Office-based Medical Visits File

DUPERSID	EVNTIDX	EVENTRN	OBDATYR	OBDATEMM	DRSPLTY_M18	VSTCTGRY	OBXP20X
2322961101	2322961101217601	6	2020	1	6 [FAMILY PRACTICE]	5 [FOLLOW-UP OR POST-OP]	111.05
2322961101	2322961101218801	6	2020	5	6 [FAMILY PRACTICE]	5 [FOLLOW-UP OR POST-OP]	75.48

CLNK File

DUPERSID	CONDIDX	EVNTIDX	EVENTYPE
2322961101	2322961101010	2322961101217601	1
2322961101	2322961101025	2322961101217601	1
2322961101	2322961101010	2322961101218801	1
2322961101	2322961101025	2322961101218801	1

Medical Conditions File

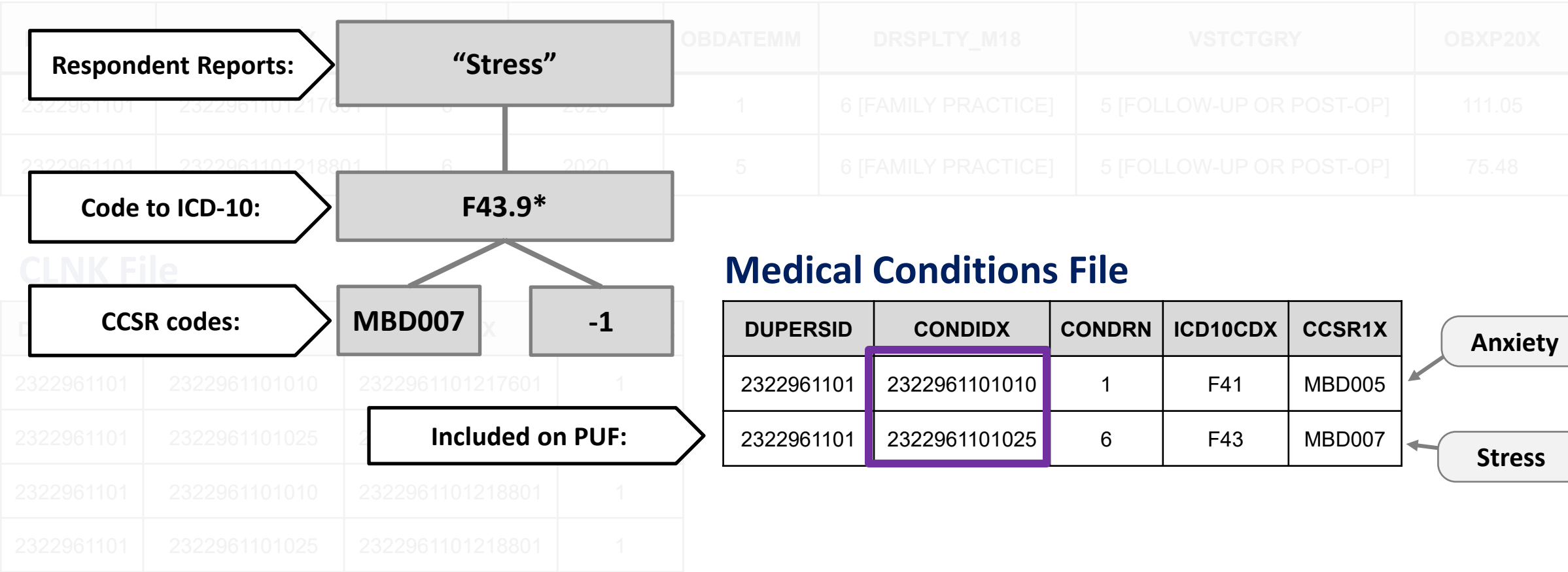
DUPERSID	CONDIDX	CONDRN	ICD10CDX	CCSR1X
2322961101	2322961101010	1	F41	MBD005
2322961101	2322961101025	6	F43	MBD007

Anxiety

Stress

Linking Medical Visits to Conditions

Office-based Medical Visits File



* Not the actual code – just an example

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>



emily.mitchell@ahrq.hhs.gov



rebecca.ahrnsbrak@ahrq.hhs.gov