U.S. Department of Health and Human Services

Agency for Healthcare Research and Quality
Advancing Excellence in Health Care ● www.ahrq.gov

MEPS – HC
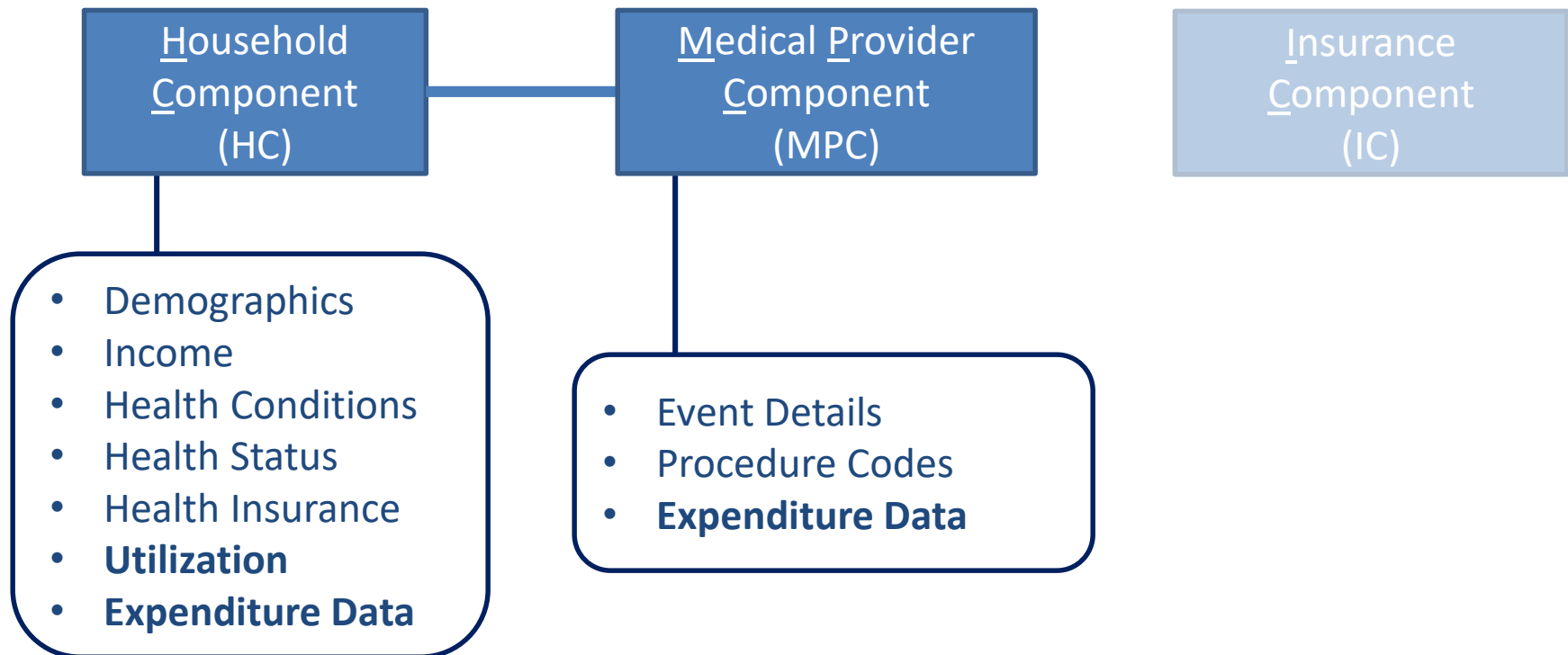# Utilization and Expenditures

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MEPS Components

Medical Expenditure Panel Survey (MEPS)

Household Component (HC)

Medical Provider Component (MPC)

Insurance Component (IC)

- Demographics
- Income
- Health Conditions
- Health Status
- Health Insurance
- **Utilization**
- **Expenditure Data**

- Event Details
- Procedure Codes
- **Expenditure Data**

Health care utilization

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

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

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Event type categories: **'Event' definition**

- ► **Hospital inpatient stays (IP)** . . . . stay
- ► **Office-based medical provider visits (OB)** . . ⎫
- ► **Outpatient department visits (OP)** . . . . ⎬ **visit**
- ► **Emergency room visits (ER)** . . . . ⎪
- ► **Dental visits (DN)** . . . . ⎭

- ► **Prescription medicine purchases (RX)** . . . . script fill or refill
- ► **Home health care (HH)** . . . . month of care
- ► **Other medical expenses (OM)** . . . . purchase
  [e.g. glasses, hearing aids]

Event files

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

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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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  ☐ **Medical Conditions files**
  ☐ **Risk Adjustment Scores files**
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  ☐ **Home Health files**
  ☐ **Appendix to MEPS Event files**

Event Files

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

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

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

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

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**

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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

Event File Expenditure Variables

RX ('PMED')

12 expenditure by source of payment variables

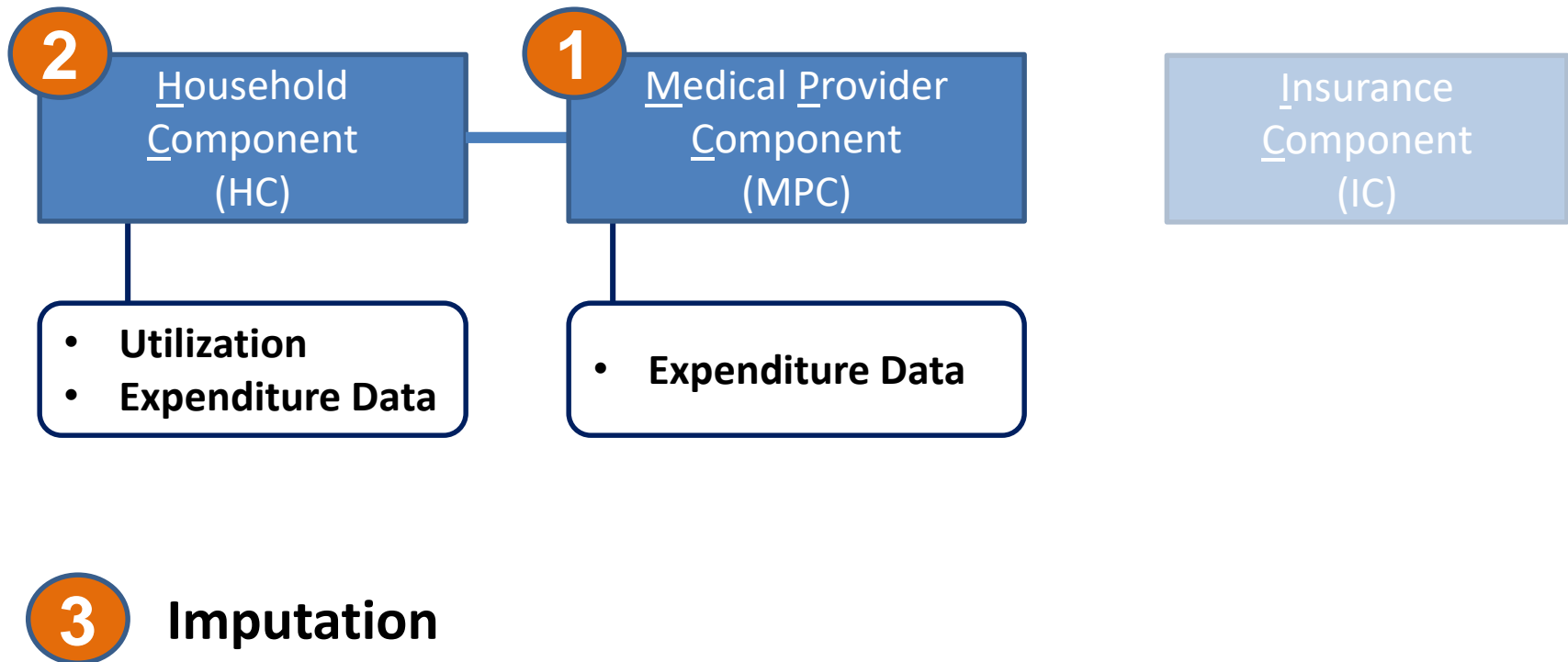**A total expenditure variable**
- ► **sum of 12 source of payment variables**

No total charge variable

Most identified

Sources of expenditure data

Medical Expenditure Panel Survey (MEPS)

2 Household Component (HC)

1 Medical Provider Component (MPC)

Insurance Component (IC)

- **Utilization**
- **Expenditure Data**

- **Expenditure Data**

3 **Imputation**

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

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

Special Case 1: Flat fees

Flat fees

Fixed dollar amount for a group of health care services

> ► **e.g. orthodontic, prenatal care**

Flat Fee ID: FFEEIDX

Flat fee structure (FF<u>OB</u>TYPE)

> ► **Stem - initial medical visit - expenditures**

> ► **Leaf - subsequent medical visits - zero expenditures**

Special Case 2: Zero dollar-events

Zero-dollar events

Flat fee – leaf event

Follow-up visit with no extra charge

Free care

Bad debt

Special Case 3: Capitation

Capitation

Imputed to fee-for-service equivalence

IMPFLAG = 5

Special Case 4: Missing expenses

Expense variables = '-1'

Missing data codes	
-1	Inapplicable
-7	Refused
-8	Don't know
-9	Not ascertained

OB, OP – phone calls (SEETLKPV = 2)

HH – informal care   (MPCELIG = 3)

Annual person-level file

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 <u>Appendix 1</u> of documentation for naming conventions

Annual person-level file

OB Event File, 2013

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

Full Year Consolidated File, 2013

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

Event File Expenditure Variables

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