Enhancing the Supplemental Poverty Measure to Estimate the Impact of Health Insurance Benefits on Poverty

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The Social, Economic and Political Effects of the Affordable Care Act Program
SPM useful for measuring the poverty-reducing impact of many cash and in-kind transfers, but not HI

**Figure 9. Impacts of Select Safety Net Programs on Supplemental Poverty Rate, 2014**

<table>
<thead>
<tr>
<th>Program</th>
<th>Percentage in Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>+8.2</td>
</tr>
<tr>
<td>Tax Credits</td>
<td>+3.1</td>
</tr>
<tr>
<td>EITC</td>
<td>+2.1</td>
</tr>
<tr>
<td>SNAP</td>
<td>+1.5</td>
</tr>
<tr>
<td>UI</td>
<td>+0.3</td>
</tr>
<tr>
<td>SSI</td>
<td>+1.2</td>
</tr>
<tr>
<td>Housing</td>
<td>+0.9</td>
</tr>
<tr>
<td>School Lunch</td>
<td>+0.4</td>
</tr>
<tr>
<td>TANF (cash)</td>
<td>+0.2</td>
</tr>
<tr>
<td>WIC</td>
<td>+0.1</td>
</tr>
<tr>
<td>LIHEAP</td>
<td>+0.1</td>
</tr>
<tr>
<td>Child Support</td>
<td>+0.2</td>
</tr>
</tbody>
</table>

**Baseline** = 15.3%


## Approximate Expenditures ($Billion) c. 2016

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>600</td>
</tr>
<tr>
<td>Medicaid</td>
<td>550</td>
</tr>
<tr>
<td>ESI, Federal tax expenditure</td>
<td>200+</td>
</tr>
<tr>
<td>ACA Premium subsidies</td>
<td>30</td>
</tr>
<tr>
<td>Social Security (OASDI)</td>
<td>900+</td>
</tr>
<tr>
<td>EITC</td>
<td>70</td>
</tr>
<tr>
<td>SNAP</td>
<td>65</td>
</tr>
<tr>
<td>SSI</td>
<td>55</td>
</tr>
<tr>
<td>TANF</td>
<td>35</td>
</tr>
<tr>
<td>Housing, low inc. (fed.)</td>
<td>50</td>
</tr>
</tbody>
</table>
Health Inclusive Poverty Measure (HIPM): Concept

- Puts health care and/or health insurance “needs” directly in poverty threshold
- Values health insurance benefits as resources to meet those needs

Including health insurance in poverty measurement: The impact of Massachusetts health reform on poverty

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Why a valid HIPM Not Possible Before ACA

• NAS panel (1995), Moon (1994) recommended “SPM”
• *Tried hard* to put health care &/or insurance in needs
  – could find no valid way at that time
  – *Health care* needs highly variable & skewed, depend on enormous clinical detail
  – Historically: *Health insurance premiums* depended on (detailed) health status, employment, etc.

⇒ Could not determine $ for HI in poverty needs threshold
  – HI benefits in resources inconsistent if HI need not in threshold
  – Health insurance cannot be used for other needs (not fungible)
⇒ Not valid to count HI benefits in resources
NAS panel *reluctantly* chose “material only” poverty approach (MOOP subtracted and treated as nondiscretionary) and acknowledged that the treatment of health care was a weakness:

[The revised measure] “…does not explicitly acknowledge a basic necessity, namely medical care, that is just as important as food or housing. Similarly, the approach devalues the benefits of having health insurance, except indirectly.”

It recommended:

“As changes are made to the US system of health care, it will be important to reevaluate the treatment of medical care”
SPM Implicit Health Needs

SPM improves greatly on OPM.

But, implicitly, for health care & insurance, what you spend is exactly what you need.

If you buy a lot, then you “need” a lot

➔ wealthier people who buy more/better care or insurance may be deemed poorer by MOOP subtraction

If you go without care/insurance & spend less, you “need” less

➔ Uninsured going without useful, necessary care is not an unmet need. Result is not SPM poverty.

SPM does not count value of subsidized insurance as a resource, but subtracts any premium payments.

➔ HI subsidy (e.g., ACA) could make you poorer, according to the SPM.
SPM measures 1 of 3 sources of economic value of insurance

1. Value of HI in reducing MOOP
   - Sommers & Oellerich, JHE (2013): Medicaid ➔ - 0.7% point SPM
     “Beyond the program’s presumed primary benefit of improved access to care & health…”

2. Access-to-care value of HI
   - when uninsured get less/no care, not treated as an unmet need

3. Ex ante risk reduction value of HI
   - HI valuable even if ex post did not use health care, did not have MOOP;

Access to care & ex ante risk reduction are also necessities.

SPM cannot show health benefits’ direct effects on poverty through meeting the need for health insurance or care.

Do not expect a non-health measure of poverty to capture well the impact of health benefits (ACA, Medicaid) on poverty
Health Inclusive Poverty Measure (HIPM)

• Revision of SPM
• Threshold: add health insurance need to SPM threshold
  – ACA Guaranteed Issue & Community Rating ⇒ Can determine $ for health insurance need based on age.
  – HI Need = 2\textsuperscript{nd} cheapest silver plan in ACA rating area
    (or cheapest MA-PD plan for Medicare recipients)
• HIPM Resources:
  – SPM resources before the MOOP deduction
  – Add \textit{net} health insurance benefits the family receives
  – Those without HI benefits have no HI resources
• Non-fungibility of HI: Never value HI resources > HI need
• Cost-sharing needs: deduct capped non-premium MOOP from resources
Estimating The Effects Of Health Insurance And Other Social Programs On Poverty Under The Affordable Care Act
Data & Analysis Samples

- Main Data: CPS Annual Social and Economic Supplement
- CPS Supplemental Poverty Measure Research file
- CPS OUTTYP Extract File (for health insurance coverage of household members from someone outside the household)
- ACA Marketplace Health Plan Data (from RWJ)
- Medicare Advantage-Prescription Drug plan data (CMS/NBER)
- State Medicaid & CHIP: premiums & cost-sharing (KFF reports +)
- 2014 and 2015
- To focus on ACA impacts, present results mostly for
  - Households without a disability recipient
  - Persons under age 65
  - Individuals not imputed to be undocumented (Borjas 2017)
- Overall sample size = 156,079 in 2014 and 132,903 in 2015
HIPM and SPM Average Thresholds 2015

- SPM Threshold
- HIPM Threshold

Single adult
Single parent, 2 kids
Couple alone
Couple, 2 kids

$0, $10,000, $20,000, $30,000, $40,000
Poverty Impacts (direct)

• Accounting impacts of benefit programs on HIPM poverty rates

• Accounting impacts....on HIPM poverty gaps

• Comparisons of HIPM poverty and deep poverty rates across states that did and did not expand their Medicaid programs
  • un-adjusted and regression-adjusted rate differences
  • HIPM vs. SPM
Categories of Benefits

**Non-Health**
Social Ins. (SI) other than Health:
- Social Security OASDI
- unemployment compensation
- workers compensation
- some veteran's payments

**Means-Tested Transfers (MTTs)**
- SSI
- Public assistance/welfare/TANF
- SNAP
- capped housing subsidies
- school lunch program
- WIC
- energy assistance

**Tax Credits**
- EITC
- CTC

**Health**
- Employer Insurance (ESI)
- Medicare
- Medicaid
- ACA Premium Subsidies
Percentage-point reductions in health-inclusive poverty rates from various programs among people in households with no disability recipients, by health insurance type

* If received subsidies for which eligible

Source: Remler, Korenman, Hyson (2017)
EXHIBIT 4

Source: Remler, Korenman, Hyson (2017)

Percentages of the health-inclusive poverty gap filled, by selected population characteristics

- **Unfilled**: Light gray
- **Tax credits**: Blue
- **Means-tested benefits**: Red
- **SI**: Mauve
- **Premium subsidies**: Yellow
- **Medicaid**: Cyan
- **Medicare**: Khaki
- **ESI**: Black

Households with no disability recipients

**INDIVIDUAL CHARACTERISTICS**
- Younger than 18
- Hispanic
- Non-Hispanic black
- Non-Hispanic white

**TYPE OF INSURANCE**
- ESI
- Medicaid/CHIP
- Individual insurance
- Uninsured

**HOUSEHOLD STRUCTURE**
- One parent
- Two parents
- One adult
- Two adults

0% 10% 20% 30% 40% 50% 60% 70%
Results: USA 2015

Korenman, Remler & Hyson (under review)

Reducing Poverty Through Medicaid Expansions
Poverty Rates and Medicaid Expansion Impacts, 2015
(Non-Expansion Rates & Non-Expansion – Expansion Differences; *p<.05)

• Embargoed results
Deep Poverty Rates and Medicaid Expansion Impacts
(Non-Expansion Rates & Non-Expansion – Expansion Differences)
(*p < .05)

• Embargoed results
Summary

• SPM based largely on NAS (1995) recommendations
  – NAS wanted to include health in needs threshold
  – Recommended revisit as US health care system changes
• SPM can only show impact on MOOP, not direct impact of HI in meeting health insurance needs: access and ex ante risk reduction
• Health insurance transfers to low-income population: large and growing.
• HIPM possible, provided Guaranteed Issue, Community Rating and we are willing to accept HI as a need
• HIPM captures major poverty reductions from HI that SPM misses.
Summary of HIPM Results

• Govt HI benefits have major anti-poverty impacts
  – similar to or larger than means-tested transfers (cash + in-kind) or tax credits.
• Employer insurance is also important
• ACA subsidies: important for lone adults & indiv. insured
• Medicaid/CHIP poverty impact for kids: 5.3 % points
• Medicaid Expansion reduced deep HIPM poverty
  {embargoed result}
• SPM misses much of ACA & Medicaid’s impact on poverty