



State Variation in Narrow Networks on the ACA Marketplaces

In-Brief

In June, we presented national data from one of the first attempts to measure the size of provider networks in plans sold on the health insurance marketplaces. We used simple “T-shirt” sizes to categorize networks in a way that could help consumers quickly grasp the choices they were making. In this Data Brief, we present network sizes summarized up to the level of the state and the rating area. This analysis should help regulators and consumers assess and understand the trade-off between premiums and network size as we enter the next open enrollment period.

In the new health insurance marketplaces, insurers have limited options for offering plans at different price points within a metal tier. ACA-mandated changes — such as community rating, standardized benefits, and removing limits on annual or lifetime benefits — mean that insurers must find other strategies for offering lower-cost plans. Narrow provider networks have emerged as one of the only remaining pieces in the insurers’ cost-containment toolbox.

Insurers can use narrow networks to lower premiums in various ways. They can directly exclude high-cost providers from the network. They can offer a fixed lower reimbursement level to all providers, resulting in a set of providers opting out of the insurer’s network. They can segment their network into tiers, with higher cost-sharing for the higher tiers, resulting in a de facto narrowing of the network for price-conscious consumers. All of these strategies are designed to control the costs of individual plans offered on the ACA marketplaces.

Within the current marketplaces, it is difficult for a consumer to assess network size, even as a broad concept. As a result, the trade-off between network size and premiums is not at all transparent. It is even hard to gauge which providers are in the network as this typically would involve checking the provider directories at the issuer’s website for a particular provider for a particular plan. These provider directories are notoriously out-of-date. New federal [rules](#) for 2016 will require plans to publish up-to-date, accurate, and complete provider directories, including information on which providers are

accepting new patients, the provider’s location, contact information, specialty, medical group, and institutional affiliations.

Similarly, it is difficult for regulators to judge the adequacy of the provider network, something that the ACA requires. The federal standards require networks to have sufficient numbers and types of providers to deliver services without “unreasonable delay,” though “unreasonable” is left to the states to define. According to the [Commonwealth Fund](#), states vary in the standards they set based on maximum travel times, appointment wait times, provider-to-enrollee ratios, or extended hours required. The data challenges also make enforcement of these regulations a challenge for regulators.

In a previous [Data Brief](#), we described one of the first attempts at sizing the provider networks offered on the marketplaces. In a national analysis of silver plans offered in 2014, we found that 41% were x-small or small, meaning that they included 25% or less of the physicians in a rating area. Network size varied across type of plans, with health maintenance organizations (HMOs) more narrow than Preferred Provider Organizations (PPOs). Network size also differed by specialty. We demonstrated that it is possible to provide consumers with simple “T-shirt” sizing of networks to improve decisions on the marketplaces.

However, consumers do not select plans nationally; plans (and networks) are offered by rating area. Similarly, state regulators assess

premium rates and networks. To be more useful to consumers and regulators, we take a closer look at our data and present state- and rating area-specific information on network size in this Data Brief.

WHAT WE DID

From the 2014 list of all 1065 unique silver plans (and 6690 unique plan / rating area combinations) sold in the marketplaces for all 50 states plus DC as provided by [HIX Compare](#), we identified 394 unique provider networks offered by 267 different issuers. We used the publicly available provider directories on the issuer websites of individual marketplace-based networks and plans to gather all providers in specified networks, including data on provider characteristics such as specialty, name, gender, and geographic location. These data were collected in the fall of 2014.

The provider lists from which these data were gathered were not uniform in their formats and coding. Thus we created a multi-stage cleaning process to integrate all lists into a list with unified formats for names, addresses, and specialties (see our first [Brief](#) for more details). We used national provider datasets to confirm unique physicians and to identify physicians in the rating area who did not participate in any plan.

We excluded non-matching records, physician locations outside of a plan’s rating area, and issuers and networks without complete data. Our analysis dataset consisted of 450,232 physicians participating in plans issued by 267 carriers

across 355 networks where we were successful in gathering information on all physicians. Table 1 lists the number of issuers and networks in each state's marketplace and the number of networks that we were able to collect for our analysis. Overall, our data sample includes 90% of all silver plan networks in the 2014 exchanges. Table 1 also lists the percentage of rating areas covered by the networks in our analysis to make the point that not all networks span the entire state. We only consider network size for the rating areas where a plan with each of networks is offered.

Thus, we estimate network size based on the fraction of providers in each eligible rating area within a state that participate in the network. To arrive at state estimates for each network, we weighted our rating area-specific averages by the number of physicians in each rating area. We categorized network size into 5 groups using arbitrary cutoffs that might provide meaningful information to consumers: x-small (less than 10%), small (10%-25%), medium (25%-40%), large (40%-60%), and x-large (more than 60%). We summarize the t-shirt size of these networks for each state and each rating area, but focus more of our report on the prevalence of x-small or small networks (which we call "narrow"), because they cause the most concern for regulators and consumers. We also summarize narrow networks within each plan type (PPO, HMO, EPO, or POS) for each state and present a summary of these patterns for states grouped by their propensity to offer narrow network plans.

WHAT WE FOUND

The distribution of networks in each T-shirt size is presented for each state in Table 2. Some states are characterized by mostly large or x-large networks (such as Delaware, Kansas, and North Dakota), others feature small networks (such as Georgia, Florida, and Oklahoma), and others are fairly well balanced across sizes (such as Minnesota, New York, and Washington). Table 2 also lists the percentage of networks that we consider narrow (small or x-small) by state, and Figure 1 displays the percentage of narrow networks in each state in descending order. Although the concept of narrow networks has gained national attention, it is important to note that we could find no narrow ones in 12 states. The prevalence of narrow networks in the other states range from 83% in Georgia to 13% in Idaho and North Carolina.

We map our narrow network data in Figure 2 for each state and in Figure 3 for each rating area. Comparing these maps we can see that statewide averages obscure pockets of narrow networks in specific rating areas within states (for example, Texas and California).

In our previous brief, we found that the prevalence of narrow networks varied by plan type, with HMOs having the smallest networks. We wanted to understand whether the prevalence of narrow networks in each state was driven by the distribution of plan types across states. Table 3 presents the percent of narrow networks within each available plan type in each state. We find

significant variability within plan types by state; for example, none of Idaho's three HMO networks are narrow, compared to half of its PPO networks; 91% of California's 11 HMO networks are narrow, compared to 33% of its PPOs.

To better generalize from this variability, we summarized this information using states grouped by their propensity to offer narrow networks in their plans. These groups are based on the color differences observed in Figure 2 and 3. Results are displayed in Figure 4. Notice that the states in the first three groupings have a similar proportion of narrow networks within each plan type. This contrasts with the overall differences as shown in the last set of bars where HMOs have about twice the rate of narrow networks as the other plan types. It is a bit different in the states with a high (60% or more) propensity for narrow networks. Among these states, more than 80% of HMO networks and about 45% of PPO networks are narrow. EPO and POS rate of narrow networks are similar to HMO rates for all types of states.

But what causes one state to have more narrow networks than other states? This is a question for future research. While we cannot answer that question, we do find a strong correlation between states that offer HMO plans and states that have more narrow networks. This correlation is shown in Figure 5. Here we see that states with a high prevalence (60% or more) of narrow networks are dominated by HMOs, whereas states that have the lowest prevalence (20% or less) are dominated by PPOs.

POLICY IMPLICATIONS

As the prevalence of narrow provider networks increases, the ability to measure their size, assess their adequacy, and transparently communicate this information to consumers and regulators becomes essential. These findings demonstrate the utility of the new database in measuring the size of networks within geographic areas that matter most to consumers and regulators. These data can also be used to build an integrated "Find a Doctor" database that far surpasses the utility of existing online plan directories.

New federal and state regulations will result in provider directories that are more accessible, accurate, and up-to-date. These new regulations will create opportunities to provide consumers with clear and simple ways to include network characteristics in the choices they have and the trade-offs they make. It will also make it easier to evaluate networks not only in terms of size as we demonstrate here, but also to include information on the value and adequacy of these networks. Ultimately, these steps will improve the implementation of narrow networks as a strategy for offering lower-cost plans on the marketplaces. Well-functioning narrow networks will survive only if they are made more transparent to consumers and are regulated to ensure sufficient network adequacy.

Table 1. Number of Issuers, Networks, Analytical Sample, and Network Coverage, by State

	ISSUERS	NETWORKS ON EXCHANGE	NETWORKS IN STUDY SAMPLE	AVERAGE % OF RATING AREAS COVERED BY NETWORKS
Alabama	2	2	1	100%
Alaska	2	2	2	100%
Arizona	9	15	15	86%
Arkansas	3	5	3	68%
California	11	16	16	87%
Colorado	10	16	15	80%
Connecticut	3	3	3	100%
Delaware	2	3	3	100%
District of Columbia	3	4	4	100%
Florida	10	15	14	93%
Georgia	5	6	6	89%
Hawaii	2	2	2	100%
Idaho	4	8	8	70%
Illinois	6	8	7	85%
Indiana	4	4	4	100%
Iowa	4	7	6	88%
Kansas	4	6	5	89%
Kentucky	3	4	4	100%
Louisiana	4	7	7	71%
Maine	2	2	2	100%
Maryland	4	4	4	100%
Massachusetts	9	12	10	94%
Michigan	9	15	15	88%
Minnesota	5	7	7	78%
Mississippi	2	3	3	89%
Missouri	4	8	5	72%
Montana	3	5	5	100%
Nebraska	4	8	8	66%
Nevada	4	9	9	72%
New Hampshire	1	1	1	100%
New Jersey	3	9	3	100%
New Mexico	4	6	6	87%
New York	16	18	18	96%
North Carolina	2	8	8	75%
North Dakota	3	3	3	100%
Ohio	12	12	10	100%
Oklahoma	6	9	9	88%
Oregon	11	16	11	84%
Pennsylvania	10	20	15	94%
Rhode Island	1	1	1	100%
South Carolina	4	8	7	59%
South Dakota	3	3	3	100%
Tennessee	4	6	6	92%
Texas	11	12	11	100%
Utah	6	11	10	94%
Vermont	2	3	3	100%
Virginia	7	12	12	90%
Washington	8	8	6	100%
West Virginia	1	3	3	100%
Wisconsin	13	17	14	93%
Wyoming	2	2	2	100%
TOTAL	267	394	355	89%

Table 2. T-shirt Size of Networks by State

	X-SMALL	SMALL	MEDIUM	LARGE	X-LARGE	NUMBER OF NARROW NETWORKS (SMALL & X-SMALL)	% NARROW
Alabama	0%	0%	0%	100%	0%	0	0%
Alaska	0%	50%	50%	0%	0%	1	50%
Arizona	13%	60%	20%	7%	0%	11	73%
Arkansas	0%	0%	33%	33%	33%	0	0%
California	38%	38%	19%	6%	0%	12	75%
Colorado	20%	27%	27%	20%	7%	7	47%
Connecticut	0%	0%	33%	67%	0%	0	0%
Delaware	0%	0%	0%	67%	33%	0	0%
District of Columbia	0%	25%	75%	0%	0%	1	25%
Florida	43%	36%	21%	0%	0%	11	79%
Georgia	0%	83%	17%	0%	0%	5	83%
Hawaii	0%	50%	50%	0%	0%	1	50%
Idaho	13%	0%	25%	38%	25%	1	13%
Illinois	14%	0%	43%	29%	14%	1	14%
Indiana	0%	25%	50%	25%	0%	1	25%
Iowa	17%	0%	17%	33%	33%	1	17%
Kansas	0%	20%	0%	40%	40%	1	20%
Kentucky	25%	0%	0%	50%	25%	1	25%
Louisiana	0%	29%	43%	29%	0%	2	29%
Maine	0%	50%	0%	50%	0%	1	50%
Maryland	25%	0%	50%	25%	0%	1	25%
Massachusetts	0%	60%	20%	20%	0%	6	60%
Michigan	7%	47%	20%	27%	0%	8	53%
Minnesota	14%	29%	14%	14%	29%	3	43%
Mississippi	0%	33%	33%	33%	0%	1	33%
Missouri	0%	0%	40%	40%	20%	0	0%
Montana	0%	20%	20%	60%	0%	1	20%
Nebraska	13%	50%	13%	0%	25%	5	63%
Nevada	0%	44%	11%	44%	0%	4	44%
New Hampshire	0%	0%	0%	0%	100%	0	0%
New Jersey	0%	67%	33%	0%	0%	2	67%
New Mexico	0%	17%	67%	17%	0%	1	17%
New York	0%	39%	22%	33%	6%	7	39%
North Carolina	13%	0%	50%	25%	13%	1	13%
North Dakota	0%	0%	0%	67%	33%	0	0%
Ohio	30%	30%	10%	30%	0%	6	60%
Oklahoma	11%	67%	0%	22%	0%	7	78%
Oregon	0%	0%	64%	27%	9%	0	0%
Pennsylvania	0%	27%	13%	27%	33%	4	27%
Rhode Island	0%	0%	0%	0%	100%	0	0%
South Carolina	0%	14%	14%	71%	0%	1	14%
South Dakota	0%	0%	33%	33%	33%	0	0%
Tennessee	0%	17%	50%	0%	33%	1	17%
Texas	45%	27%	9%	0%	18%	8	73%
Utah	0%	20%	10%	70%	0%	2	20%
Vermont	0%	33%	0%	0%	67%	1	33%
Virginia	17%	42%	17%	25%	0%	7	58%
Washington	17%	17%	33%	33%	0%	2	33%
West Virginia	0%	0%	0%	0%	100%	0	0%
Wisconsin	0%	57%	29%	7%	7%	8	57%
Wyoming	0%	0%	100%	0%	0%	0	0%

Table 3. Narrow Networks, by State and Plan Type

	PPO		HMO		EPO		POS		TOTAL	
	NETWORKS (N)	NARROW (%)	NETWORKS (N)	NARROW (%)	NETWORKS (N)	NARROW (%)	NETWORKS (N)	NARROW (%)	NETWORKS (N)	NARROW (%)
Alabama	1	0%	-	-	-	-	-	-	1	0%
Alaska	2	50%	-	-	-	-	-	-	2	50%
Arkansas	2	0%	-	-	-	-	1	0%	3	0%
Arizona	7	57%	8	88%	-	-	-	-	15	73%
California	3	33%	11	91%	2	50%	-	-	16	75%
Colorado	3	33%	9	56%	3	33%	-	-	15	47%
Connecticut	2	0%	-	-	-	-	1	0%	3	0%
Delaware	1	0%	1	0%	1	0%	-	-	3	0%
District of Columbia	1	0%	2	50%	-	-	1	0%	4	25%
Florida	3	67%	8	88%	2	100%	1	0%	14	79%
Georgia	1	100%	4	75%	-	-	1	100%	6	83%
Hawaii	1	0%	1	100%	-	-	-	-	2	50%
Idaho	2	50%	3	0%	-	-	3	0%	8	13%
Illinois	6	17%	1	0%	-	-	-	-	7	14%
Indiana	-	-	4	25%	-	-	-	-	4	25%
Iowa	3	0%	-	-	1	0%	2	50%	6	17%
Kansas	3	0%	-	-	-	-	2	50%	5	20%
Kentucky	3	33%	1	0%	-	-	-	-	4	25%
Louisiana	2	0%	1	0%	-	-	4	50%	7	29%
Maine	1	100%	1	0%	-	-	-	-	2	50%
Maryland	1	0%	2	50%	1	0%	-	-	4	25%
Massachusetts	1	0%	9	67%	-	-	-	-	10	60%
Michigan	6	50%	9	56%	-	-	-	-	15	53%
Minnesota	4	25%	3	67%	-	-	-	-	7	43%
Mississippi	2	50%	1	0%	-	-	-	-	3	33%
Missouri	5	0%	-	-	-	-	-	-	5	0%
Montana	4	25%	-	-	-	-	1	0%	5	20%
Nebraska	3	0%	3	100%	-	-	2	100%	8	63%
Nevada	-	-	4	50%	-	-	5	40%	9	44%
New Hampshire	-	-	1	0%	-	-	-	-	1	0%
New Jersey	-	-	-	-	3	67%	-	-	3	67%
New Mexico	2	0%	4	25%	-	-	-	-	6	17%
New York	2	0%	8	63%	7	29%	1	0%	18	39%
North Carolina	3	0%	-	-	-	-	5	20%	8	13%
North Dakota	2	0%	1	0%	-	-	-	-	3	0%
Ohio	4	25%	6	83%	-	-	-	-	10	60%
Oklahoma	5	60%	3	100%	-	-	1	100%	9	78%
Oregon	9	0%	1	0%	1	0%	-	-	11	0%
Pennsylvania	10	20%	5	40%	-	-	-	-	15	27%
Rhode Island	1	0%	-	-	-	-	-	-	1	0%
South Carolina	-	-	-	-	3	0%	4	25%	7	14%
South Dakota	1	0%	2	0%	-	-	-	-	3	0%
Tennessee	5	20%	-	-	1	0%	-	-	6	17%
Texas	3	67%	8	75%	-	-	-	-	11	73%
Utah	1	0%	8	25%	-	-	1	0%	10	20%
Vermont	-	-	2	0%	1	100%	-	-	3	33%
Virginia	3	67%	5	40%	-	-	4	75%	12	58%
Washington	3	33%	3	33%	-	-	-	-	6	33%
West Virginia	3	0%	-	-	-	-	-	-	3	0%
Wisconsin	2	50%	8	50%	1	100%	3	67%	14	57%
Wyoming	1	0%	1	0%	-	-	-	-	2	0%
TOTAL	133	25%	152	56%	27	37%	43	40%	355	41%

Figure 1. Percent of Narrow Networks by State

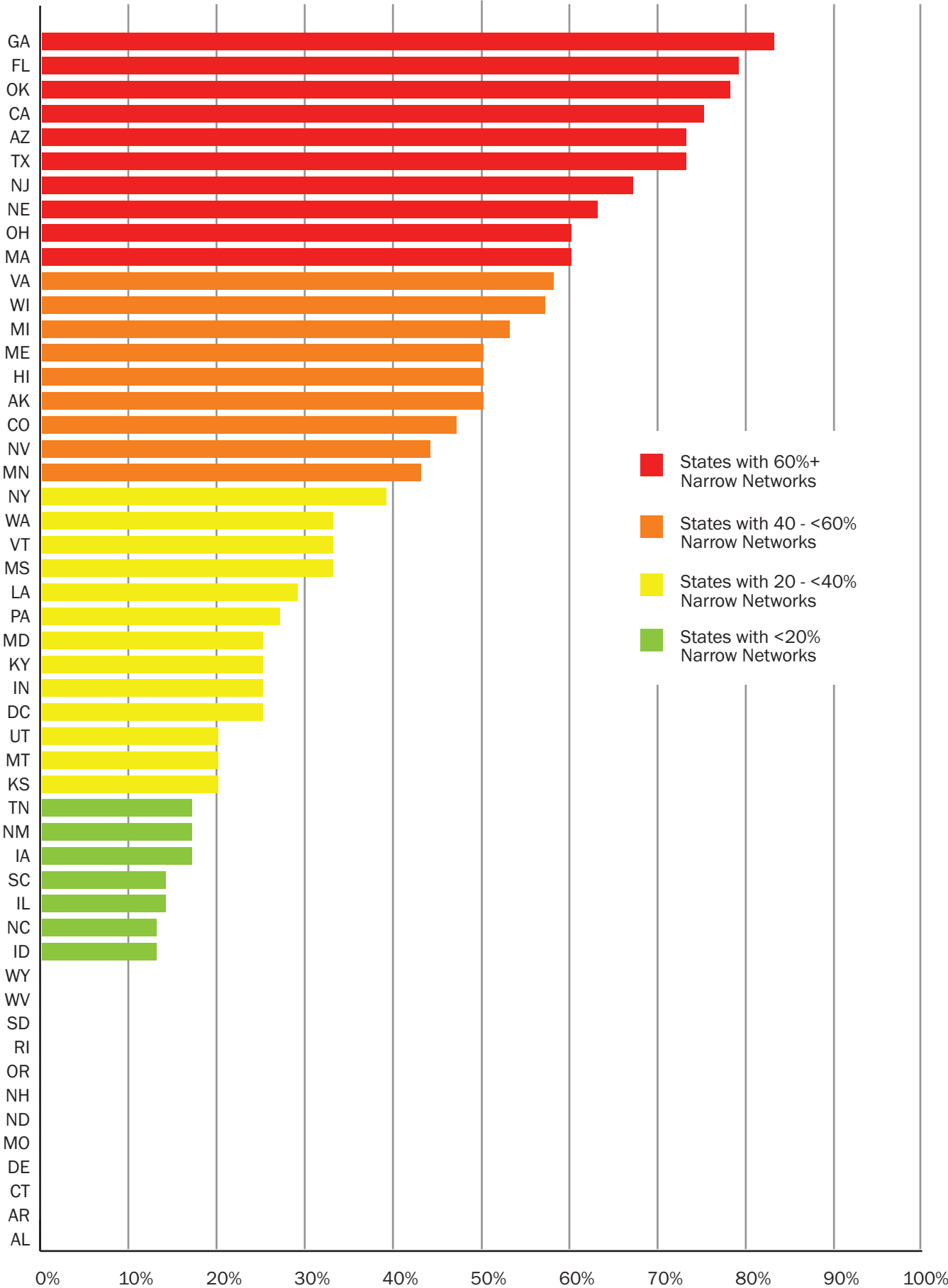


Figure 2. Percent of Narrow Networks by State

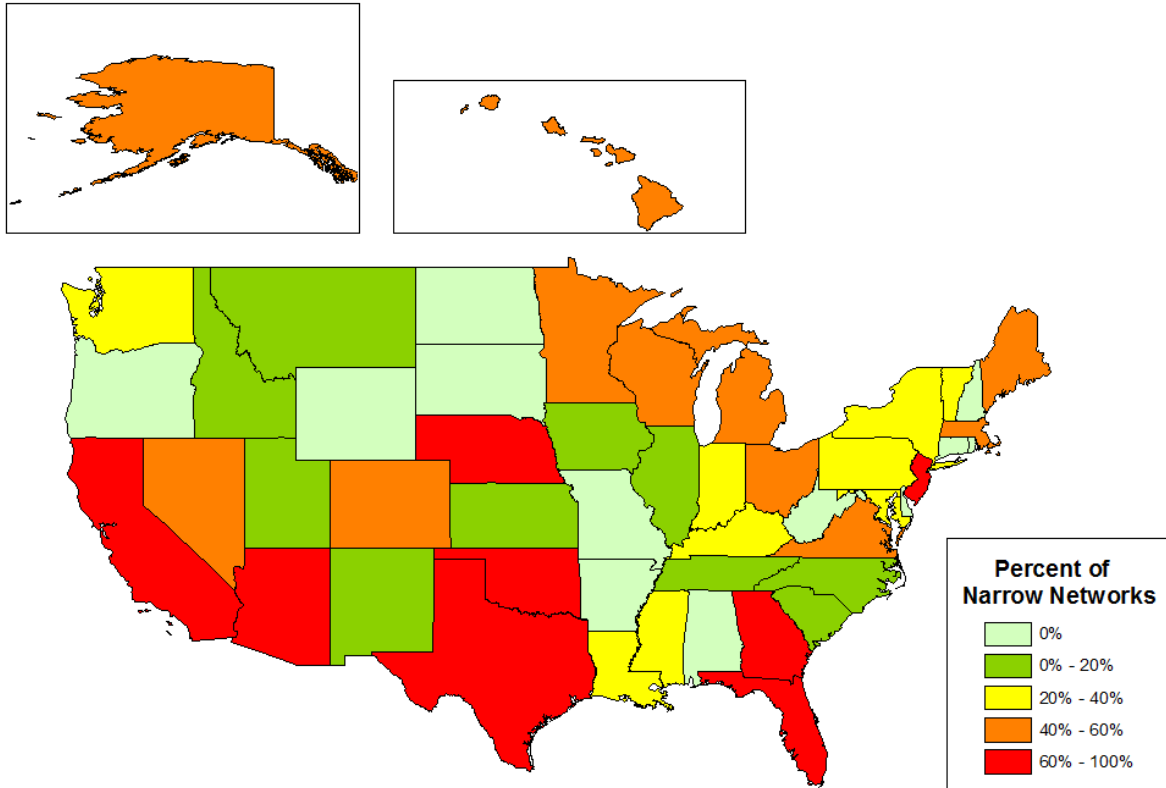


Figure 3. Percent of Narrow Networks by Health Insurance Exchange Rating Area

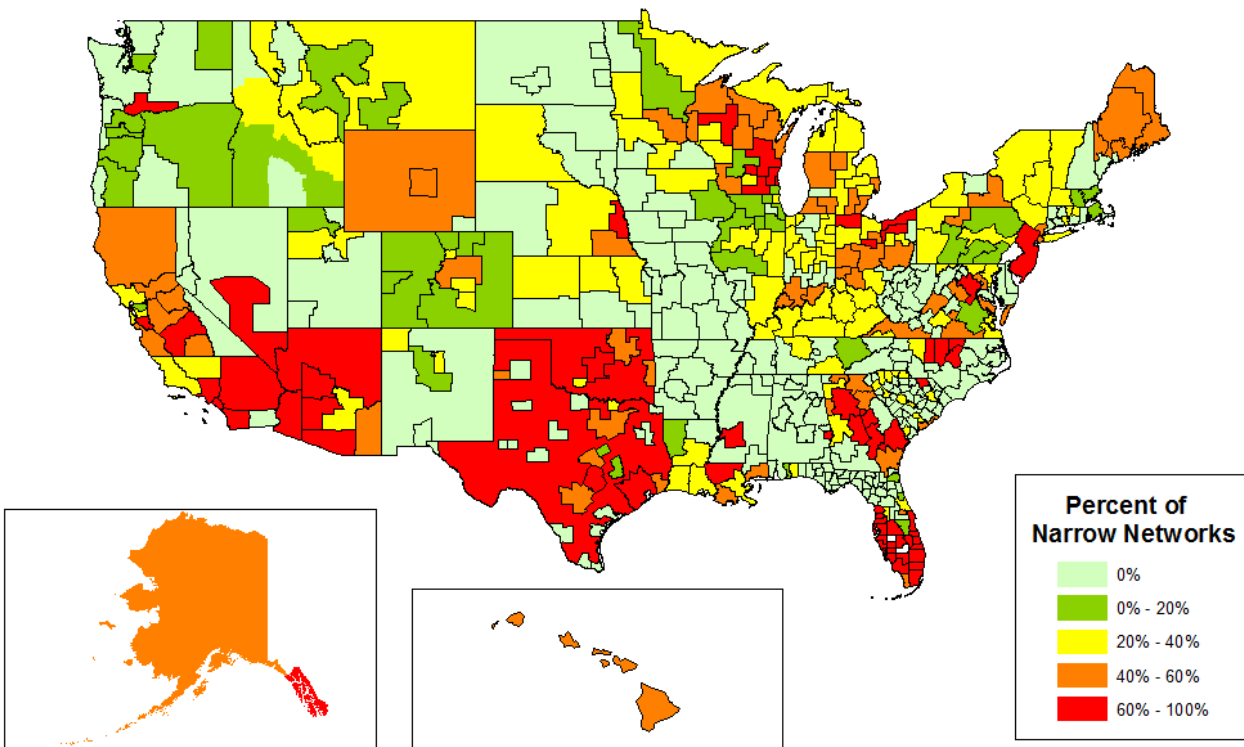


Figure 4. Percent of Narrow Networks Within Plan Type, by State Prevalence of Narrow Networks

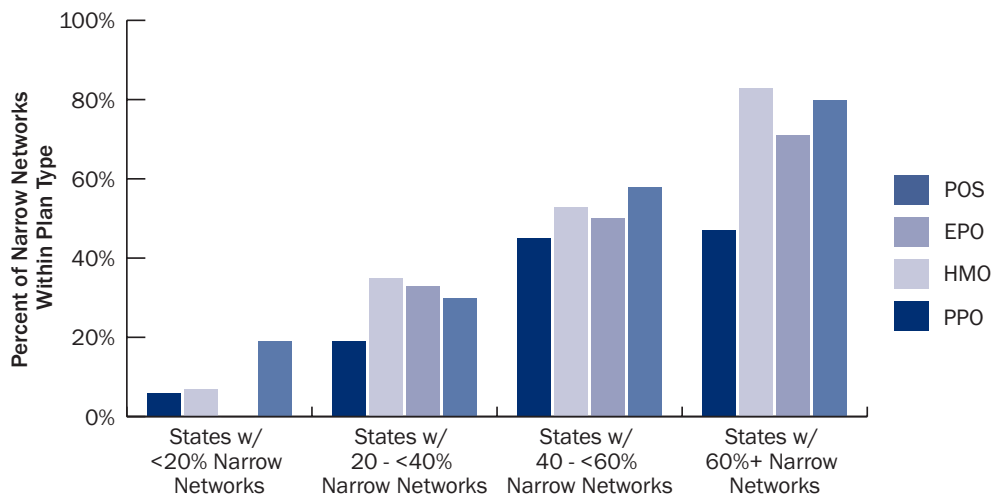
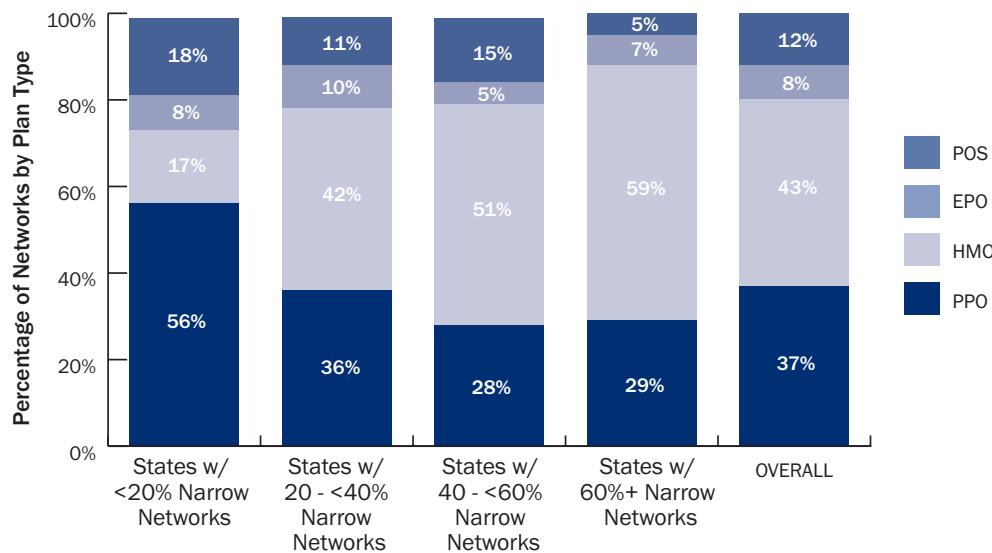


Figure 5. Distribution of Plan Types, Overall and by State Prevalence of Narrow Networks



About the Authors

This Data Brief was written by Dan Polsky, PhD and Janet Weiner, MPH.

About The Leonard Davis Institute of Health Economics

The [Leonard Davis Institute of Health Economics](http://www.lidiv.org) (LDI) is the University of Pennsylvania’s center for research, policy analysis, and education on the medical, economic, and social issues that influence how health care is organized, financed, managed, and delivered. LDI, founded in 1967, is one of the first university programs to successfully cultivate collaborative multidisciplinary scholarship. It is a cooperative venture among Penn’s health professions, business, and communications schools (Medicine, Wharton, Nursing, Dental Medicine, Law School, and Annenberg School for Communication) and the Children’s Hospital of Philadelphia, with linkages to other Penn schools, including Arts & Sciences, Education, Social Policy and Practice, and Veterinary Medicine.

About the Robert Wood Johnson Foundation

For more than 40 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are striving to build a national Culture of Health that will enable all to live longer, healthier lives now and for generations to come. For more information, visit www.rwjf.org. Follow the Foundation on Twitter at [www.rwjf.org/twitter](https://twitter.com/rwjf) or on Facebook at [www.rwjf.org/facebook](https://www.facebook.com/rwjf).