Health Insurance Marketplaces: Premium Trends in Rural Areas
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Purpose
Since 2014, when the Health Insurance Marketplaces (HIMs) authorized by the Patient Protection and Affordable Care Act (ACA) were implemented, considerable premium changes have been observed in the marketplaces across the 50 states and the District of Columbia. This policy brief assesses the changes in average HIM premium prices from 2014 to 2016, before accounting for subsidies, with an emphasis on the widening variation across rural and urban places. Since this brief focuses on premiums without accounting for subsidies, this is not intended to be an analysis of the “affordability” of ACA premiums, as that would require assessment of premiums, cost-sharing adjustments, and other factors.

Key Findings
- Data for 2016 provide clear evidence that HIM premiums have grown disproportionately in rural places; in contrast, the first two years (2014-2015) of HIM premium data exhibited only weak tendencies toward rural disparities.
- From 2015 to 2016, total (pre-subsidy) premiums grew less in highly populated rating areas than in less populated areas.
- In 2016, urban counties have an average of 4.2 firms offering health insurance coverage through the HIMs overall (an 8.0 percent decrease from 2015), while rural counties have an average of 3.2 firms participating (a 5.6 percent decrease from 2015).
- In general, Federally Facilitated Marketplaces (FFMs) and Partnership Marketplaces (PMs) continue to have higher average premiums than State-Based Marketplaces (SBMs); however, the difference in average premiums has decreased significantly in 2016, with SBM premiums increasing more in 2016 than FFM (including PM) premiums.
- At the county level, as the number of firms increases, premiums increase at a slower rate.

Introduction
Analysis of premiums of plans offered during 2014, the first year of HIM operation, showed very few definitive patterns, either in rural/urban differences or in any other potentially related factors. Premiums offered for 2015 did not increase substantially, and many rural places fared equally to or better than urban places in terms of average premium increases. The number of firms operating in the rating area—the geographic unit within which premiums charged must be the same—was a potentially influential factor: rating areas with more firms generally had lower premium increases than rating areas with fewer firms. However, at the time that 2015 premiums were determined, few insurance firms had

Analysis of published premiums, even with our adjustments, is only one element of an analysis of affordability. Individual and family eligibility for subsidies and cost-sharing reductions will significantly impact whether potential HIM consumers find plans affordable. Median incomes in rural counties average $41,240, compared to $48,124 in urban counties, meaning that higher subsidies are available to rural consumers.
significant quantities of claims data on which to base premium change decisions. Also, many new firms entered the marketplace in 2015 for the first time. Thus, to obtain a current picture of the evolution of HIMs it is extremely important to examine premium data on plans offered in 2016 to determine how rural people may be experiencing HIM changes relative to their urban counterparts.

Data and Methods
We analyzed data for all insurance plans in states operating either FFMs (including PMs) or SBMs. Data on FFMs, PMs, and on SBMs operating with federal supervision are from comprehensive county-level files available from the Centers for Medicare & Medicaid Services. Data on available plans from the remaining 14 SBMs were obtained from state insurance commissions and from shopping states’ online consumer portals. All premiums reported here are for 27-year-old individuals who do not use tobacco; premiums typically increase by age and by tobacco use status. We created an overall average premium for each county by normalizing all other metal levels of coverage to an equivalent cost for a silver plan, using the “actuarial value” corresponding to each metal level, and we performed cost-of-living adjustments.

When comparing urban and rural areas, we used county-level averages, defining urban and rural by the standard Urban Influence Code definitions. In some comparisons, we zoomed out to the rating-area level, which can be as small as a single county or as large as a small state. Many rating areas are a contiguous mixture of metropolitan, micropolitan, and noncore counties, making it difficult to systematically characterize them as rural or urban. In the rating-area level analysis, we used population density as a measure of population dispersion that could be related to decisions to set premiums, and also as a proxy indicator of ruralness of the rating area.

Results
Figure 1 shows growth in average premiums by type of marketplace (FFM or SBM) and by urban/rural status of the county. Two patterns are evident: first, average adjusted premiums in the FFM marketplaces are typically higher than those in SBMs; and second, average adjusted premiums in rural counties are higher than in urban counties, with a widening gap in 2016 for both marketplace types. In 2016, rural averages in FFMs and SBMs were $306 and $285, respectively, compared to urban averages of $287 and $245. The fact that FFMs average higher premiums than SBMs is also potentially a “rural” issue in and of itself because 20 of the 25 states with the highest percentages of rural (non-metropolitan) population are FFMs. We also note that premium growth rates for rural SBM consumers are increasing at the fastest rate between 2015 and 2016 and are now approaching the level of FFM premiums.

Figure 1. Average Adjusted Urban and Rural Premiums, 2014-2016, by Marketplace Type

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* NY and VT are excluded since their premiums do not vary by age.
Shifting focus away from the county level to the rating-area level, we continue to observe the same phenomenon regarding greater premium growth in more rural places. At this level, we report average adjusted premium growth at various population densities. Figure 2 shows that from 2015 to 2016, there was an obvious trend of low premium growth in highly populated rating areas, whereas from 2014 to 2015, that trend was very weak and evident only in the most densely populated places.

A core aspect of the economic theory on which HIMs are based is that competition will restrain premium growth. We find that overall in 2016, urban counties have an average of 4.2 firms participating (an 8.0 percent decrease from 2015), while rural counties have an average of 3.2 firms participating (a 5.6 percent decrease from 2015). Furthermore, the estimated correlation between number of firms in a county and percent change in premium is -0.259 (p < 0.001), indicating a significant inverse relationship. In other words, a greater number of firms is correlated with lower premium growth.

Another depiction of this relationship is the downward trend line for both average adjusted premiums and average second-lowest silver premiums by the number of firms operating in the county. For each group of counties, these averages are population weighted. Thus, for example, Figure 3 shows that 278 urban counties have three firms participating, with average premium increases of about 12.7 percent (13.2 percent for second-lowest silver plans). Analogously, 638 rural counties have three firms operating, with an average premium increase of 14.2 percent (12.6 percent for second-lowest silver plans). The distributions of counties differ between urban and rural: in the former there is a longer tail (up to 13 firms operating in three urban counties) and the latter has more mass concentrated at the level of two or three firms. This difference is problematic since the gains from additional firms (lower premium increases) seem strongest when there are four or more firms operating.

Discussion
While the first two years of HIM premium activity exhibited only weak tendencies toward rural disparities, with results differing widely across different parts of the rural United States, the data for 2016 shows clear evidence that premiums have grown disproportionately in rural places. Moreover, a greater number of firms operating in the county is correlated with more highly populated areas (and thus more urbanized areas), and is associated with somewhat lower premium growth. These results raise some concerns for policymakers. As HIMs continue to develop and mature, if premiums are higher in areas with less competition among firms, and less competition is occurring in rural areas, then there is a differential in premiums that is affecting people based upon where they live. Clearly, the factors affecting premiums are complex, with population density and other demographics (including health status and thus utilization rates) affecting firm participation directly as well as
indirectly through provider contracting. Therefore we must be cautious in interpreting the results as purely driven by “competition” or lack thereof. Furthermore, not everyone will be affected equally by such a differential, since the final premium paid by many consumers is lowered by subsidies.

Additional research on premium affordability in rural areas is needed, and ongoing monitoring of the competitiveness of rural HIMs is critical. Analysis of insurance markets for years has suggested that these markets can be volatile with firm entry and exit and with premiums adjusting accordingly. Some firms may exit markets if they find they cannot compete in the sense of offering products that are appealing to enough consumers; however, new firms may enter some markets to replace them if they can offer products in way that is attractive to the consumer and is cost effective. Furthermore, analysis (not presented here) shows signs that Medicaid expansion status is also playing a role in premium growth, and reductions in Disproportionate Share Hospital payments, once implemented, will likely do the same. In short, there are many reasons to expect a dynamic marketplace with significant changes in prices and firm participation over the first several years of health reform implementation.

But there is the potential that policymakers will need to address the rural/urban differential, if it continues to propagate, to mitigate any adverse effects on people living in rural areas. Policy levers include aggressive purchasing models in SBMs to influence health plan behavior, setting rating area boundaries to create larger risk pools, and rate review.

Notes
2 Premiums vary by age in all states except NY and VT.
4 This fact makes COLA premiums more important since the same nominal premium must be charged across urban areas with higher COL and rural areas with lower COL.