Introduction

The Patient Protection and Affordable Care Act of 2010 (ACA) created a marketplace for private health insurance plans for individuals and families without affordable coverage through their employers. In this marketplace, substantial subsidies are available based on the person’s income, increasing the affordability of the plans. In addition, Medicaid coverage was to be made available for those below 138% of the poverty line. The Supreme Court determined that states had the option to determine whether to expand Medicaid up to 138% of the Federal Poverty Line (FPL). As a result, in states such as Illinois that chose to expand Medicaid, marketplace subsidies begin at 138% of the FPL, while in states such as Missouri, which has chosen not to expand Medicaid, subsidies begin at 100% of FPL.

In the first two years of Health Insurance Marketplace (HIM) activity, premiums across the U.S. were reasonably affordable in this new marketplace. However, in 2016, premium growth accelerated in many places, particularly locations in which only a few firms compete. Furthermore, premium growth tends to be highest in places where premiums had been below average. In addition, concerns about the affordability of health insurance coverage overall arise from the rise of higher deductibles and higher out-of-pocket maximum costs. It may be the case that many HIM consumers are shopping heavily on the up-front premium costs and not considering these other factors. To truly assess affordability, it is important to analyze coverage options across all three of these measures.

Data and Methods

We use the 2014 American Community Survey Public-Use Microdata Sample (PUMS) data, which allows us to focus on the St. Louis metropolitan region (St. Louis city, the Missouri counties of St. Louis, St. Charles, and Jefferson, and the Illinois counties of Madison and St. Clair) and create a subsample of adults ages 18-64 who are either uninsured or purchasing private coverage directly. These are the individuals most likely to be HIM consumers. Since the data are from 2014, some individuals in the sample will have already obtained coverage through HIMs.

The method is a simulation in which we match these individuals with the plan options available to them (from a publicly-available file at healthcare.gov), first calculating any subsidy for which they would be eligible and then customizing their options depending on their eligibility for special “cost-sharing reduction,” or CSR, silver plans. These are silver plans which have the same premium as their standard counterparts but which offer significantly lower deductibles and out-of-pocket maxima to low-income consumers. We have chosen to focus on the least expensive option in each metal category; we report weighted average results for age-adjusted premiums as well as deductibles and out-of-pocket maxima across the silver and gold categories. In order to better gauge affordability, we calculate the deductibles and out-of-pocket maxima as percentages of annual income. The simulation
methodology and weighting of averages ensures that our results are representative of the experiences of the potential HIM consumer in the St. Louis metropolitan region.

Results

Across the St. Louis metro area, the average potential HIM consumer experiences very different premiums depending on income. Age-adjusted premiums are highly subsidized for consumers just above 100% FPL. Because of the lack of Medicaid expansion in Missouri, there are uninsured consumers below 100% FPL, and they receive no marketplace subsidies. Figure 1 shows these results as well as the expected pattern of declining subsidies and increasing net premiums as income increases. The figure also shows the proportion of the premium paid by the subsidy in each income group. Note that this figure assumes the individual chose the least-cost silver or gold plan available to them in terms of geography (as plan availability and premiums vary by location) and, for silver plans, in terms of CSR qualification.

Figure 1: Affordability of Lowest-Cost Silver and Gold Premiums Available to St. Louis Metro Area Adult Uninsured Residents

Of course, premium is only one aspect of affordability. This may be the aspect most consumers focus on as they shop, but once they begin using their health insurance, the deductibles and maximum out-of-pocket costs are equally important. We need to know whether insurance is in fact performing its function of shielding people from negative outcomes when unexpectedly high healthcare costs are incurred. To that end, we define “total
out-of-pocket burden” as the maximum a person would have to pay, including premiums and the out-of-pocket maximum specified by his or her plan, in the event of high medical expenses. Evidence shown in Figure 2 suggests that, unsurprisingly, the deductibles and total out-of-pocket burden of plans available to people with incomes below 100% are extremely unaffordable: on average they are three and eleven times the family’s annual income, respectively. The inset panel of Figure 2 examines the range of incomes above 100% FPL, as these are the incomes targeted by the HIMs. The figure shows a striking relationship that is not linear. In particular, people with incomes below 200% FPL tend to have more affordable options (mainly due to high levels of cost-sharing in the CSR silver plans) while people between 200% and 300% FPL are at risk for paying an average of almost 20% of their incomes on medical costs before their insurance shields them. Deductibles in excess of 5% and total out-of-pocket burden in excess of 10% of annual income are commonly deemed unaffordable in the literature.\(^1,\)\(^2,\)\(^3\) Starting at 300% FPL, the average percentage declines as income increases, resulting in a curved rather than linear relationship. This is very important from a policy standpoint because it means that individuals in the middle income group are more likely to find the plans unaffordable.

Figure 2: Affordability of Silver Plan Deductibles and Total Out-of-Pocket Burden for Uninsured Adults in the St. Louis Area
Eligibility for silver plans with CSRs ends at incomes at or above 250% FPL. This cutoff has resulted in an unaffordability “hump” among the uninsured with mid-level (about 200% to 300% FPL) incomes. To illustrate this point, we show that a family of four in St. Louis county with an income of $62,000 shopping for a silver plan faces an average per-person out-of-pocket maximum of $6408, while a similar family of four with an income of $60,000 faces an average per-person out-of-pocket maximum of $4961 (Table 1). In other words, the $2000 of additional income earned by the first family is largely – if not entirely – at risk if large medical costs are incurred.

**Discussion**

The set of policies currently in effect produces very uneven results, with the poorest uninsured ineligible for Medicaid and facing extremely high deductibles and out-of-pocket maximum expenses relative to their incomes. The poorest uninsured face premiums that are, on average, similar to those of the richest uninsured. While changes to the CSR formula must occur at the federal level, it is important for state and local policymakers to be aware of the local impact for two reasons: first, unaffordability is a key reason for failure to become insured, and these results predict that some moderate-income households may face fairly high premiums; and second, unaffordability of deductibles and out-of-pocket charges is the main predictor of failure to pay medical bills. As people continue to select HIM plans primarily on the basis of premium, rates of uncompensated care experienced by medical providers in the region will likely increase.

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3 Peter J. Cunningham. “The Share Of People With High Medical Costs Increased Prior To Implementation Of The Affordable Care Act.” Health Affairs, vol. 34, no. 1, January 2015.

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### Table 1. Options for Families of Four in St. Louis Co.

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<thead>
<tr>
<th></th>
<th>Family A</th>
<th>Family B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Income</strong></td>
<td>$60,000 (247% FPL)</td>
<td>$62,000 (255% FPL)</td>
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<tr>
<td><strong>Average per-person OUT-OF-POCKET MAXIMUM</strong></td>
<td>$4961</td>
<td>$6408</td>
</tr>
<tr>
<td><strong>Lowest available per-person OUT-OF-POCKET MAXIMUM</strong></td>
<td>$3700</td>
<td>$5000</td>
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