Measuring Medical Expenses: MOOP in Thresholds vs. MOOP Subtractions

Thesia I. Garner

Bureau of Labor Statistics, U.S. Department of Labor

Measuring Poverty in the 21st Century Conference
Stanford Center on Poverty & Inequality
March 11, 2016

BLS
BUREAU OF LABOR STATISTICS
U.S. DEPARTMENT OF LABOR

Disclaimer: Any views expressed are mine and not those of the BLS.

www.bls.gov

Outline

- Why MOOP subtracted?
- How to define and measure health care in poverty measurement?
- Review two approaches to account for medical care in poverty measurement
  - MOOP in thresholds (Garner, Short, and Gudrais, 2014)
  - Universal Basis Plan in thresholds with adjustments to resources (Korenman and Remler, 2013, 2016)

BLS

Bottom Line

- How to treat health care?
  - Need
  - Or “tax”
- If Need, how to measure?
  Impact on thresholds and resources?
  - MOOP spending
  - Health insurance
- Practical Issues if in thresholds
  - If MOOP in Thresholds - issue of 33rd percentile vs. median
  - If Basic plan – issue of value of data plans, premiums, in-kind benefits, cost-sharing

BLS

Why MOOP Subtracted?

- ... Or... *Why Health Care is not accounted for in thresholds?*
  - MOOP is non-discretionary-reduces resources for FCSU leading to material hardship
  - Heterogeneous health care needs based on health status
  - Medical risk differ across population-insurance status
  - High variance and skewness of MOOP
  - Very large numbers of thresholds needed, complicating measure
  - How to value health care “needs”
  - Consistency in thresholds and resources

  - Basically the answer...
    - Lack of agreement regarding how to defined health care NEEDS
    - No National Health Insurance
    - How to measure with data available

Source: Adapted from Korenman and Remler (pres 2012) (interpretation of underlying Barriers tthat drove Moon’s (1993) and NAS (1995) analysis.

Accounting for Health Care in Poverty Measurement

- NAS and SPM
  - Subtract MOOP from resources like a “tax”
  - No impact on thresholds
  - Separate Medical Risk Index

BLS

Accounting for Health Care in Poverty Measurement

- NAS and SPM
  - Subtract MOOP from resources
  - No impact on thresholds
  - Medical Risk Index

- Drive for including in thresholds: **Portability**
  - Emphasized by Bavier (1998, 2000) and others mostly at state level

- SPM Alternatives
  - Add MOOP to FCSU with medical risk adjustment
    - Thresholds only
    - Produced for NAS (available)
    - SPM Research
  - Add basic health insurance
    - Thresholds
    - Resources
    - SPM Research

How to Measure "Need" in Thresholds?

- MOOP
- Health Care

Garner, Short, Banthin with adjustments for the uninsured and risk index: NAS (2000, 2002)

Garner Gudrais and Short with risk index adjustment: SPM (2014)

Some states

Korenman and Remler: SPM (2012 pres., 2013, 2016)

BLS

How to Account for Assistance to Meet Heath Care Needs in Resources?

- MOOP
- Health Care

Korenman and Remler: SPM (2012 pres., 2013, 2016)

Needed

MOOP in Thresholds

- Premium paid
- Expenditures for discretionary and nondiscretionary
- MOOP part of threshold adjusted for medical care risk
- *Resources Impact*
  - *No additions or subtractions*

Health Care in Thresholds

- Universally provided plan that socially defined as essential
  - Covers nondiscretionary
  - Not based on health status
- *Resources Impact*
  - *Plan premium*
  - *Subtract premiums OOP*
  - *Subsidies added*
  - *Subtract non-premium MOOP with cap*

BLS

MOOP in Thresholds: CU Level, CUs+2C to CUs 2A+2C

3-parameter equivalence scale

+

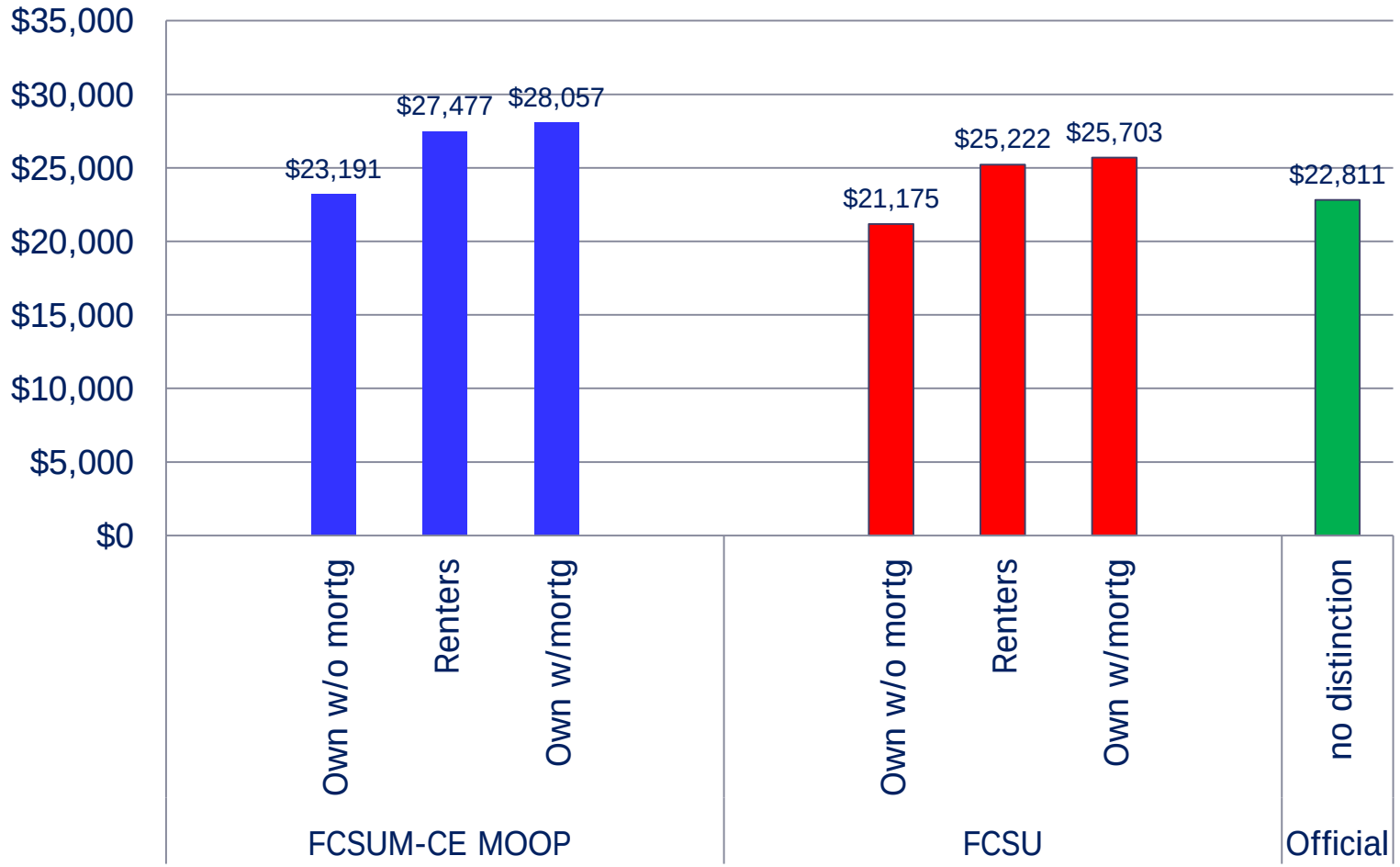
CUs +2C medical equivalence scale

Equivalence Scales Applied to Derive Thresholds for Other CUs

- 3-parameter equivalence scale
- Medical risk (12 groups)
  - One, two, or three or more people in SPM unit
  - Presence of elderly
  - Health insurance status
    - Privately insured
    - Publicly insured
    - Uninsured non-elderly
  - *(For NAS, also included health status based on 1996 MEPS)*

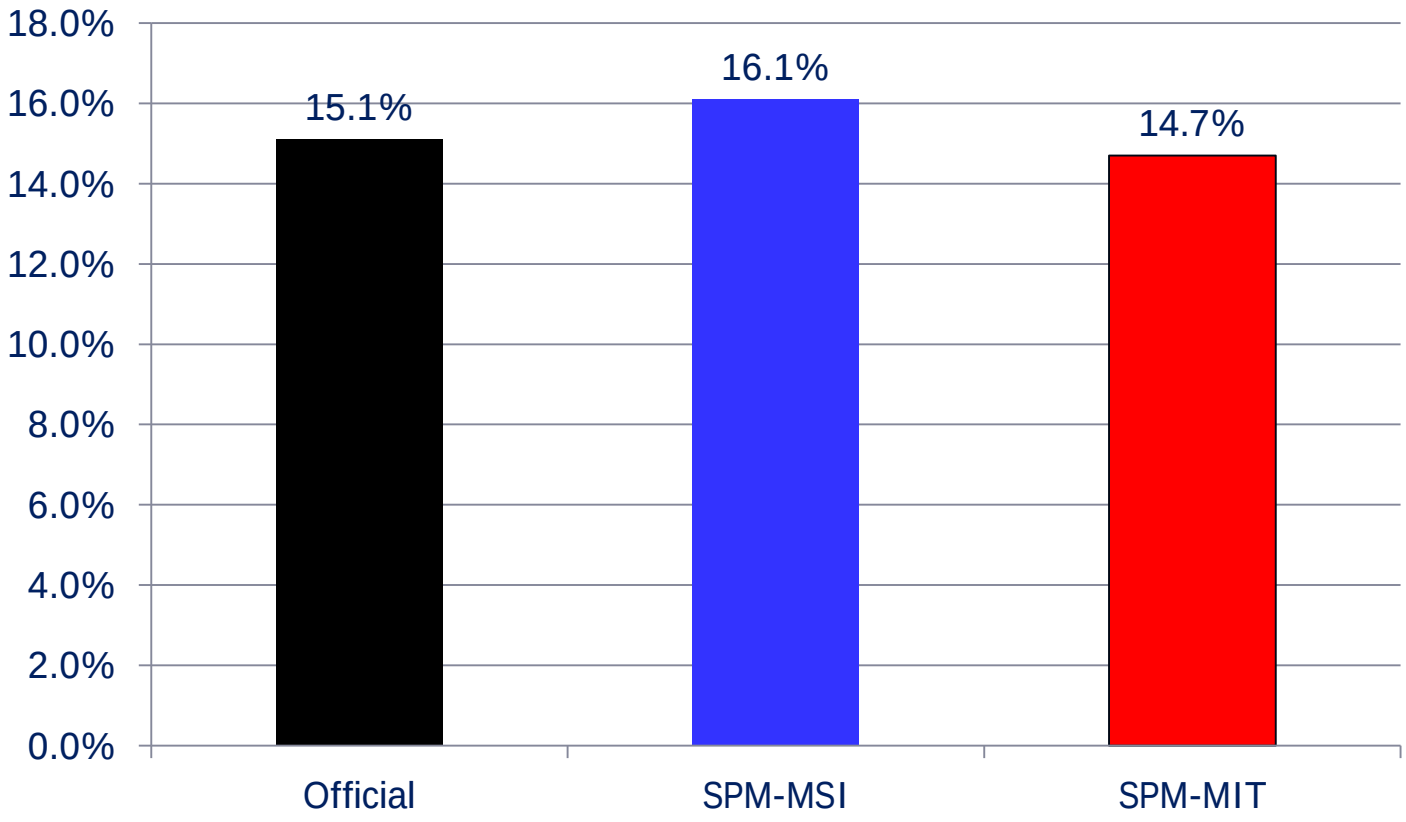
BLS

SPM Thresholds for Two Adults with Two Children vs. Official: 2011



Source: Garner Gudrais and Short (ASSA, 2014)

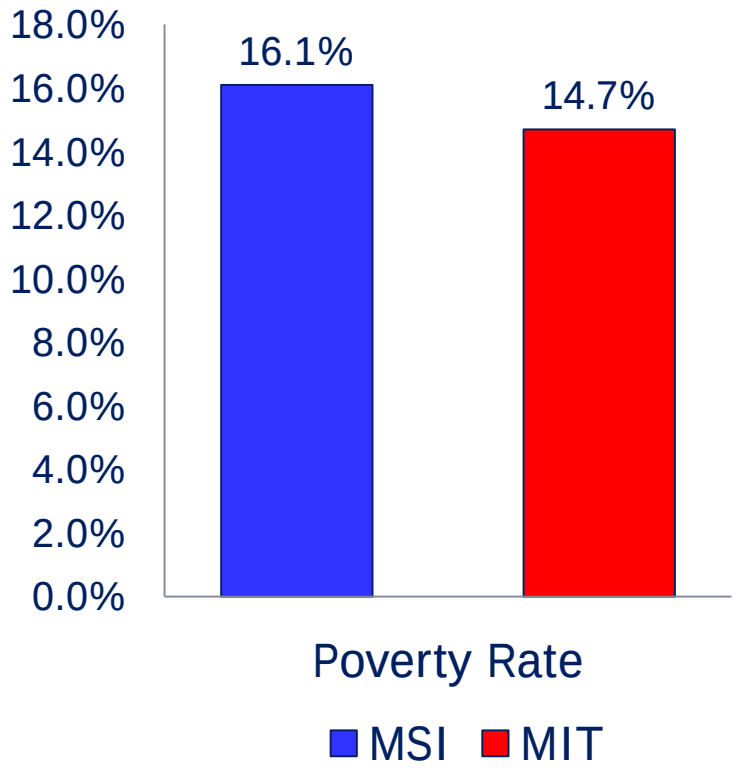
Poverty Rates: 2011



Source: Garner Gudrais and Short (ASSA, 2014)

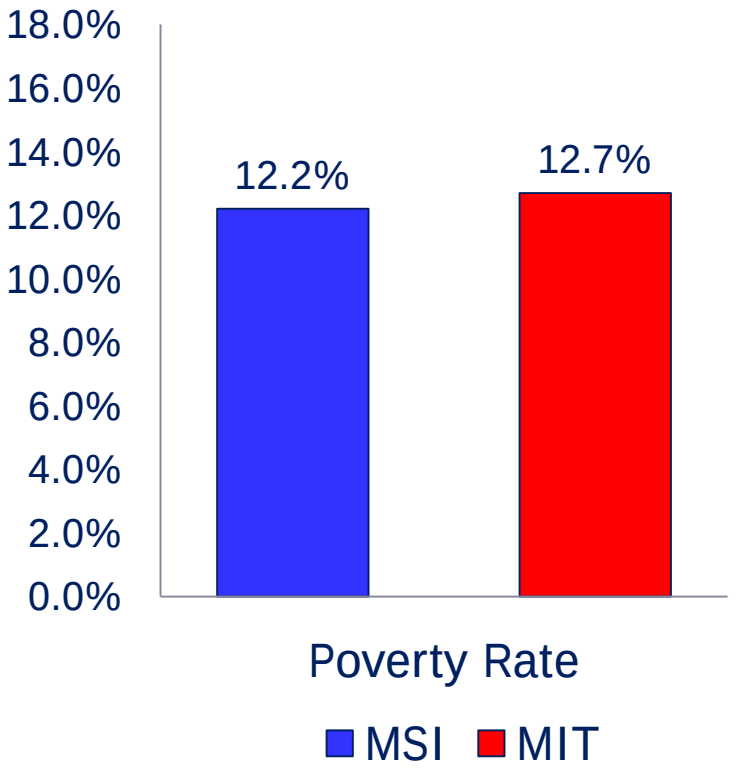
Accounting for MOOP: SPM vs. NAS

SPM 2011



Source: Garner, Short, and Gudrais (2014)

NAS 2000



Source: Short and Garner (2002)

Reasons for Differences

SPM 2011

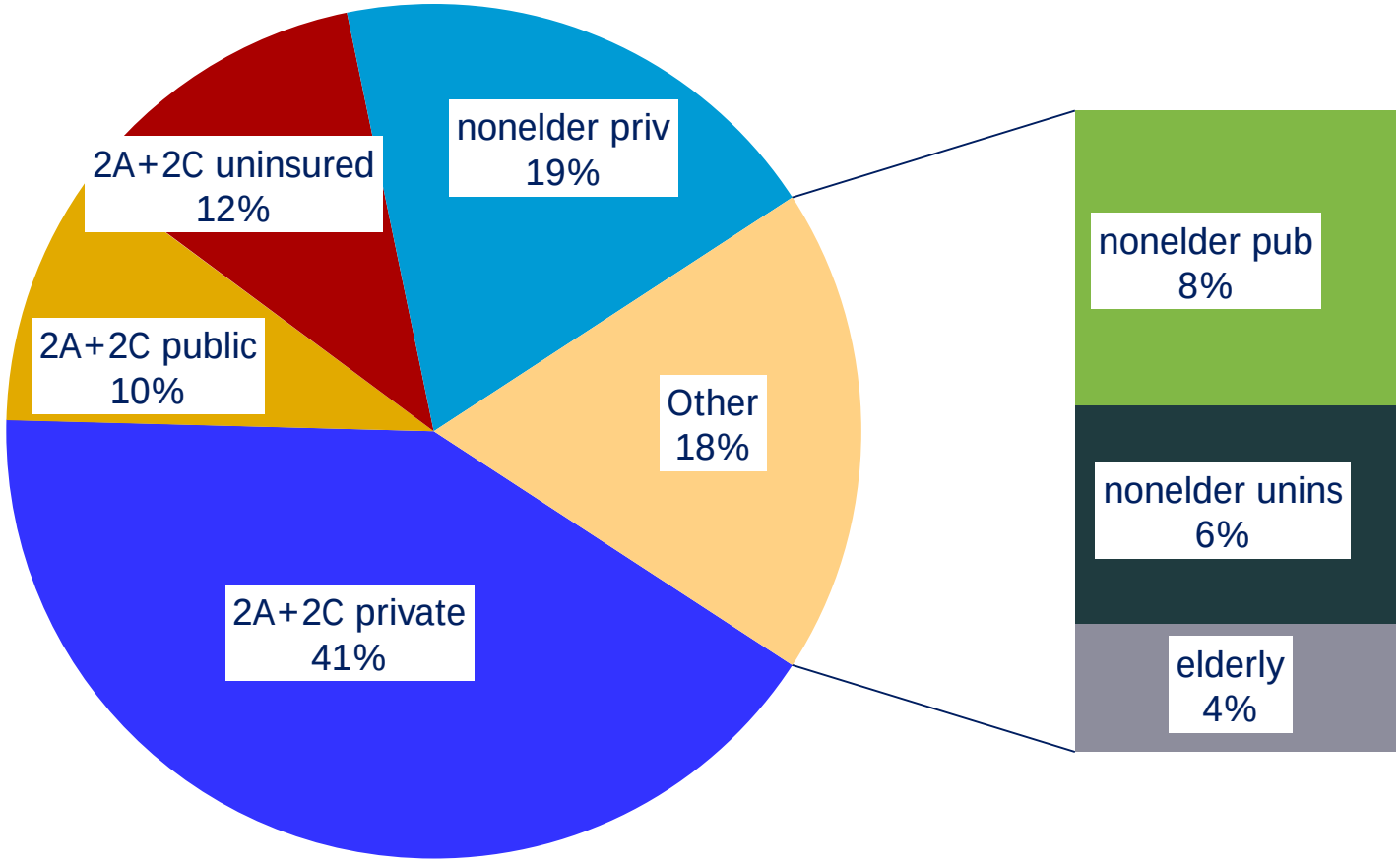
- Thresholds based on *33rd percentile FCSUM*
- 2011 CE-based medical equivalence, no adjustment for uninsured
- Estimation and reference units differ
  - *Estimation: all consumer units with 2 children*
  - Reference: consumer units with families with 2 adults and 2 children
- Resources with reported MOOP subtracted

NAS 2000

- MSI: MOOP subtracted modeled
- Thresholds based on *median FCSUM*
- 1996 MEPS-based medical equivalence, adjustment for the uninsured
- Estimation and reference units same
  - *Families with 2 adults and 2 children*

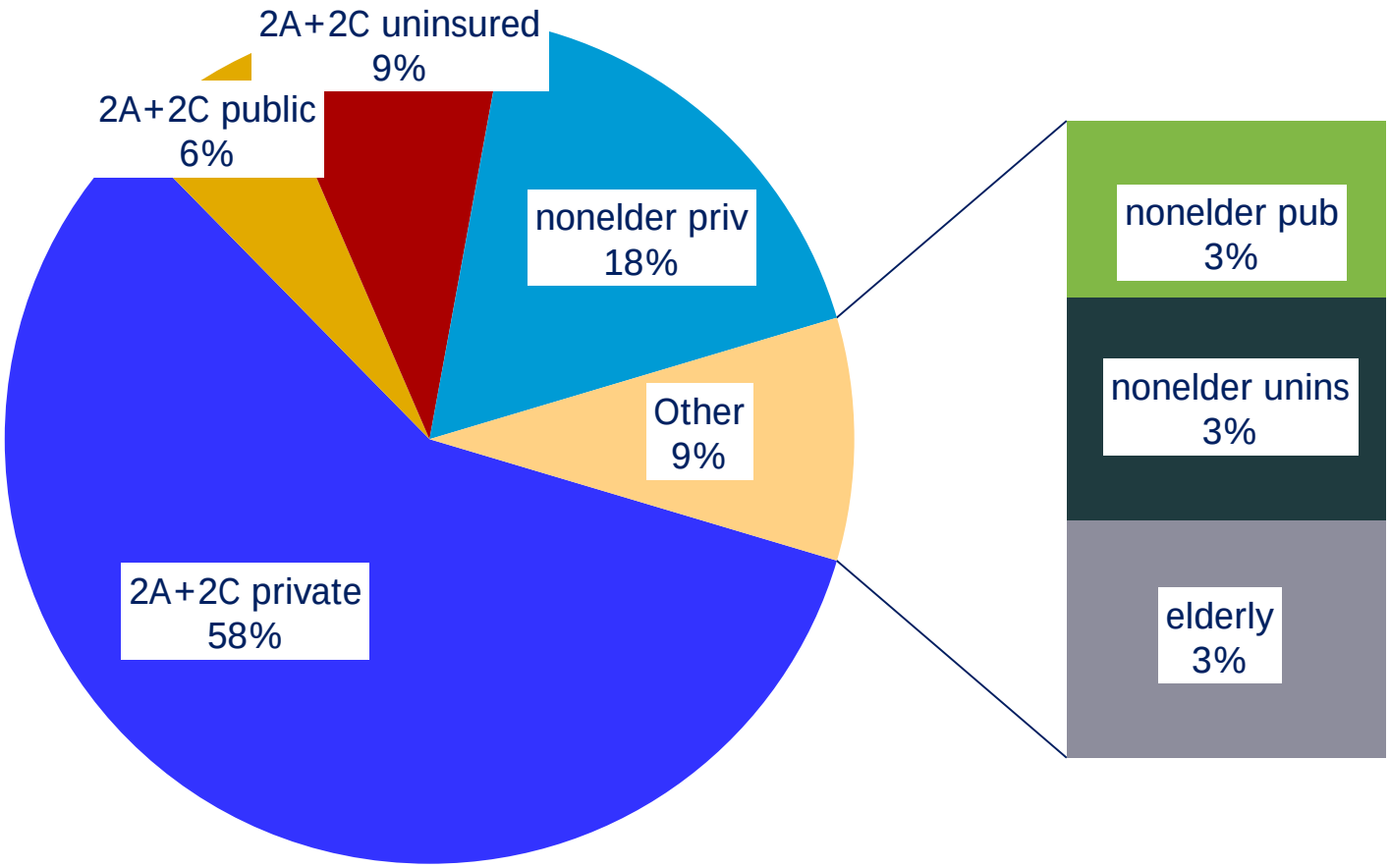
BLS

Weighted Distribution of Consumer Units with Two Children by Medical Equivalence Group: 30-36 Percentile Range of FCSUM



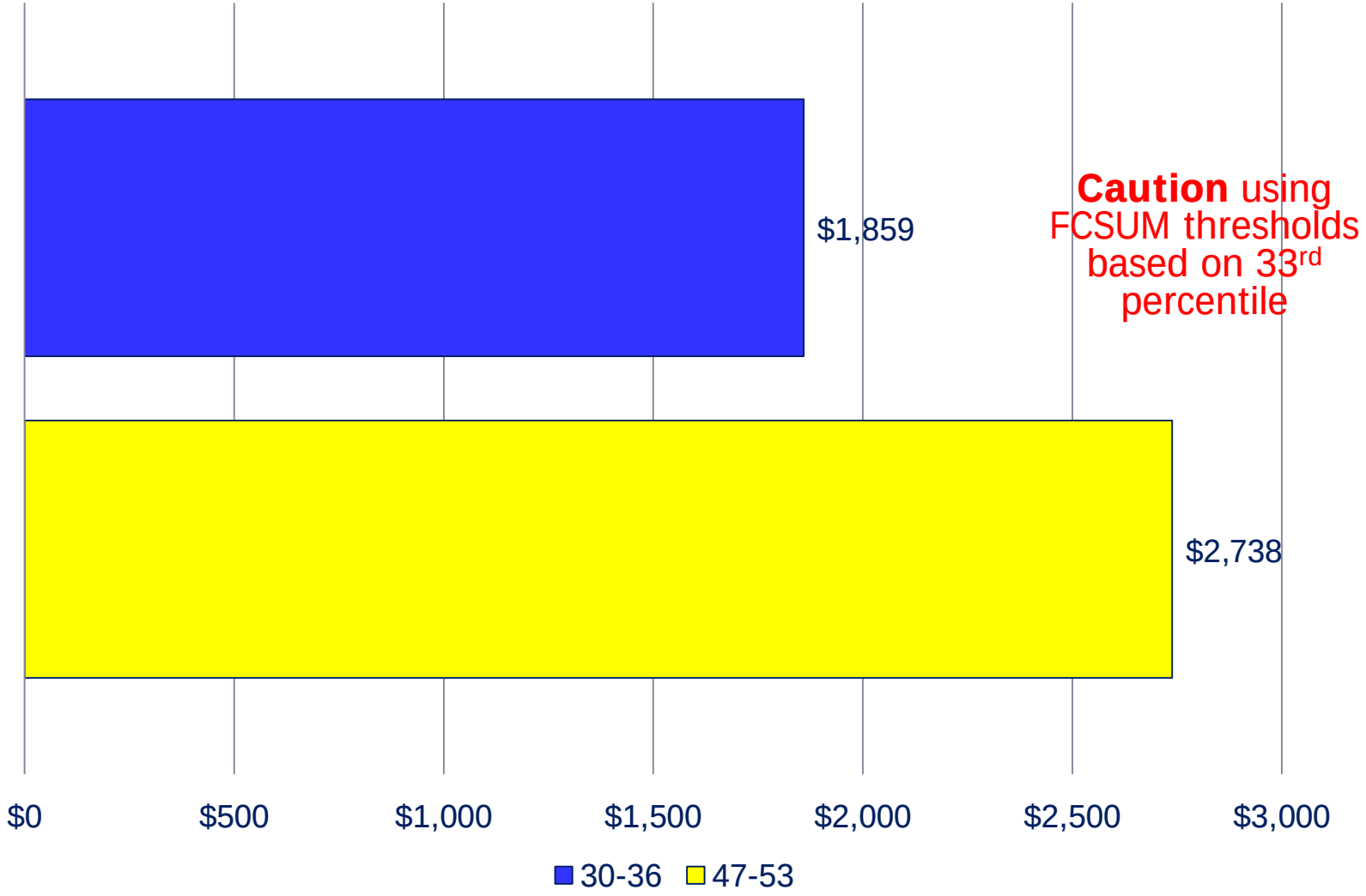
MOOP share of 2A+2C equivalized FCSUM: 8.1%
60% private + 22% public = 82% covered

Weighted Distribution of Consumer Units with Two Children by Medical Equivalence Group: 47-53 Percentile Range of FCSUM



MOOP share of 2A+2C equivalized FCSUM: 9.5%
76% private + 12% public = 88% covered

Implicit Equivalized 2A+2C MOOP Expenditures in Ranges of FCSUM Distributions: 2011



Basic Capped Plan: Korenman and Remler (2013)

- Health-Inclusive Poverty Measure (HIPM)

- In contrast to earlier times, now feasible (2013)
  - Conceptualize Health Needs as Need for Health Insurance
  - Universally available plans
    - Non-risk-rated premiums (community rating)
    - Caps on MOOP
  - Example sources of plans: Affordable Care Act and Medicare Advantage Plans
  - Consistency in thresholds and resources

BLS

Basic Plan and Adjustments: K&R 2016

- Basic Plan premiums depend on
  - Geography (local rating area so geographically adjusted)
  - Family size and age composition
  - Health insurance status of other members

- Health insurance needs and resources defined at "Health Insurance Unit" (HIU)
  - Sub-units of SPM units
  - Adjustments made at HIU level
  - Aggregate to SPM units

BLS

Implementing HIPM: K&R 2016

- Thresholds
  - SPM thresholds based on FCSU, geographic adjustment for Massachusetts
  - Add unsubsidized premiums ("full cost") of Basic Plan (BP) health insurance for HIU within SPM units, then aggregate to SPM unit
- Resources
  - As defined by Census but not subtracting MOOP
  - For HIU (aggregated to SPM units) with insurance provided by government or employer, add net value of insurance (BP premium less required premium MOOP payment)
  - For HIU receiving subsidies, add subsidy (capped at premium of BP)
  - Subtract actual nonpremium MOOP (capped at nonpremiuim cap in BP) as reported in CPS

BLS

Basic Plan in Thresholds: K&R 2016

Thresholds Data

- FCSU 2010 Thresholds geographically adjusted for MA
- Cheapest MA Bronze Low plan defined as BP (today closest to ACA Silver Plan)

Resources Data

- CPS ASEC with data for 2010
- Drop from sample
  - Resource units with people >64
  - One or more non-citizens
- MA sample: 2504 SPM resource units

BLS

Table 1: Illustrative Calculation of the SPM and HIPM for Two Hypothetical Families

Line No.		Family A	Family B
	Needs		
(1)	Material needs (SPM threshold)	20,000	20,000
(2)	Health Insurance Needs (Basic Plan)	10,000	10,000
	Resources		
(3)	Income (SPM resources)	22,000	22,000
(4)	Health insurance resources provided	None	Medicaid policy, no MOOP premium payment required. Value = Basic Plan (10,000).
	SPM Poverty Status (line 3 versus line 1)	Not poor	Not poor
(5)	HIPM Resources (line 3 + line 4)	22,000	32,000
(6)	HIPM Poverty Threshold (line 1 + line 2)	**30,000**	**30,000**
(7)	HIPM Poverty status: line (5) vs. line (6)	Poor	Not Poor

Note: Neither family has any premium or nonpremium MOOP.

Source: Korenman and Remler (2016), p. 42

Table 2: Official, Supplemental and Health Inclusive Poverty Rates, Massachusetts, 2010
SPM Units with All Persons Under Age 65
Poverty Rates (%) for Persons, By Family Type

Poverty Measure	All Persons	Children	Family Type			
			Lone Adults SPMUs	Persons in One-Parent SPMUs	Persons in Two-Parent SPMUs	Persons in Two-Adult SPMUs
(1) OPM	11.9	15.0	21.2	37.3	9.7	7.9
(2) SPM	13.5	14.9	23.4	27.0	12.8	7.1
(3) SPM, no MOOP Deduction	10.4	10.9	19.5	25.7	8.0	5.9
(4) HIPM	12.2	13.0	21.5	25.7	10.1	7.1
Unweighted Sample Count	2504	819	222	182	1183	292

Notes:
Sample weighted using CPS March Supplement person weights.
OPM: Official Poverty Measure
SPM: Supplemental Poverty Measure
MOOP: Medical Out of Pocket Expenses
HIPM: Health Inclusive Poverty Measure

Source: Korenman and Remler (2016), p. 43

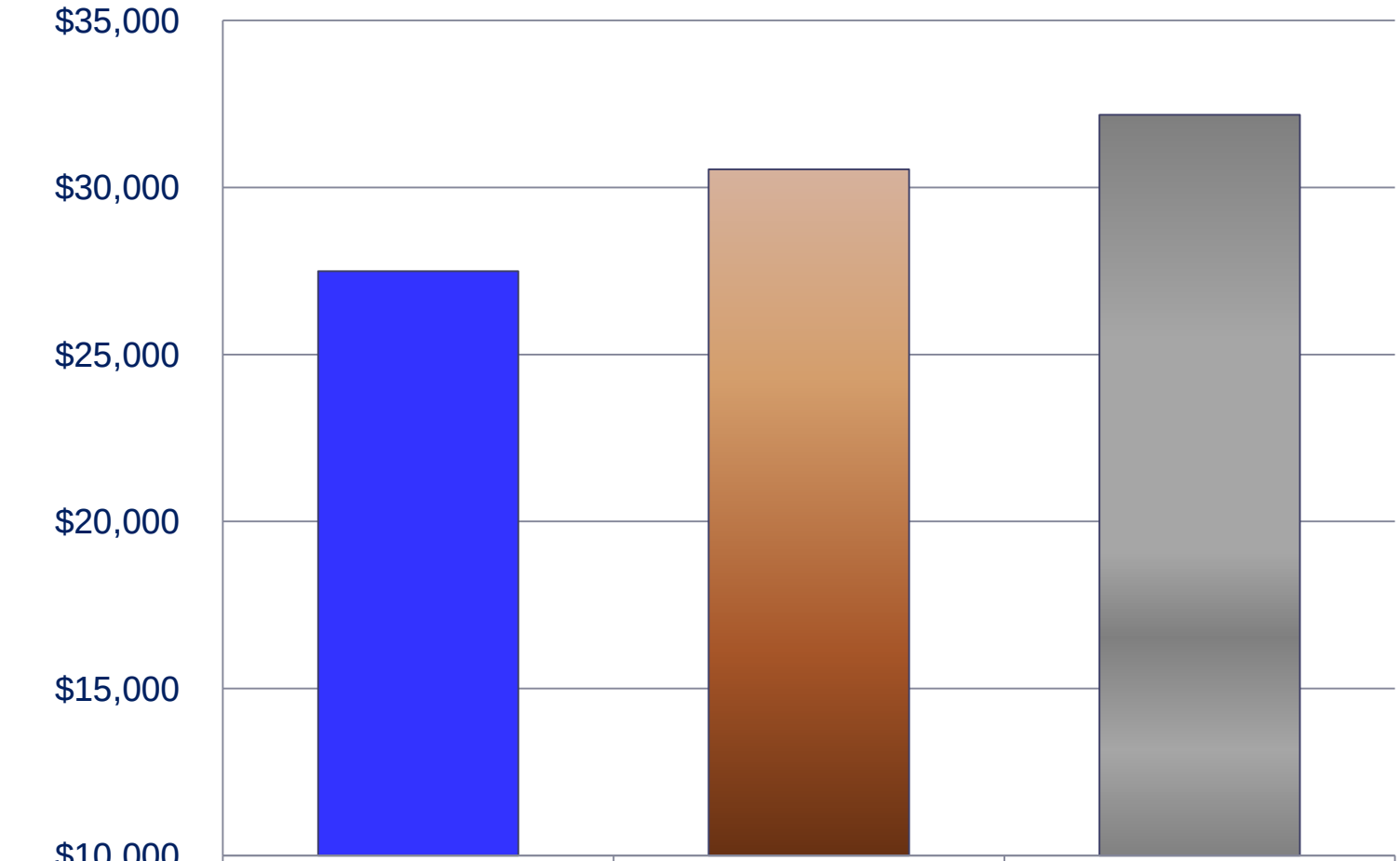
BLS

Source of Data for Plans

- Value Basic Plan Health Insurance using Kaiser Bronze and Silver
  - Non smoker
  - Less than 65
- Derived
  - 2A+2C FCSU + Kaiser geographically plan full cost (premium without subsidies)

BLS

2A+2C FCSUM Thresholds 2011: Renters



	CE MOOP	Kaiser Bronze	Kaiser Silver
SPM Thres.	$27,491	$30,546	$32,172

CU-Based with Kaiser City/Area premiums

Source: Garner, Short, and Gudrais (presentation 2014)

Bottom Line

- How to treat health care?
  - Need
  - Or “tax”
- If Need, how to measure?
  Impact on thresholds and resources?
  - MOOP spending
  - Health insurance
- Practical Issues if in thresholds
  - If MOOP in Thresholds - issue of 33rd percentile vs. median
  - If Basic plan – issue of value of data plans, premiums, in-kind benefits, cost-sharing

BLS

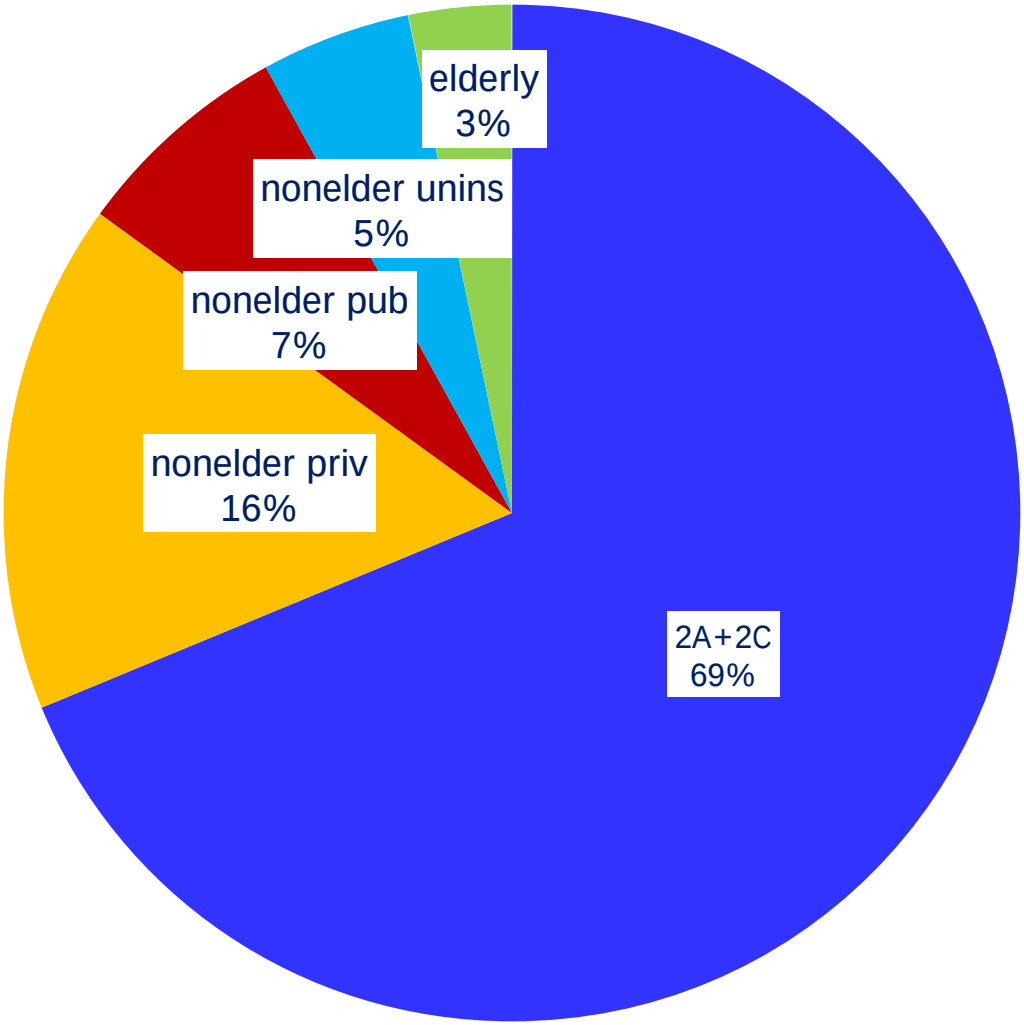
Contact Information

Thesia I. Garner
Senior Research Economist
Division of Price and Index Number Research/OPLC

202-691-6576
garner.thesia@bls.gov

BLS
BUREAU OF LABOR STATISTICS
U.S. DEPARTMENT OF LABOR

Weighted Distribution of Consumer Units with Two Children by Medical Equivalence Group: 2007Q2-2012Q1

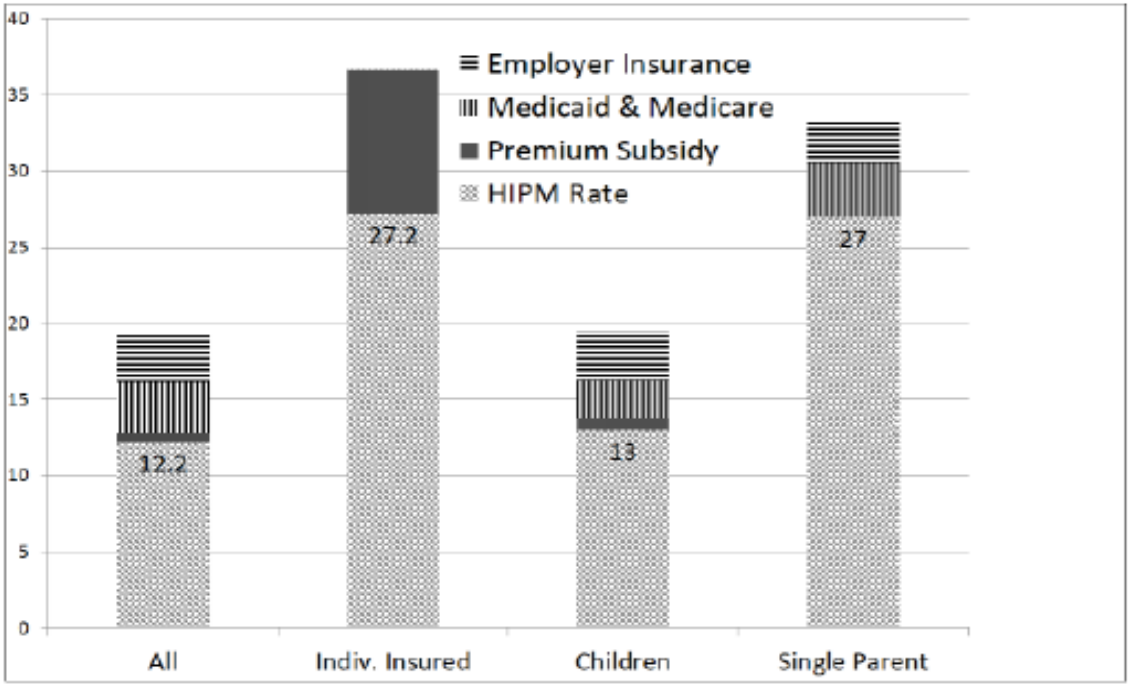


Basic Capped Plan: Korenman and Remler (K&R 2016)

- Health insurance a basic need, regardless of health insurance status, and included in thresholds
- Social standard *(reflected by Medicare, Medicaid, ACA)* but consensus incomplete
- "HIPM can be implemented for the US as required data become available" *(K&R refer to Pascale, Boudreau and King (2014) in Census Bureau report on new health insurance questions in the CPS)*
- *"Demostrate practicality, value and face validity of a HIPM for uner-65 population, primary beneficiaries of health reform"* (p. 5)

BLS

Figure 1:
Impact of Health Insurance & Mass. Premium Subsidies on HIPM Poverty Rates



Notes:

1. "Single Parent" is persons in single parent families; Indiv. Insured are individuals in health insurance units (subunits of SPM family units) who purchase insurance as individuals or families, rather than as part of a group plan or government insurance program.
2. The number in each bar is the HIPM poverty rate for the group.
3. See Table 2 for additional information and figures for other groups.

Allows how the proportion poor (i.e., having insufficient resources to meet material and health insurance needs) falls as additional benefits are included in resources

Source: Korenman and Remler (2016), p. 43

BLS