Stanford Institute for Economic Policy Research

on the web: http://siepr.stanford.edu

Choice and Affordability in the ACA's Health Insurance Exchanges

By Michael Dickstein

Introduction

In 2014, nearly 8 million U.S. residents signed up for private health insurance coverage through new marketplaces created under the Affordable Care Act (ACA). According to a Kaiser Family Foundation estimate, this enrollment represented about 28 percent of the potential marketplace enrollment nationally. Individual states, however, differed in the share of the eligible population that gained coverage in the first year. At the high end, Vermont enrolled 87 percent of residents who lacked coverage through an employer or through public insurance programs. California enrolled 43 percent, while, toward the low end, North and South Dakota signed up only 13 percent of the eligible population.1

Setting aside the reliability of the technology through which consumers purchase plans, the success of the state marketplaces

1 The estimated number of potential marketplace enrollees and the share of enrollees collected from the Kaiser Family Foundation's State Health Facts, reported as of April 19, 2014. requires that insurers offer consumers a variety of plans at prices the uninsured or underinsured can afford. This Policy Brief looks at how state decisions on geographic boundaries affect prices in the first year, particularly for individuals living in rural parts of the United States. These small markets may attract fewer insurers, leaving consumers with few plan options and higher prices.

Key Provisions

The ACA, passed in 2010, reformed the process for obtaining health insurance coverage for those individuals not covered through their employer or through a government insurance program. Prior to the Act's passage, market participants faced a patchwork of regulations by state. Two central regulations include "community rating" and "guaranteed issue." Under community rating, prices may vary only by a very restricted set of characteristics, often including

continued on inside...

About The Author

Michael Dickstein is
an assistant professor of
economics at Stanford
University and a faculty
research fellow at the
National Bureau of Economic
Research (NBER). His research and teaching
fields include Industrial Organization,
Health Economics, and Econometrics. He
holds a Ph.D. in Business Economics from

Economics from Cornell University (2005).

Before joining the faculty at Stanford, he was a postdoctoral associate at the Cowles

Foundation for Research in Economics at Yale
University.

Harvard University (2011) and a BS in Applied

SIEPR policy brief

age, family size, and whether the purchaser of the plan smokes tobacco. Premiums may also vary by geography—the term "community" refers to the geographic region within which the insurer must charge the same price. Under guaranteed issue, insurers must sell plans to all consumers who seek to purchase them, independent of any pre-existing illnesses. Regulators often bundle these two provisions, to prevent insurers from setting a community price but then rejecting all but the healthiest applicants for coverage.

In June 2012, prior to the implementation of the ACA, only New York required insurers selling plans to individuals to adhere to community rating. Seventeen states and the District of Columbia regulated insurance prices to some degree, while 32 states offered no rate restrictions. In the same year, only six states required guaranteed issue for all insurance plans offered in the individual market. In the remaining states, regulators typically required guaranteed issue only for purchasers who met specific criteria, including those categories of consumers protected under the Health Insurance Portability and Accountability Act (HIPAA) of 1996.2

Under the ACA, lawmakers mandated guaranteed issue and community rating nationwide. The ACA allows insurers to charge prices that vary only by geography, family size, age, and smoking status. The provisions are strict, requiring that age only vary in a 3:1 ratio—that

is, the oldest buyer of a plan, a 64-year-old, can only be charged three times the level of the youngest purchaser, even if his expected medical expenses are greater than three times as large.

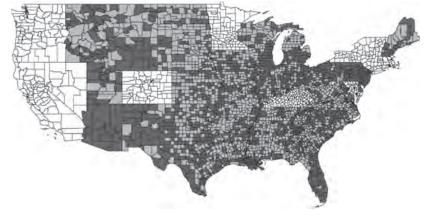
Lawmakers left the definition of a community, here known as a coverage region, to individual states. Each state could choose the number of regions and the geographic areas covered by each region. This decision has important implications for market outcomes. Drawing larger regions might attract more insurers to compete for the larger pool of potential customers, leading to more plan choices and possibly lower prices. Larger regions, however, could also pool together a diverse group of customers over a larger geographic area. Insurers might find this heterogeneous or dispersed population more costly to serve at a single price and therefore choose not to enter.

In joint work with Mark Duggan, Joe Orsini, and Pietro Tebaldi, we investigate how a state's designation of the coverage region affects market outcomes in the ACA's individual marketplaces. The variation in the size and composition of coverage regions within a state and across states provides a laboratory to study how the characteristics of these markets influence both the number of insurers that offer plans in a market and the affordability of the plans offered in the inaugural year of the marketplaces. The analysis below draws heavily from this joint work.

Early experience under the ACA

To assess the early experience in the ACA marketplaces, we collected the premiums, financial characteristics, and associated insurance carrier for every health insurance plan offered on the healthcare.gov website. The website served as a platform for sales of

Figure 1
County size and urbanity across the United States



- ☐ No data; state-based exchange
- Satisfies cutoffs for small and rural designation
- Above cutoff for small and rural designation

² HIPAA mandated that states make guaranteed issue plans available for consumers who could show at least 18 months of prior coverage and who elected new coverage within 63 days of losing their employer-sponsored health insurance.

marketplace plans in 36 states.³ Figure 1 highlights the states that offer plans via the federal platform. These states are largely in the South and Midwest. The excluded states, shown in white, include the major population centers in the West and the Northeast. These states operate their own exchange infrastructure and do not appear in our analysis. After some adjustment for data availability, we are left with 33 states and 2,388 counties, representing over 66 percent of the 8 million

3 Of these, 27 are states that chose not to operate their own exchange, ceding responsibility to the federal government. Seven of the states are "partnership" states that share regulatory oversight with the federal government and use the healthcare.gov platform. The remaining two states, New Mexico and Idaho, operate their exchanges independently but adopted the healthcare.gov platform for consumers to enroll in plans. people who enrolled in the first year of the insurance marketplaces.

Table 1 provides an example of a typical menu of contracts available to consumers in one of the federally administered marketplaces. This menu, from Shelby County, Tennessee, includes the average and the minimum premiums and deductibles in this market. It also lists the names of the four insurers offering products in Shelby County.

The premiums offered for a particular plan differ depending on the plan's financial characteristics, summed up in its "tier" rating. Each tier is characterized by an actuarial value, which describes the percentage of a representative consumer's medical expenditures that a plan in that tier would cover. Bronze plans cover, on average, 60

percent of costs, silver plans cover 70 percent, gold plans cover 80 percent, and platinum plans are the most generous, covering 90 percent of costs.

Shelby County's menu is typical. Table 2 illustrates the level of the premiums and deductibles across all plans in our sample. In the 33 states we study, the included 2,388 counties are divided into 398 regions, within which insurers must set a single price to all consumers of the same age, family size, and smoking status. For a 51-year-old buyer, the average plan has an annual premium of \$4,895 and a deductible of \$3,350. The average market includes six counties and has three insurers competing. In the typical market, insurers offer a variety of plans on each tier, giving consumers a choice of 60 unique plans on average (Shelby County has 72 plan options from four providers).

Table 1 Plan menu for Shelby County, Tennessee

Population: 575,872Insurers: Blue Cross Blue ShieldCignaPercent Urban: 97%Community Health AllianceHumana

		Monthly Premium (\$)		Annual Deductible (\$)	
Plan tier	No. of plans	Average	Minimum	Average	Minimum
Bronze	14	276	208	4,646	2,500
Silver	30	352	272	2,717	0
Gold	21	451	357	1,712	0
Platinum	7	526	482	143	0

Table 2 Summary statistics by region, for 51-year-old purchaser (398 regions)

	Average	Standard Deviation	10th percentile	90th percentile
Annual Premium (\$)	4,895	780	3,956	5,772
Annual Deductible (\$)	3,350	1,322	2,000	5,750
No. of insurers	2.9	1.5	1	5

Choice of Regions

We focus specifically on how the states' selection of market boundaries affects both prices and plan availability. We can generate some predictions based on the experience of private marketplaces for public health insurance that existed before the Affordable Care Act. For example, Medicare Advantage (MA), through which more than 16 million Medicare recipients obtain their coverage, defines each county to be a coverage region. Because of this, a health insurer essentially has 3.100 distinct markets it may enter across the United States. On the opposite extreme, Medicare Part D defines just 34 coverage regions for its prescription drug plans (PDPs)

nationally. An additional 25 million Medicare recipients obtain PDP coverage through these Medicare Part D marketplaces.

The experience in these markets suggest that the size of a coverage region may be especially important for smaller markets—for example in rural areas—which may attract relatively few private insurers. For example, the fraction of Medicare recipients enrolled in MA plans is significantly lower in rural counties with fewer residents (Brown et al. [2014]). While 33 percent of Medicare recipients in the most

populous 20 percent of counties are enrolled in an MA plan, just 13 percent in the least populous counties are. The opposite relationship holds for Medicare Part D enrollment, with beneficiaries in the smallest counties much more likely to be enrolled in private PDP plans than their counterparts in the largest counties (60 percent versus 42 percent). One possible source of this distinct enrollment pattern is the size of the coverage region, which may attract different numbers of firms and may affect the intensity of a plan's marketing

and the level of pricing.

In the marketplaces created under the ACA, states chose very different region designations, often between the extremes seen in Medicare Advantage and Medicare Part D. Figure 2 illustrates this variation for three states. At one extreme, Florida defines rating regions uniquely by county--there are 67 regions to cover the 67 counties in the state. Near the other extreme, Texas defines rating regions by using one region per major city and then a complementary region that covers all other counties of the state. Thus, Texas divides its 254 counties into only 26 regions. Tennessee, as pictured, defines regions with slightly higher numbers of counties per region than the average, but unlike the large region in Texas, the counties within each Tennessee region are geographically contiguous.

To isolate the effect of the rating region definition on pricing and entry, we examine those counties that are otherwise similar--in demographics and health market characteristics-but differ in whether or not they are bundled with a more populous county in their region. We focus on small and rural counties, as these markets are most similar and are of particular policy interest because of the historical lack of access to insurance in these markets. These 1,157 small and rural counties appear in Figure 1 with light shading.4 We identify

Figure 2
Region definitions in Florida, Texas, and Tennessee

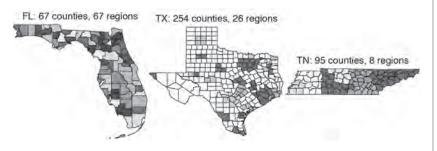
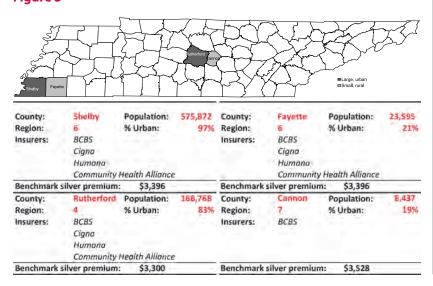


Figure 3



⁴ We define small and rural markets as those with population and urbanity below the 75th percentile in population—around 37,000—and below the 50th percentile in urbanity, about 40 percent urban.

continued on flap...

those counties included in our data that are larger than the thresholds for small or rural with dark shading.

To illustrate our approach, we return to an example from Tennessee. In Figure 3, we highlight four counties within Tennessee: two small and rural counties, Fayette and Cannon, and two large and urban counties, Shelby and Rutherford. Fayette and Shelby counties share a border in the southwest of the state; Tennessee officials drew the region boundaries in a way that bundled the two counties into Region 6. Thus, in both counties the same four insurers operate, and consumers face the same benchmark premium of \$3,396.5 In the center of the state, Cannon and Rutherford counties share a boundary but officials bundled the two into distinct regions. The larger Rutherford County, placed in Region 4, attracted four insurers to serve the individual market, with a benchmark premium of \$3,300. The smaller Cannon County in Region 7 attracted only one insurer, and consumers faced a benchmark premium of \$3,528, 7 percent more than the premiums faced in the bordering urban county. Cannon County consumers face a benchmark premium that is also 4 percent more than the otherwise comparable Fayette County, which officials bundled with its urban neighbor.

We repeat this within-state, small-county comparison in a regression framework, to add controls for county-level

demographics and health market characteristics. In this analysis, we find a significant increase in the number of insurers entering these counties. Being grouped in a region with a large urban county increases the number of entrants by an average of between 0.6 and 0.8 insurers. The bundling also leads to an average decrease in annual benchmark premiums of between \$200 and \$300 in the rural counties. Bundling rural counties with larger, more urban neighboring regions appears to have a meaningful impact on the supply of plans available to rural residents.

These findings raise the question: Should government regulators choose larger region sizes, to include entire states or maybe multiple states, as in Medicare Part D? At the extreme, why not establish one nationwide market for insurance in which insurers can choose to participate?

The experience of existing regions of different sizes can inform the likely outcome under such a region definition. We compare regions that differ in population size, density in square kilometers, and the degree of urbanity in the region. Across these regions, we focus on counties that have similar patient demographic profiles and similar costs of medical care provision, so that the comparison isolates the effect of region size. We find a clear trade-off in the designation of a region's boundaries. While an increase in the population of the region is associated with greater numbers of insurers offering plans and lower premiums for the benchmark plans, more heterogeneous regions appear to have lower degrees of competition

and higher premiums. That is, for the same population level, regions that have pockets of extremely high and low urbanity appear relatively unattractive markets for private insurers to enter.

Conclusions

We examine the performance of the health insurance marketplaces, created under the ACA, in their initial year of operation. Using data from 33 states representing two-thirds of the consumers who signed up for coverage in the marketplaces, we find small and rural regions appear to attract fewer entrants. Insurers also charge higher premiums to rural residents, controlling for observable measures of consumer and provider costs in these markets. One way for policymakers to improve market outcomes for rural residents is to consider alternative region definitions to increase the incentives for insurers to serve rural areas. There exists a trade-off between size and heterogeneity, however, which limits the benefits from expanding the region boundaries too widely.

References

Brown, Jason, Mark Duggan, Ilyana Kuziemko, and William Woolston, "How Does Risk Selection Respond to Risk Adjustment? New Evidence from the Medicare Advantage Program," *American Economic Review*, Volume 104, No. 10, pp. 3335-64. 2014.

Dickstein, Michael J., Mark
Duggan, Joe Orsini, and Pietro
Tebaldi. "The Impact of Market
Size and Composition on Health
Insurance Premiums: Evidence from
the First Year of the ACA," Stanford
University Working Paper, 2015.

⁵ The benchmark premium is the price of the second-cheapest silver tier plan available to consumers in the market. We use this particular silver plan because it is policy relevant—the federal government pays subsidies for low-income purchasers based on this premium level. The dollar values in this example are for a 51-year-old single adult.

SIEPR policy brief

Stanford University 366 Galvez Street Stanford, CA 94305 MC 6015

A publication of the Stanford Institute for Economic Policy Research Non-Profit Org. U.S. Postage PAID Palo Alto, CA Permit No. 28

SIEPR

About SIEPR

The Stanford Institute for Economic Policy Research (SIEPR) conducts research on important economic policy issues facing the United States and other countries. SIEPR's goal is to inform policymakers and to influence their decisions with long-term policy solutions.

Policy Briefs

SIEPR policy briefs are meant to inform and summarize important research by SIEPR faculty. Selecting a different economic topic each month, SIEPR will bring you up-to-date information and analysis on the issues involved.

SIEPR policy briefs reflect the views of the author. SIEPR is a non-partisan institute and does not take a stand on any issue.

For Additional Copies

Please see SIEPR website at http://SIEPR.stanford.edu.