

# Measuring Transitions, Spells of Uninsurance, and Churning in the Redesigned CPS

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  - Michel Boudreaux, Kathleen Call & Joanna Turner (SHADAC)



- Policy relevance
- Compare surveys that measure duration
- Compare estimates from other surveys
- Method for testing face validity
- Results of face validity test
- Discussion



### Purpose of this presentation

To compare the redesigned Current Population Survey to other federal surveys that are currently used to measure duration and to check the face validity of duration of coverage estimates in the Survey of Health **Insurance and Program Participation** 



# Why does data on duration of coverage matter?

- Length of uninsurance and health care access are inversely related
- Gaps in coverage and changes in coverage can affect continuity of care
- After implementation of federal health care reform, changes in coverage between Medicaid and health insurance exchanges could affect administrative costs and continuity of care
- Different policies are needed to address longterm and short-term uninsurance



# Comparing to Federal Surveys That Measure Duration



### Primary Focus and Survey Administrator

|                              | Redesigned<br>CPS                                   | SIPP                                   | MEPS/HC   | NHIS   |
|------------------------------|---|--|---|--|
| Primary<br>Focus             | Labor Force<br>Participation<br>and<br>Unemployment | Income and<br>Program<br>Participation | Health Care<br>Access,<br>Utilization and<br>Cost   | Population<br>Health                               |
| Survey<br>Adminis-<br>trator | U.S. Census<br>Bureau                               | U.S. Census<br>Bureau                  | Agency for<br>Healthcare<br>Research and<br>Quality | Center for<br>Disease<br>Control and<br>Prevention |



### Sample Size and Geography Available

|  | Redesigned<br>CPS                       | SIPP               | MEPS/HC                          | NHIS                             |
|--|---|--------------------|----------------------------------|----------------------------------|
| Approximate<br>Sample Size                               | 200,000                                 | 90,000             | 37,000                           | 90,000                           |
| State<br>Representative                                  | Yes                                     | No                 | No                               | No                               |
| Level of<br>Geography<br>Available in<br>Public Use File | National, state<br>and some<br>substate | National and state | National and<br>census<br>region | National and<br>census<br>region |



### **Recall and Length**

|  | Redesigned<br>CPS  | SIPP   | MEPS/HC    | NHIS      |
|--|--|--|------------|-----------|
| Recall<br>Period                             | 14-16 months   | 4 months<br>current but 12<br>months in 2014 | 5-6 months | 12 months |
| Longitudinal                                 | inal Longitudinal<br>component but<br>most analysis<br>cross-sectional |  | yes        | no        |
| Maximum<br>length of<br>duration<br>measured | length of<br>duration 16 months  |  | 2 years    | 12 months |

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### Available Measures

|   | Redesigned<br>CPS | SIPP | MEPS/HC | NHIS |
|---|-------------------|------|---------|------|
| Uninsured all year                              | Yes               | Yes  | Yes     | Yes  |
| Uninsured anytime<br>in year                    | Yes               | Yes  | Yes     | Yes  |
| Monthly coverage                                | Yes               | Yes  | Yes     | No   |
| Number and duration of spells                   | Yes               | Yes  | Yes     | No   |
| Churning on and off same plan type              | Yes               | Yes  | Yes     | No   |
| Transitions from<br>one plan type to<br>another | Yes               | Yes  | Yes     | No   |



### Estimates of Duration: Ratios

#### **Ratios of All-Year Uninsured to Anytime-in-Year Coverage**

|              | Unin | Uninsured All-Year |      |      | Uninsured Anytime-<br>in-Year |      |      | Ratio |      |  |
|--------------|------|--------------------|------|------|-------------------------------|------|------|-------|------|--|
| Data<br>Year | SIPP | MEPS               | NHIS | SIPP | MEPS                          | NHIS | SIPP | MEPS  | NHIS |  |
| 1998         | 9%   | 13%                | 11%  | 25%  | 25%                           | 21%  | 37%  | 53%   | 53%  |  |
| 1999         |      | 12%                | 11%  |      | 25%                           | 20%  |      | 49%   | 51%  |  |
| 2001         | 7%   |                    | 11%  | 24%  |                               | 20%  | 28%  |       | 52%  |  |
| 2003         |      | 14%                | 11%  |      | 25%                           | 21%  |      | 54%   | 54%  |  |
| 2009         | 10%  |                    | 12%  | 30%  |                               | 22%  | 33%  |       | 56%  |  |

Sources: 2005 ASPE Issue Brief, 2003 CBO Report, 2009 Annual NHIS Report and 2008 SIPP panel as analyzed by SHADAC. --Estimates not available



### Estimates of Duration: Partials

### **Duration of Coverage in Federal Surveys, Nonelderly**

|              | Cov  | ered All-Y | 'ear | Unin | sured All | -Year | Unins | ured Part<br>Year | -of-the- |      | Totals |      |
|--------------|------|------------|------|------|-----------|-------|-------|-------------------|----------|------|--------|------|
| Data<br>Year | SIPP | MEPS       | NHIS | SIPP | MEPS      | NHIS  | SIPP  | MEPS              | NHIS     | SIPP | MEPS   | NHIS |
| 1998         | 76%  | 75%        | 79%  | 9%   | 13%       | 11%   | 15%   | 12%               | 10%      | 100% | 100%   | 100% |
| 1999         |      | 75%        | 80%  |      | 12%       | 11%   |       | 13%               | 10%      |      | 100%   | 100% |
| 2001         | 76%  |            | 80%  | 7%   |           | 11%   | 17%   |                   | 10%      | 100% |        | 100% |
| 2003         |      | 75%        | 79%  |      | 14%       | 11%   |       | 12%               | 10%      |      | 100%   | 100% |
| 2009         | 70%  |            | 78%  | 10%  |           | 12%   | 20%   |                   | 10%      | 100% |        | 100% |

Sources: 2005 ASPE Issue Brief, 2003 CBO Report and 2009 Annual NHIS Report and 2008 SIPP panel as analyzed by SHADAC

--Estimate not available



### Methods

- Weighted results from the experimental component of the RDD (Landline) SHIPP to the following SIPP control totals
  - Race/Ethnicity
  - Age by Education
  - Household Size
  - Sex
- Compared estimates between the RDD (Landline) SHIPP and the SIPP
  - Ratio of uninsured all-year to uninsured anytime-in-year
  - Compared estimates of uninsured part-of-year



# RESULTS



### Estimates of Duration: Ratios

# Ratios of All-Year compared to Any-Time in Year Coverage, Nonelderly 2009

|  | weighted |       | unweighted |       |  |
|--|----------|-------|------------|-------|--|
|  | SIPP     | SHIPP | SIPP       | SHIPP |  |
| Uninsured All-Year/Uninsured Anytime-in-Year                 | 33%      | 78%   | 32%        | 75%   |  |
| Public Coverage All-Year/Public Coverage<br>Anytime-in-Year  | 43%      | 82%   | 44%        | 81%   |  |
| Private Coverage All-Year/Public Coverage<br>Anytime-in-Year | 80%      | 96%   | 80%        | 96%   |  |

Source: 2008 SIPP panel and 2010 SHIPP Survey



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### Estimates of Duration: Uninsured Partials

### **Duration of Coverage, Nonelderly 2009**

|                        | weig | hted  | unweighted |       |  |
|------------------------|------|-------|------------|-------|--|
|                        | SIPP | SHIPP | SIPP       | SHIPP |  |
| Covered All-Year       | 70%  | 81%   | 70%        | 84%   |  |
| Uninsured All-Year     | 10%  | 15%   | 10%        | 12%   |  |
| Uninsured Part-of-Year | 20%  | 4%    | 20%        | 4%    |  |
| Total                  | 100% | 100%  | 100%       | 100%  |  |

Sources:2008 SIPP panel and 2010 SHIPP survey



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# Estimates of Duration: Private Coverage Partials

#### **Duration of Coverage, Nonelderly 2009**

|                            | weig | hted  | unweighted |       |
|----------------------------|------|-------|------------|-------|
|                            | SIPP | SHIPP | SIPP       | SHIPP |
| No Private Coverage        | 26%  | 26%   | 27%        | 21%   |
| Private Coverage All-Year  | 59%  | 71%   | 58%        | 76%   |
| Private Coverage Part-Year | 15%  | 3%    | 15%        | 3%    |
| Total                      | 100% | 100%  | 100%       | 100%  |

Sources: 2008 SIPP panel and 2010 SHIPP survey



# Estimates of Duration: Public Coverage Partials

### **Duration of Coverage, Nonelderly 2009**

|                            | weighted |       | unweighted |       |
|----------------------------|----------|-------|------------|-------|
|                            | SIPP     | SHIPP | SIPP       | SHIPP |
| No Public Coverage         | 77%      | 86%   | 76%        | 88%   |
| Public Insurance All-Year  | 10%      | 12%   | 11%        | 10%   |
| Public Insurance Part-Year | 13%      | 3%    | 13%        | 2%    |
| Total                      | 100%     | 100%  | 100%       | 100%  |

Source: 2008 SIPP panel and 2010 SHIPP survey



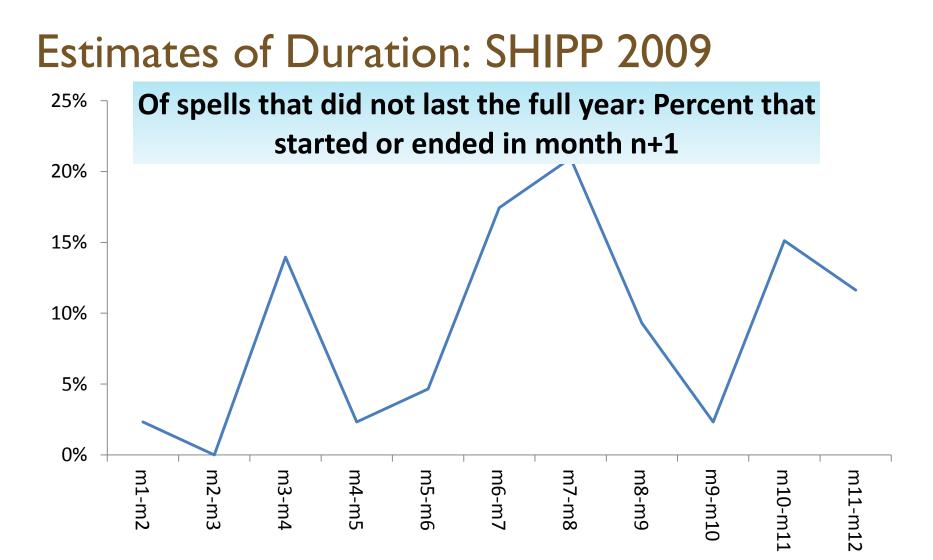
### Estimates of Duration: SHIPP

### **Duration of Coverage in SHIPP, 2009 vs 15-17 Months**

|         |             | Jan-Dec 2009 | Jan 09 thru Spr 10 | Diff |
|---------|-------------|--------------|--------------------|------|
| Insured | All months  | 84.3         | 83.3               | -1.0 |
|         | No months   | 11.8         | 10.1               | -1.7 |
|         | Some months | 3.9          | 6.4                | 2.5  |
| Public  | All months  | 9.8          | 9.3                | -0.5 |
|         | No months   | 87.8         | 86.5               | -1.3 |
|         | Some months | 2.4          | 4.0                | 1.6  |
| Private | All months  | 76           | 75                 | 1.0  |
|         | No months   | 21.1         | 19.8               | 1.3  |
|         | Some months | 2.9          | 5.1                | 2.2  |

Source: SHIPP 2010





Source: 2010 SHIPP survey



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### Limitations

- Coverage bias
  - Cell phone only households are not included in the SHIPP sample and characteristics of cell phone only households are different than landline households
  - Weighting should help reduce some of the bias but some variables such as homeownership that are correlated with telephone usage are not included in the SHIPP
- Relatively small sample size (2,370)
- There is no gold standard for duration of coverage estimates



### Discussion

- Duration of coverage estimates would be useful to states particularly with the advent of federal health reform.
- Prevalence of transitions in coverage is lower than expected (4% as compared to 10-20% uninsured part-year in other surveys).
- One possible reason is that weighting was not very effective in adjusting for coverage bias due to the exclusion of cell-only households

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