



U.S. Department of Health and Human Services

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Agency for Healthcare Research and Quality

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# **MEPS – HC**

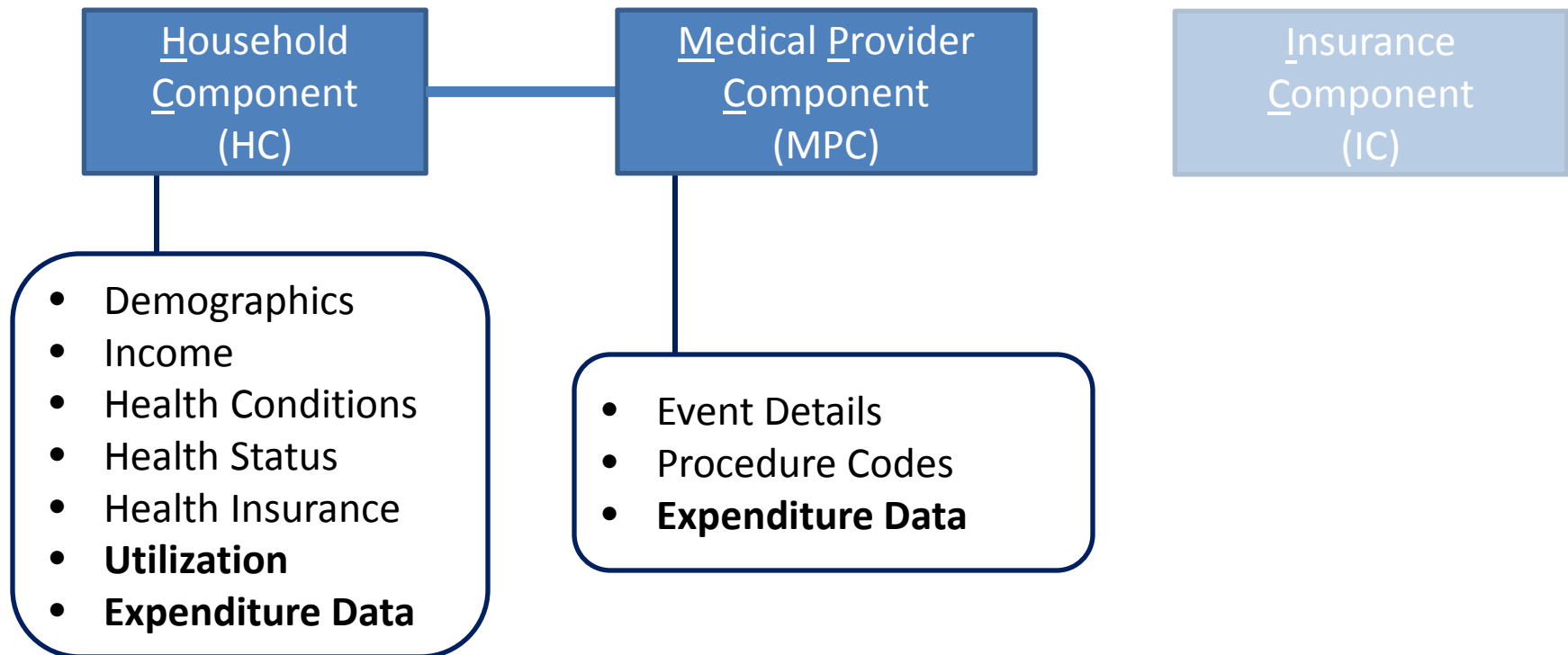
## **Utilization and Expenditures**

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**April 24, 2017**

## Medical Expenditure Panel Survey (MEPS)



MEPS household respondents asked to report all health care use for family members during reference period

Utilization is called an 'event' in MEPS

## **Event type categories:**

- ▶ Hospital inpatient stays (IP)
- ▶ Office-based medical provider visits (OB)
- ▶ Outpatient department visits (OP)
- ▶ Emergency room visits (ER)
- ▶ Dental visits (DN)

- 
- ▶ Prescription medicine purchases (RX)
  - ▶ Home health care (HH)
  - ▶ Other medical expenses (OM)  
[e.g. glasses, hearing aids]



# Health care utilization

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MEPS household respondents asked to report all health care use for family members during reference period

Utilization is called an 'event' in MEPS

Event type categories:		'Event' definition
▶ Hospital inpatient stays (IP) . . . . .		stay
▶ Office-based medical provider visits (OB) . .	}	visit
▶ Outpatient department visits (OP) . . . . .		
▶ Emergency room visits (ER) . . . . .		
▶ Dental visits (DN) . . . . .		
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▶ Prescription medicine purchases (RX) . . . . .		original script or refill
▶ Home health care (HH) . . . . .		month of care
▶ Other medical expenses (OM) . . . . .		purchase
[e.g. glasses, hearing aids]		

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What's New

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☐ **Household Component Full-Year files** ⓘ

Expenditure and utilization data for the calendar year from several rounds of data collection.

☐ [Full-Year Consolidated Data files](#)

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☐ [Long Term Care file \(1998\)](#)

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

☐ [Prescribed Medicines files](#)

☐ [Dental Visits files](#)

☐ [Other Medical Expenses files](#)

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**Event Files**

## OB Event File, 2013

Person / Event IDs		Date		Payment/Charge		Person Weight
dupersid	evntidx	obdateyr	obdatemm	obxp13x	obtc13x	perwt13f
20004101	200041010011	2013	8	300	300	6594.802
20004101	200041010021	2013	8	127.6	154	6594.802
20015102	200151020051	2013	2	124.23	208.12	2140.442

- + Provider characteristics
- + Services/procedures (e.g. surgery, lab tests)
- + Health conditions
- + Detailed expenditure variables



# Health care expenditures

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Collected at the event level

Represent payments to providers of the health care

Payments are reported by source

- ▶ e.g. out-of-pocket, private insurance

Total expenditure is the sum of payments across all sources of payment



# Sources of payment

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## Out of Pocket

- ▶ **SF** – self or family

## Public

- ▶ **MR** – Medicare
- ▶ **MD** – Medicaid
- ▶ **VA** – VA/CHAMPVA

## Private insurance

- ▶ **PV** – private Insurance
- ▶ **TR** – TRICARE

## Other

- ▶ **OF** – other federal government
- ▶ **SL** – state or local government
- ▶ **WC** – worker's comp
- ▶ **OT** – other insurance
- ▶ **OR** – other private
- ▶ **OU** – other public

**Total Expenditures (XP) =**  
Sum of payments from all  
12 sources





# Event File Expenditure Variables

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## OB, DN, HH, and OM

12 expenditure by source of payment variables

A total expenditure variable

- ▶ sum of 12 source of payment variables

A total charge variable

- ▶ provider's charge before adjustment or discount



# Event File Expenditure Variables

## OB Event File, 2013

Event ID	OOP (SF)	Medicare (MR)		Private (PV)	Total Pmt. (XP)	Total Charge (TC)
evntidx	obsf13x	obmr13x	...	obpv13x	obxp13x	obtc13x
200041010011	300	0	...	0	300	300
200041010021	50	0	...	77.6	127.6	154
200151020051	25	0	...	99.23	124.23	208.12



# Event File Expenditure Variables

## Hospital: IP, OP and ER

### Facility Expenditure Variables

- ▶ 12 expenditure by source of payment variables
- ▶ A total facility expenditure variable
- ▶ A total facility charge variable

### Separately Billing Doctor (SBD) Expenditure Variables

- ▶ 12 SBD expenditure by source of payment variables
- ▶ A total SBD expenditure variable
- ▶ A total SBD charge variable

Total expenditures for the event: facility + SBD expenditures

Total charges for the event: facility + SBD charges



# Event File Expenditure Variables

## ER Event File, 2013

Event ID	Facility payments (f)				Total facility pmt.	Facility charge
evntidx	erfsf13x	erfmr13x	...	erfpv13x	erfxp13x	erftc13x
200121010011	0	94.46	...	0	94.46	353
200161020101	208.54	0	...	334.16	542.7	1464

SBD payments (d)				Total SBD pmt.	SBD charge
erdsf13x	erdmr13x	...	erdpv13x	erdxp13x	erdtc13x
0	176.36	...	0	176.36	700
0	0	...	304.71	304.71	388

Total payment (facility + SBD)	Total charge (facility + SBD)
erxp13x	ertc13x
270.82	1053
847.41	1852

## **RX ('PMED')**

Multiple RX scripts can be linked to single visit

Not all RX are linked to a medical visit

12 expenditure by source of payment variables

A total expenditure variable

- ▶ sum of 12 source of payment variables

~~A total charge variable~~



# Event File Expenditure Variables

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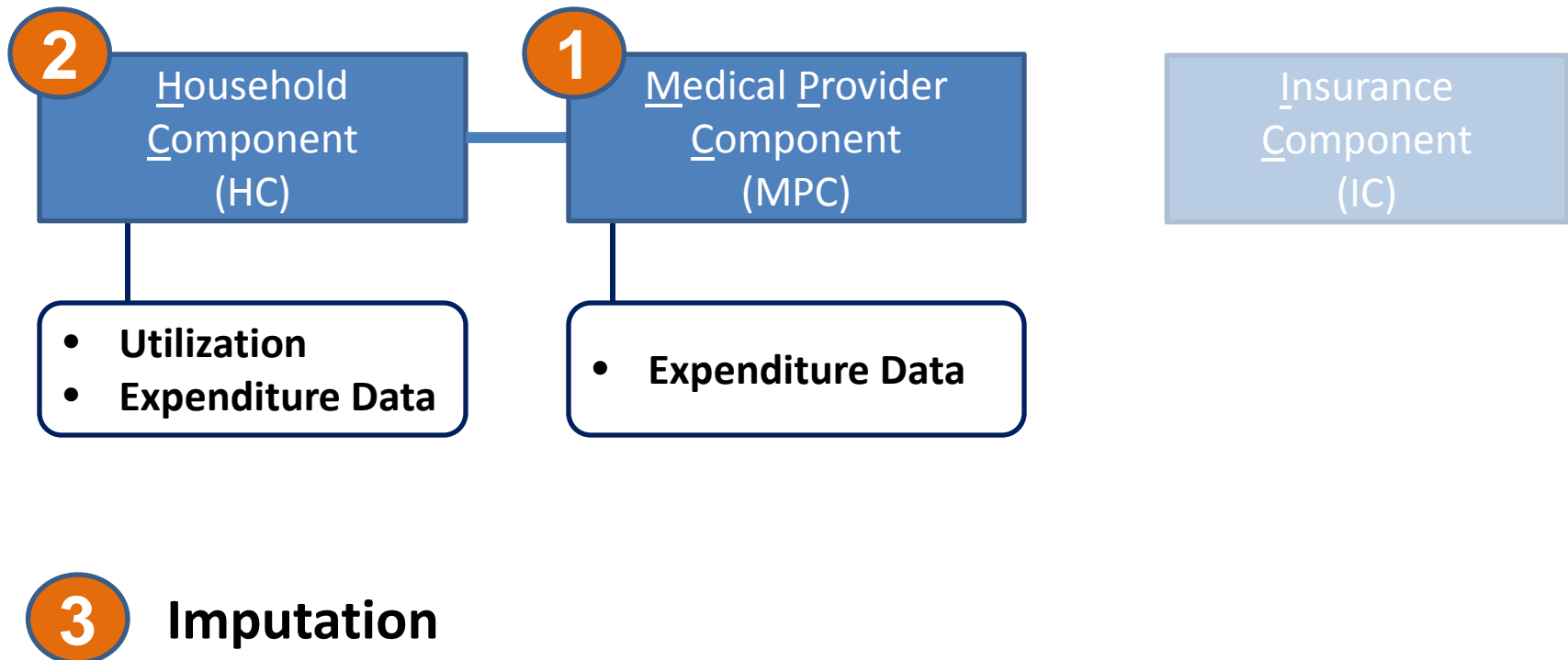
☐ Home Health files

☐ Appendix to MEPS Event files

RX Link Files

# Sources of expenditure data

## Medical Expenditure Panel Survey (MEPS)





## Sources of expenditure data by event type

Event type	HC	MPC
Office-based: physician	✓	✓
Office-based: non-physician	✓	
Inpatient	✓	✓
Outpatient	✓	✓
ER	✓	✓
Dental	✓	
RX	✓	✓
Home health: agency		✓
Home health: paid independent	✓	
Other medical	✓	



# Sources of expenditure data

dupersid	evntidx	impflag	obxp13x	obtc13x
20004101	200041010011	1	300	300
20004101	200041010021	3	127.6	154
20015102	200151020051	4	124.23	208.12

## impflag\*

- 0 Not eligible for imputation
- 1 Complete HC data
- 2 Complete MPC data
- 3 Fully imputed
- 4 Partially imputed
- 5 Capitation imputation

\* Codes are different for RX file



# Medical Provider Component

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## The MPC is NOT...

- ...designed to yield national estimates
- ...available to the public

## The MPC is...

- ...a supplement to household-reported expenditure data
- ...used for internal methodological studies



# Medical Organization Survey

## 2.5.1 2015 Medical Organizations Survey

The 2015 Medical Organizations Survey was fielded in 2016 during MPC data collection for the 2015 Medical Expenditure Panel Survey. Data are for persons that had a visit to their usual source of care provider in 2015, and the usual source of care question was asked in Panel 19 Round 4 and Panel 20 Round 2. Only persons who saw their office-based usual source of care provider were included in the sample frame.

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  - ☐ [Preventive Care Self-Administered Questionnaire file \(2014\)](#)
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**NEW!**



# Special Cases

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Flat fees

Zero-dollar events

Capitation

'-1' and other missing codes

## Flat fees

Fixed dollar amount for a group of health care services

- ▶ e.g. orthodontic, prenatal care

Flat Fee ID: FFEEIDX

Flat fee structure (FFOBTYPE)

- ▶ **Stem** - initial medical visit - **expenditures**
- ▶ **Leaf** - subsequent medical visits - **zero expenditures**



# Special Cases

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Flat fees

## **Zero-dollar events**

Flat fee – leaf event

Follow-up visit with no extra charge

Free care

Bad debt



# Special Cases

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Flat fees

Zero-dollar events

## **Capitation**

Imputed to fee-for-service equivalence

IMPFLAG = 5

Flat fees

Zero-dollar events

Capitation

## Missing data codes

-1 Inapplicable

-7 Refused

-8 Don't know

-9 Not ascertained

## '-1' and other missing codes

OB, OP – phone calls (SEETLKPV = 2)

HH – informal care (MPCELIG = 3)



## Event level files

- ▶ Separated by type of service
- ▶ Unique record for each reported event
  - Some persons have no events
  - Some persons have multiple events

## Person-level file (full year consolidated)

- ▶ Variables derived from event level
- ▶ One record for each person in MEPS
- ▶ No detail on expenditures or characteristics of individual events
- ▶ Summary of all events and expenditures
  - **See Appendix 1 of documentation for naming conventions**



# Annual person-level file

## OB Event File, 2013

<b>dupersid</b>	<b>evntidx</b>	<b>obdateyr</b>	<b>obdatemm</b>	<b>obxp13x</b>	<b>obtc13x</b>	<b>perwt13f</b>
<b>20004101</b>	200041010011	2013	8	<b>300</b>	<b>300</b>	6594.802
<b>20004101</b>	200041010021	2013	8	<b>127.6</b>	<b>154</b>	6594.802
<b>20015102</b>	200151020051	2013	2	<b>124.23</b>	<b>208.12</b>	2140.442

## Full Year Consolidated File, 2013

<b>dupersid</b>	<b>obtotv13</b>	<b>obvexp13</b>	<b>obvtch13</b>	<b>perwt13f</b>
<b>20004101</b>	<b>2</b>	<b>428</b>	<b>454</b>	6594.802
20004102	0	0	0	7144.183
20004103	0	0	0	5616.279
<b>20015102</b>	<b>1</b>	<b>124</b>	<b>208</b>	2140.442

# Event File Expenditure Variables

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Person-Level File

Event Files

# Questions?

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