Projected Distribution of Health Insurance Coverage under the Affordable Care Act

-Handout-

Young Rock Hong, MPH; Derek Holcomb, PhD;
Michelyn Bhandari, DrPH; Laurie Larkin, PhD

Eastern Kentucky University
Department of Health Promotion and Administration
Introduction

• Introduction of the health insurance exchanges and the expansion of Medicaid eligibility under the Affordable Care Act (ACA).

• 44% of the population in the United States were underinsured or uninsured in 2010 (Schoen, Doty, Robertson, and Collins, 2011).

• The ACA enactment in 2014 is expected to assist those who are both underinsured and uninsured U.S. residents. It was estimated that over 32 million uninsured Americans will consequently receive the minimum essential coverage under the ACA (Jaffe, 2012).
To examine possible impacts of the Affordable Care Act!

1) Estimates the number of US adults who would be likely to be eligible for the Medicaid expansion and who would be required to purchase health insurance through the health exchanges

2) Describes the proportion and characteristics of individuals with health coverage and the uninsured who are eligible for the federal subsidies and Medicaid expansion
Data

• Data from the Household Survey Component (HC) of the Medical Expenditure Panel Survey (MEPS) 2012
• A large-scale U.S. population based survey administered by the Agency for Healthcare Research and Quality (AHRAQ).

• Consolidated MEPS data files are publically available at http://meps.ahrq.gov/mepsweb/.
• **Sample:** adults aged 27 to 64 years

✓ Those 65 years and older were excluded to avoid confounding with individuals using Medicare (near-universal coverage; Franks, Clancy, Gold, & Nutting, 1993; Shi, 2000).

✓ Those younger than 27 were also excluded to avoid possible effects of changing insurance status (47% of US young adults ages 19-25 stayed or joined their parent’s health plan in 2011 [Collins, Robertson, Garber, & Doty, 2012]).

• **Final N of 16,866 individuals**
• Classified by indicators of age, family income level, household size, and insurance status
**Method**

- **Private (n=9,315):** Individuals with private coverage purchased individually or through an employer or group.

- **Public (n=2,323):** Individuals who were covered primarily through Medicaid and those with other income-determined coverage sponsored by federal or state payers and Medicare.

- **EME (n=2,133):** Individuals who reported no health coverage and had a family income equal to or lower than 133% of the federal poverty level (FPL) in 2012.

- **RPIE (n=2,863):** Individuals who reported no health insurance and had a family income above 133% of FPL in 2012.

*Note that Each Federal Poverty Level was adjusted according to the number of family members.*
## Results

### Demographic characteristics-1

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Insured</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>n= 9,428</td>
<td>n= 2,371</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td>(M) 45.59</td>
<td>(M) 45.37</td>
</tr>
<tr>
<td></td>
<td>± 0.109</td>
<td>± 0.229</td>
</tr>
<tr>
<td>27-45</td>
<td>48.8%</td>
<td>48.8%</td>
</tr>
<tr>
<td>46-64</td>
<td>51.2%</td>
<td>51.2%</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.3%</td>
<td>35.1%</td>
</tr>
<tr>
<td>Female</td>
<td>52.7%</td>
<td>64.9%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>19.2%</td>
<td>31.3%</td>
</tr>
<tr>
<td>White / Non-Hispanic</td>
<td>51.4%</td>
<td>29.6%</td>
</tr>
<tr>
<td>Black / Non-Hispanic</td>
<td>17.6%</td>
<td>31.4%</td>
</tr>
<tr>
<td>Asian</td>
<td>9.7%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Others</td>
<td>2.1%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>
## Results

### Demographic characteristics-2

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Insured</th>
<th></th>
<th></th>
<th></th>
<th>Uninsured</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td>RPIE</td>
<td>EME</td>
<td></td>
<td>Private</td>
<td>Public</td>
<td>RPIE</td>
</tr>
<tr>
<td>Education, College or Higher</td>
<td>67.0%</td>
<td>29.1%</td>
<td>40.5%</td>
<td>26.5%</td>
<td></td>
<td>34.5%</td>
<td>14.2%</td>
<td>47.9%</td>
</tr>
<tr>
<td>(more than 12 years)</td>
<td>n= 9,428</td>
<td>n= 2,371</td>
<td>n=2,172</td>
<td>n=2,894</td>
<td></td>
<td>n=2,172</td>
<td>n=2,894</td>
<td>n=2,172</td>
</tr>
<tr>
<td>Married</td>
<td>68.4%</td>
<td>33.9%</td>
<td>53.6%</td>
<td>42.2%</td>
<td></td>
<td>31.6%</td>
<td>66.1%</td>
<td>46.4%</td>
</tr>
<tr>
<td>Not married</td>
<td>31.6%</td>
<td>66.1%</td>
<td>46.4%</td>
<td>57.8%</td>
<td></td>
<td>68.4%</td>
<td>33.9%</td>
<td>53.6%</td>
</tr>
<tr>
<td>Employed</td>
<td>85.1%</td>
<td>28.6%</td>
<td>73.5%</td>
<td>52.0%</td>
<td></td>
<td>14.9%</td>
<td>71.4%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>14.9%</td>
<td>71.4%</td>
<td>26.5%</td>
<td>48.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low income (&lt; 200% FPL)</td>
<td>17.5%</td>
<td>82.0%</td>
<td>33.8%</td>
<td>100%</td>
<td></td>
<td>17.5%</td>
<td>82.0%</td>
<td>33.8%</td>
</tr>
<tr>
<td>Middle income (≥ 200 to &lt; 400% FPL)</td>
<td>34.5%</td>
<td>14.2%</td>
<td>47.9%</td>
<td>.</td>
<td></td>
<td>34.5%</td>
<td>14.2%</td>
<td>47.9%</td>
</tr>
<tr>
<td>High income (≥ 400% FPL)</td>
<td>48.0%</td>
<td>3.8%</td>
<td>18.3%</td>
<td>.</td>
<td></td>
<td>48.0%</td>
<td>3.8%</td>
<td>18.3%</td>
</tr>
</tbody>
</table>
## Results

### Demographic characteristics - 3

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Insured</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>n=9,428</td>
<td>n=2,371</td>
</tr>
<tr>
<td><strong>Family Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 3</td>
<td>41.1%</td>
<td>42.6%</td>
</tr>
<tr>
<td>3 to 4</td>
<td>42.4%</td>
<td>36.0%</td>
</tr>
<tr>
<td>5 to 7</td>
<td>15.8%</td>
<td>19.4%</td>
</tr>
<tr>
<td>&gt; 7</td>
<td>0.7%</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>16%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Midwest</td>
<td>21.2%</td>
<td>17.0%</td>
</tr>
<tr>
<td>South</td>
<td>35.6%</td>
<td>31.2%</td>
</tr>
<tr>
<td>West</td>
<td>27.3%</td>
<td>25.2%</td>
</tr>
</tbody>
</table>

*Note.* *p* < .05, **p** < .01, ***p*** < .001, based on $\chi^2$ analysis; Data from Medical Expenditure Panel Survey (MEPS) 2012; Numbers are unweighted and percentages do not always equal 100 due to rounding or missing data; RPIE= the Uninsured Who Will Likely Be Required to Purchase Health Insurance through the Exchanges under the ACA Enactment; EME= the Uninsured Who Will Likely Be Eligible for Medicaid Expansion; FPL= Federal Poverty Level in 2012. *Tests for differences between insurance groups based on the analysis of variance (ANOVA).*
Results

Risk groups

*Risk group 1:
Most of Southern States did not expand Medicaid

**Risk group 2:
Not eligible for subsidies

***Risk group 3:
Less likely to afford health coverage

---

Fig 1. Eligibility for Medicaid Expansion by region

- **South**: 50%
- **Northeast**: 11%
- **West**: 27%
- **Midwest**: 12%

---

Fig 2. Required to Purchase Insurance by Family Income Level

- **More than 400% FPL**: 18%
- **134 to 199% FPL**: 34%
- **200 to 400% FPL**: 48%
Findings

• Of those who were uninsured, **57.1%** were likely to be eligible for Medicaid Expansion (EME; accounting for 17.2% of the total sample).

• US adults who were uninsured with EME were **younger**, and more likely to be **Hispanic**, low income, and to live in the **Southern U.S.**

• US adults who were uninsured with RIPE were more likely than the publicly insured and EME to be **educated** and **employed**.

• The percentage of individuals with the middle family income in the RPIE was almost **48%**. (the highest proportion of middle income family compared with the other groups).
• The Affordable Care Act is well-targeted and likely to have a sizable impact on uninsured US adults.
• We could estimate that **77.7%** of those who were uninsured would be likely to have significant subsidies and would be more likely to be covered under the full ACA enactment.
Implications

• Individuals with low family income and not eligible for Medicaid expansion (14.5% of the uninsured) could be risk for combined out-of-pocket expenses and premium that are relatively high relative to their income.

• Individuals with high family income (7.9% of the uninsured) would be more likely to choose to opt out due to the absence of federal subsidies. However, as penalties increase over time, this may be less likely.

• Since most of the Southern US states do not expand Medicaid coverage, individuals who live in the Southern states and are eligible for Medicaid expansion may remain uninsured with a few options under the ACA.
References


References


References

• Young Rock Hong, MPH.

521 Lancaster Avenue, Begley 420, Richmond, KY 40475, USA

Tel: +1-859-893-9091

Email: medibizman@gmail.com

Linkedin: https://www.linkedin.com/in/medibizman

*Research interests:
• Health Service Quality
• Patient’s Satisfaction
• Health Reform
• Attitudes of Health Provider
• Medical Tourism

• Health Insurance
• Evaluation of Health Technology
• Assessment of Health Care Costs
• Quantitative Research
• Path Analysis