The Affordable Care Act and Marketplace Coverage: Implications for Rural Areas

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    - [http://www.public-health.uiowa.edu/rupri](http://www.public-health.uiowa.edu/rupri)
  - Washington University, Brown School
    - [http://gwbweb.wustl.edu/Pages/Home.aspx](http://gwbweb.wustl.edu/Pages/Home.aspx)
Questions

- ACA implementation has begun
- Focus here is on Marketplaces and Insurance coverage
  - How many are covered?
  - What is variation in premiums and costs and what accounts for the variation?
  - How do we think through these issues?
Outline

- RUPRI Center’s Work on Marketplaces and Insurance coverage
- How many are covered in 2014?
  - Snapshot of Marketplace, Medicaid Coverage
- What is variation in premiums and costs and what accounts for the variation?
  - How do we think through these issues?
  - Preliminary results
- Implications
RUPRI Center work on Marketplaces

- Large database on Marketplaces
  - All rating areas in the U.S. (n=500)
    - Produced maps of each rating area
  - Obtained data on all plans in the Health Insurance Marketplaces (HIM) in U.S.
    - Plan organization, plan type (metal level)
    - Premiums by plan at the rating area level
  - Linked to other data at the geographic level
    - From various files: Census, ERS, ARF, other data
    - Insurance coverage prior to ACA
    - Social determinants, economic variables, health systems
    - Unfortunately no enrollment data as of this point.
RUPRI Center’s Work on Marketplaces and Insurance coverage

How many are covered in 2014?
  - Snapshot of Marketplace, Medicaid Coverage

What is variation in premiums and costs and what accounts for the variation?
  - How do we think through these issues?
  - Preliminary results
  - Implications
## Enrollment in Affordable Care Act Marketplaces and Medicaid (projected)

(October 2013-end of April 2015*)

### By Type of Marketplace (Federal or State)

<table>
<thead>
<tr>
<th>Type of Marketplace</th>
<th>TOTAL Marketplace Plans</th>
<th>Medicaid</th>
<th>Percent of Uninsured Covered</th>
<th>Average population density</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-based</td>
<td>7.45 million</td>
<td>3.80 million</td>
<td>3.65 million</td>
<td>60.2%</td>
</tr>
<tr>
<td>Federally-facilitated</td>
<td>6.44 million</td>
<td>4.31 million</td>
<td>2.13 million</td>
<td>26.8%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13.89 million</strong></td>
<td><strong>8.11 million</strong></td>
<td><strong>5.77 million</strong></td>
<td><strong>38.1%</strong></td>
</tr>
</tbody>
</table>


### By Whether State Expanded Medicaid or Not

<table>
<thead>
<tr>
<th>Medicaid Expansion Decision</th>
<th>TOTAL</th>
<th>Marketplace Plans</th>
<th>Medicaid</th>
<th>Percent of Uninsured Covered</th>
<th>Average population density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Expansion: Yes</td>
<td>10.02 million</td>
<td>4.77 million</td>
<td>5.25 million</td>
<td>50.5%</td>
<td>322</td>
</tr>
<tr>
<td>Medicaid Expansion: No</td>
<td>3.86 million</td>
<td>3.34 million</td>
<td>0.52 million</td>
<td>23.3%</td>
<td>164</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13.89 million</strong></td>
<td><strong>8.11 million</strong></td>
<td><strong>5.77 million</strong></td>
<td><strong>38.1%</strong></td>
<td><strong>248</strong></td>
</tr>
</tbody>
</table>
State Decisions on Marketplaces, Medicaid

- Important distinction: state decisions on what type of Marketplace to set up; and whether to expand Medicaid or not

<table>
<thead>
<tr>
<th>Design</th>
<th>Medicaid Expansion? Yes</th>
<th>Medicaid Expansion? No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federally-Facilitated</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>State-Based</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

[Table: States classified by Decisions on Marketplaces and Medicaid]
# Enrollment in Affordable Care Act Marketplaces and Medicaid

(October 2013 – April 2014*)

By Type of Marketplace, and by Whether State Expanded Medicaid or Not

<table>
<thead>
<tr>
<th>By Type of Marketplace, and by Whether State Expanded Medicaid or Not</th>
<th>Percent of Eligible for Marketplace Plans Covered</th>
<th>Percent of Eligible for Medicaid Covered</th>
<th>Total Percent of Uninsured Covered</th>
<th>Odds of Being Covered as Compared to FBM/Medicaid-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-Based/Medicaid-Yes</td>
<td>65.2%</td>
<td>55.8%</td>
<td>60.2%</td>
<td>2.59</td>
</tr>
<tr>
<td>Federal/Medicaid-Yes</td>
<td>26.5%</td>
<td>42.1%</td>
<td>34.5%</td>
<td>1.48</td>
</tr>
<tr>
<td>Federal/Medicaid-No</td>
<td>25.8%</td>
<td>14.4%</td>
<td>23.3%</td>
<td>1.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36.1%</td>
<td>41.3%</td>
<td>38.1%</td>
<td></td>
</tr>
</tbody>
</table>

Proportion of Uninsured Covered, by State Marketplace and Medicaid Decisions

<table>
<thead>
<tr>
<th>Category</th>
<th>State-Based/Medicaid-Yes</th>
<th>Federal/Medicaid-Yes</th>
<th>Federal/Medicaid-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Marketplace Eligible</td>
<td>65%</td>
<td>27%</td>
<td>26%</td>
</tr>
<tr>
<td>Enrolled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Medicaid Eligible</td>
<td>56%</td>
<td>42%</td>
<td>14%</td>
</tr>
<tr>
<td>Enrolled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Percent of Uninsured</td>
<td>60%</td>
<td>35%</td>
<td>23%</td>
</tr>
<tr>
<td>Enrolled</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RUPRI Center’s Work on Marketplaces and Insurance coverage

How many are covered in 2014?
  - Snapshot of Marketplace, Medicaid Coverage

What is variation in premiums and costs and what accounts for the variation?
  - How do we think through these issues?
  - Preliminary results
  - Implications
Anecdotal reports

“Evidence is emerging that one of the program’s loftiest goals — to encourage competition among insurers in an effort to keep costs low — is falling short for many rural Americans…. While competition is intense in many populous regions, rural areas and small towns have far fewer carriers …of the roughly 2,500 counties served by the federal exchanges, more than half, or 58 percent, have plans offered by just one or two insurance carriers…two might not be enough to create competition that would help lower prices.” [New York Times, 10/24/13]

“'The way the pricing came in under the Affordable Care Act ... was anything but affordable in Summit and Eagle counties," Rep. Jared Polis says. 'Upwards of $500 to $600 a month, minimum. Whereas in other parts of my district — like Fort Collins and the Boulder area — the pricing is really good. You [can] get a very strong, good insurance program for $300 to $350 a month.' People in the mountain communities are upset because insurance rates across the county line are dramatically lower. They want to be added into a so-called rating area with the regions paying lower rates.” [National Public Radio, 12/12/13]

The problem here: comparing apples to oranges?
Comparing Apples to Apples

So how do we compare apples to apples?

- An outline for our analytical approach (also in brief)
  - Compare within each rating area; or adjust across rating areas carefully
  - Compare by “metal level” (or keep track of this)
  - Understand how premiums and other costs of plans are computed (“actuarial value”)
  - Throughout this, understand role of geography, rurality, sociodemographics, economics
Rating Areas and Premiums

- Rating Areas (RAs) are the relevant geography for comparing premiums
  - RAs are determined at the state level, subject to individual states’ motivations (why, unclear):
  - LAW requires state to set up a number of rating areas NOT TO EXCEED the number of MSAs in the state plus one
    - This default choice meant to allow for possibility of setting up rating areas with one for each MSA, and one more for ALL rural
    - Adopted by seven states (AL, NM, ND, OK, TX, VA, and WY)
    - Three states petitioned and got permission to use more rating areas
    - But, states could use other methods to set up rating areas
  - Important point:
    - Rating Areas are determined at the state level, subject to individual states’ motivations
RAs are determined at the state level, subject to individual states’ motivations. What was their motivation? Unclear:

- Indecision, leading to default choice?
- Alignment with established regional hubs of care?
- Political considerations?

Most states created clusters of counties that mix urban and rural.

- A few (CT, FL, SC) made each county its own RA.

Relevant point: does setting of these choices affect premiums, competition, choice?
Rating Areas: NM and MN

An example of MSA+1

An example of rating areas not based on MSA+1
Rating Areas: NE and IA

Rating Areas for Nebraska

Rating Areas for Iowa

Legend
- Rating Areas by ZIP3 Boundaries
- Urban
- Rural

Source: Washington University in St. Louis & RUPRI Center for Rural Health Policy Analysis, University of Iowa
Data: CCIO
Map by Sarah Seyringer
October 2013

Legend
- Urban
- Rural

Source: Washington University in St. Louis & RUPRI Center for Rural Health Policy Analysis, University of Iowa
Data: CCIO
Map by Sarah Seyringer
October 2013

RUPRI Center for Rural Health Policy Analysis
Rating Areas: FL and SC

Each county is its own rating area
Actuarial Value (AV): the expected percentage of costs that will be covered by the plan for the average consumer

- **Bronze** means 60% AV
- **Silver** means 70% AV
- **Gold** means 80% AV
- **Platinum** means 90% AV
  - Organizations allowed to submit plans with costs that vary around these levels by 4 percentage points (+/- 2%)

- Catastrophic plans are not rated by metal level and are only available to individuals 30 and under.
Metal Levels: Key Points

- **Key points:**
  - Each plan organization typically offering several plans
  - Premium reflects AV in a direct relationship; so likely reflects value of expected health costs less deductibles, copayments, coinsurance.
  - Plans in same rating at same “metal level” will not vary on AV
    - Thus, for example, a Bronze plan pays for about 60% of the average consumer’s costs, regardless of the cost-sharing details (copays, co-insurance, out-of-network coverage, out-of-pocket maximum, etc.)
    - However, how plan varies those costs may vary
  - For example, plans may vary premiums, copays, or attempt to control costs by adjusting networks
  - Also, plans at different metal levels and in different rating areas WILL have different AV
  - Many of these points lost in simple analysis and comparisons of premiums!
Health Insurance plans determine the Actuarial Value (AV) of the plans through a very proscribed process set by CCIIO.

- Plans must use this spreadsheet available from CCIIO.
  - See next slide for “snapshot”

Organization enters plan data, hits the “calculate” button, and determines plan AV and corresponding metal level.

- There is a single underlying “sample” population being used regardless of the location of the plan or its own expected population.
- 2010 claims data provide utilization and cost estimates based upon the parameters of the plan.
## Determination of Actuarial Value (AV)

### User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate OOP Maximum for Medical and Drug Spending?
- Apply OOP Maximum for Medical and Drug Spending?
- Use Separate OOP Maximum for Medical and Drug Spending?
- Indicate if Plan Meets CSR Standard?

### Desired Metal Tier

<table>
<thead>
<tr>
<th>Type of Benefit</th>
<th>Medical</th>
<th>Drug</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Room Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient Hospital Services (inc. Surgery)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urgent Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and Counseling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialty Visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental/Behavioral Health and Substance Abuse Disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imaging (CT/PET Scans, MRIs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation Speech Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation Occupational and Physical Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventative Screening and Care</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Laboratory Outpatient and Professional Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Surgery Physician/Surgical Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Facility Fee (e.g., Ambulatory Surgery Center)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Services Physician/Surgical Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Brand Drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Preferred Brand Drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialty Drugs (i.e. High-cost)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Definitions of Deductible

- **Tier 1 Plan Benefit Design**
  - Medical
  - Drug
  - Combined

- **Tier 2 Plan Benefit Design**
  - Medical
  - Drug
  - Combined

### Options for Additional Benefit Design Limits

- Set a Maximum on Specialty Rx Coinsurance Payments?
- Specialty Rx Coinsurance Maximum:
- Set a Maximum Number of Days for Charging an IP Copay?
- # Days (1-10):
- Begin Primary Care Cost-Sharing After a Set Number of Visits?
- # Visits (1-10):
- Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?
- # Copays (1-10):

### Calculate

Output: Calculate

Status/Error Messages:

- Actuarial Value:
- Metal Tier:

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**RUPRI Center for Rural Health Policy Analysis**
To make fair comparisons, normalize premiums by metal level

- Averages are misleading in part because some plans are less available in rural rating areas.
- Platinum plans are less available in rural areas (4% compared to 6%)
- Slightly higher proportion of rural plans are catastrophic or bronze (37% vs. 36%)

Normalizing by metal type allows us to draw conclusions plan cost-sharing since AV is directly related to premiums
Should we adjust for differences in cost of living across rating areas?

- Premiums may simply reflect overall price differences
  - For example: $200/month premium in Waterloo, IA is more expensive than $200/month in Newark, NJ, after adjusting for cost of living
    - Why? $200 could buy more other goods in Waterloo than it can in Newark.
  - To cite a specific example from our data:
    - Average premium for lowest cost “Silver” plans in New Jersey is $241
    - In Waterloo IA average is $188
  - So do we conclude premiums are LOWER in Waterloo?
    - Actually that would be misleading: after we adjust for cost of living, the premium is higher in Waterloo ($191 in adjusted dollars compared to $185 in Newark)
Effects of Geography:
Cost of Living Adjustment

- How do we adjust for cost of living?
  - Purchased county-level COLA index
  - Models prices based on various factors and can successfully predict 78% of geographic variation. We adjust premiums with this index.
- COLAs are highest in urban areas and a few very remote rural areas.
  - The net impact of the adjustment is to increase the urban/rural premium differential.
Even after controlling for all these other factors, what about:

- Plans setting “Narrow Networks”
  - Evidence there are “narrow” networks in plans offered in the Marketplaces
  - From anecdotal and other evidence that plan organizations have adjusted or varied the “networks” of their plans
  - An effort to control costs?
    - Example: In St. Louis, two plan organizations and one offers the BJC network (Coventry), and the other does not (Anthem)
    - Is there a rural/urban differential here? Unclear

- Other characteristics of rating area/region
  - For example, health status, economic factors
  - This should not be a factor given how AV was computed.
RUPRI Center’s Work on Marketplaces and Insurance coverage

How many are covered in 2014?
- Snapshot of Marketplace, Medicaid Coverage

What is variation in premiums and costs and what accounts for the variation?
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- Implications
Premium Analysis: Preview of Findings

- Preliminary findings do suggest premiums higher in states with lower populations.
- Areas with higher premiums characterized by smaller populations, shortages of health providers, and more likely to found in Midwest.
- Premiums seem to be affected by rating area design.
Premium Analysis: Approach

- Analysis of all 500 Rating Areas and Premiums of Plans
- We use methods just described to draw fair comparisons (compare apples to apples)
- Rating Areas characterized here by population density to get a sense of rurality of Rating Areas
  - We also have explored several other ways of characterizing rating areas, based on rurality
  - Recall: in almost every case a rating area includes more than one county, so not possible to easily use ERS measure of rurality
- All premiums shown are for 27-year-old, which is typical for this type of analysis
  - (but recall that premiums for older person are just proportional by age)
Adjusted premiums in State-Based Marketplaces (SBMs) tend to be lower ($20 on average) than premiums in Federally-Facilitated and Partnership Marketplaces (FFM/PMs).
- Average premiums drop slightly as population density increases, but declines more in SBM.
In low-density (under 100 people/mi$^2$) RAs, the MSAs+1 design is associated with lower premiums for both types of exchange (federal or state-based).

<table>
<thead>
<tr>
<th>Design</th>
<th>Federally-Facilitated and Partnership Marketplaces</th>
<th>State-Based Marketplaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSAs+1 Default</td>
<td>$247.24 n=22</td>
<td>$217.51 n=5</td>
</tr>
<tr>
<td>Individual Counties</td>
<td>$258.86 n=56</td>
<td>none</td>
</tr>
<tr>
<td>Other Method</td>
<td>$269.18 n=113</td>
<td>$246.44 n=41</td>
</tr>
</tbody>
</table>
What characterizes the most expensive Rating Areas?

### Selected Characteristics of Rating Areas, Averaged by Premium Ranking Category

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Highest 10%</th>
<th>Lowest 90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Total (Average)</td>
<td>288,049</td>
<td>619,700</td>
</tr>
<tr>
<td>Population Density per Square Mile (average)</td>
<td>87</td>
<td>350</td>
</tr>
<tr>
<td>Land Area in Square Miles (average)</td>
<td>9,393</td>
<td>7,155</td>
</tr>
<tr>
<td>Distribution of Rating Areas Across Census Regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>Midwest</td>
<td>47%</td>
<td>23%</td>
</tr>
<tr>
<td>South</td>
<td>35%</td>
<td>54%</td>
</tr>
<tr>
<td>West</td>
<td>16%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Note: NY and VT are excluded due to the uniformity of their premiums across all ages, which makes it impossible to rank them relative to other rating areas.
### What characterizes the most expensive Rating Areas?

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Highest 10%</th>
<th>Lowest 90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Healthcare Professionals</td>
<td>1,005</td>
<td>2,861</td>
</tr>
<tr>
<td>Mortality Rate</td>
<td>0.0093</td>
<td>0.0090</td>
</tr>
<tr>
<td>Healthcare Professionals per Square Mile</td>
<td>0.3120</td>
<td>2.2319</td>
</tr>
<tr>
<td>Healthcare Professionals Per Capita</td>
<td>0.0030</td>
<td>0.0036</td>
</tr>
<tr>
<td>Specialists Per Square Mile</td>
<td>0.0491</td>
<td>0.4434</td>
</tr>
<tr>
<td>Specialists per capita</td>
<td>0.0004</td>
<td>0.0006</td>
</tr>
<tr>
<td>Mortality rate</td>
<td>0.0093</td>
<td>0.0090</td>
</tr>
</tbody>
</table>

Note: NY and VT are excluded due to the uniformity of their premiums across all ages, which makes it impossible to rank them relative to other rating areas.
States with low rural populations in absolute terms, which also have high percentages rural, tend to have higher premiums than other states.

These 7 states are:
- AK, ND, NE, SD, WY (FFM)
- ID and VT (SBM)

An average of 26 plans are offered, compared to 44 in the “most urban” states.
After controlling for all the factors we described, we find:

- States that have low rural (noncore) populations but high percentages of their populations that are rural (living in noncore counties) have the highest average adjusted premiums, at $265 compared to $243 for the “least rural” states (9% higher).

It appears that there are a few high premium outlier areas:

- The 10% of rating areas with the highest adjusted premiums are characterized by:
  - smaller populations, greater land areas, seven times fewer healthcare providers per square mile, and ten times fewer specialists per square mile.
  - They are twice as likely to be in the Midwest Census region compared to rating areas in the lower 90% of the premium distribution.
Premium Analysis: Key Findings

- Average adjusted premiums are about $20 lower PMPM in State Based Marketplaces (SBMs) than premiums in Federally Facilitated Marketplace (FFM) premiums
  - Premium savings increase as in rating areas with high population densities.
  - Premiums fall about $1.22 for each increase in rating area population density of 100 people per square mile
- In low-density rating areas, the rating area design associated with lower than average premiums is the design that assigns each Metropolitan Statistical Area (MSA) in a state to its own rating area and groups all non-MSA counties together
Conclusions and Implications
To make proper, careful comparisons of premiums across geographic areas, it is important to:

- compare similar types of plans to each other (by metal level) and for people at the same age
- understand the context of how rating areas were set
- adjust for cost of living
- Understand that total costs consumers face are not just premiums, but AV is a good proxy
Rural Policy Implications

- Preliminary results suggest that high premiums may be an issue for rural residents under certain conditions:
  - In states with Federally-Facilitated Marketplaces
  - In RAs that have few providers per square mile of land area
  - In sparsely populated states with low overall populations, especially in the Midwest
  - When RAs are individual counties
While many of the issues raised here were put in motion by federal policy (ACA law, rulemaking, etc.), and policy setting was put in the hands of states, nevertheless:

- It is important to monitor these issues in upcoming years to see how rural areas and people are affected
  - For example, it is quite likely that marketplaces will change considerably in next few years
  - Future Medicaid expansion decisions?
- If necessary, and if possible, can federal rules be adjusted? Will there be future ACA policy changes passed by Congress?
Questions, Discussion?

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- Questions??