



NARROW NETWORKS ON THE INDIVIDUAL MARKETPLACE IN 2017

Daniel Polsky, Janet Weiner, and Yuehan Zhang

This Issue Brief describes the breadth of physician networks on the ACA marketplaces in 2017. We find that the overall rate of narrow networks is 21%, which is a decline since 2014 (31%) and 2016 (25%). Narrow networks are concentrated in plans sold on state-based marketplaces, at 42%, compared to 10% of plans on federally-facilitated marketplaces. Issuers that have traditionally offered Medicaid coverage have the highest prevalence of narrow network plans at 36%, with regional/local plans and provider-based plans close behind at 27% and 30%. We also find large differences in narrow networks by state and by plan type.

INTRODUCTION

Amidst uncertainty about what the future holds for the individual marketplace and Medicaid expansion, consumers in some areas face large premium increases for the 2018 plan year. Insurers are pricing plans to account for potential changes to the risk pool and a threat to the continuation of cost sharing subsidies from the federal government. Some insurers have exited the market completely, reducing competition as a force to drive down premiums. Given the demonstrated relationship between narrow provider networks and lower plan premiums, the breadth of provider networks continues to be an important feature of qualified health plans. As the 2018 open enrollment period approaches, we report on the prevalence of narrow provider networks during the 2017 plan year.

In previous briefs, we documented the breadth of provider networks in silver plans on the marketplaces in [2014](#) and [2016](#). In this brief covering 2017, we describe the breadth of physician provider networks overall, and by plan type, specialty, issuer type (i.e., national, local, provider-based, Medicaid-focused, Blues), state marketplace type (i.e., federally-

facilitated vs. state-based), and state. We also examine overall trends in network size among silver plans since 2014.

BACKGROUND

The Affordable Care Act (ACA) did not create narrow network plans, although it spurred their rise. In a regulatory framework that includes community rating, essential health benefits with no dollar limits, and standardized actuarial levels, plans had only a few ways to keep costs down. By limiting networks to low-cost providers, or those who would accept reduced fees, issuers could offer plans with lower premiums. We [estimated](#) that in 2014, a plan with an extra-small network had a monthly premium that was 6.7% less expensive than that of a plan with a large network. For a typical plan, consumers were saving between \$212 and \$339 a year.

Two issues have arisen in the implementation of narrow networks: transparency and adequacy. Because consumers are ultimately responsible for weighing the tradeoff between lower premiums and some of the downsides of plans with restricted networks, they should

be aware of the network size of the plan they are choosing. While network breadth is not the only characteristic of a provider network, we have demonstrated that this measure is easily calculated and can quickly capture the relative differences in provider networks across plans.

On the marketplaces, consumers have had little indication of network size when choosing a plan. To address the issue of transparency, for Plan Year 2017 the Centers for Medicare and Medicaid Services (CMS) piloted a display of [network breadth information](#) on the marketplaces in four states: Maine, Ohio, Tennessee, and Texas. During open enrollment, consumers in these states saw information classifying the breadth of the plans' provider networks, as compared to other plans in the county. Consumers could compare networks for three provider types, including adult primary care providers, pediatricians, and hospitals. CMS plans to continue the pilot in the same states for the upcoming plan year.

Another concern raised by narrow networks is one of adequacy, which is a function not only of network size, but also of time, distance, and availability. In a [study](#) of 2015 federal marketplace plans, nearly 15% had no in-

network physicians within 50 miles for at least one specialty. Endocrinology, rheumatology, and psychiatry were the most common excluded specialties. Another [study](#) found that 44% of networks in 2014 had no pediatric subspecialists who practiced in the underlying area. A recent [study](#) found that narrow networks were more likely to exclude high-quality National Cancer Institute-Designated Cancer Centers. Another recent [study](#) documented the disproportionate narrowness of provider networks (both physicians and nonphysicians) that specialize in mental health care.

The ACA set a [national standard for network adequacy](#) requiring “a network that is sufficient in number and types of providers,” and that “all services will be accessible without unreasonable delay.” Subsequently, in 2016 CMS developed adequacy standards with [maximum time and distance criteria](#) for different specialties and metro/nonmetro areas. Plans submitted data for CMS review, which focused on specialties that had historically raised network adequacy concerns: hospital systems, dental providers (if applicable), endocrinology, infectious disease, mental health, oncology, outpatient dialysis, primary care, and rheumatology. However, the new administration has [proposed](#) shifting determination and oversight of adequacy standards to the states, who have varying capacity to do so. States can be guided by the National Association of Insurance Commissioners’ 2015 [Health Benefit Plan Network Access and Adequacy Model Act](#). The Act specifies that state insurance commissioners, not health plans, determine if provider networks are adequate, set standards for the accuracy of provider directories, and include consumer protections against “surprise medical bills” when out-of-network providers deliver care in in-network facilities. However, the NAIC model act did not recommend quantitative standards of adequacy, nor is it binding on states. [Twenty-one states](#) now offer some consumer protection against balance billing by out-of-network physicians in in-network hospitals.

Our previous briefs characterized the breadth of network plans offered in the first year of the marketplaces (2014) and two years later, after

TABLE 1.
Issuer type classification

Type	Description	Examples
Blues	Blue Cross Blue Shield payer	Anthem, BCBS, Regence
Medicaid	payer that traditionally primarily offered Medicaid coverage	Molina and Centene, along with regional/local Medicaid payers
National	commercial payer with a marketplace presence in more than six states	Aetna/Coventry, Cigna, Humana, UnitedHealthcare
Provider-based	payer that also operates as a provider/health system	Kaiser, Geisinger, Healthfirst
Regional/local	commercial payer with a marketplace presence in six or fewer states (most often, just one state)	Medica, MVP Health Plan, Vantage Health Plan
Consumer-operated-and-oriented plan (CO-OP)	a recipient of federal CO-OP grant funding that was not a commercial payer before 2014	Mountain Health Cooperative, Common Ground Healthcare Cooperative, Minuteman Health, Inc.

plans had some experience with the networks. Here we update our findings for 2017.

WHAT WE DID

From the 2017 list of all 4,353 qualified health plans (and 72,103 unique plan/county combinations) sold in the marketplaces for all 50 states and DC as provided by the [RWJF HIX Compare dataset](#), we identified 428 unique provider networks offered by 228 different issuers. We obtained the list of providers participating in each of these networks from Vericred, Inc. Vericred had obtained this information in May 2017 from either online or machine readable provider directories released by the insurers.

The list of data from Vericred uniquely identified providers by matching directories to the National Provider Identifier (NPI) registry so that each physician is uniquely identified. For more accurate and consistently coded information on active office-based physician location and specialty we matched Vericred data to the SK&A office-based physician dataset. The SK&A dataset telephone verifies location and specialty information every six months and thus provides validated, updated, and consistently collected specialty and location information for 606,495 physicians. Providers not matched to the SK&A dataset or deemed to be non-active were removed.

We used the SK&A specialty and location information in this brief. For physicians practicing in multiple locations, we randomly selected a single location for analyses.

Our analysis dataset consisted of 407,690 physicians participating in plans issued by the 228 issuers across 428 networks and the 138,465 physicians that were found to not be participating in any marketplace network and were verified as active office-based physicians by the SK&A data.

In addition to describing the networks in the marketplace in 2017, we compared how networks have changed from 2014 to 2017. The process of collecting the 2014 and 2016 data is described in our previous [Data Brief](#). Because methods of data collection and cleaning have improved since that time, we returned to the 2014 and 2016 file to reconcile differences. This primarily required restricting analyses to the physicians verified by SK&A data. Because the 2014 data were collected for silver plans only, all comparisons are restricted to silver plans.

Some key variables describing networks were constructed from other sources and linked to the network data from Vericred. Plan type is available in the [RWJF HIX Compare dataset](#). State marketplace type was based on marketplace types reported by the [Kaiser Family Foundation](#). Issuer type was based on a set of decision rules, as described in **Table 1**.

QUANTIFYING PHYSICIAN NETWORK SIZE

Network size is estimated by the ratio of the number of physicians participating in each network to the total number of physicians eligible for that network. We estimate network size only for the parts of a state where plans using that network are sold (i.e., plan service area) based on the practice location of the physician’s office. As in previous years, we categorized network size into five groups using arbitrary cutoffs that might provide meaningful information to consumers: x-small (< 10%), small (10%-25%), medium (25%-40%), large (40%-60%), and x-large (≥ 60%). We define “narrow” networks as including fewer than 25% of eligible physicians (x-small and small combined).

Because some networks are only attached to a single plan while others are attached to multiple plans offered in the marketplace, we use the plan as the unit of analysis. To adjust for the fact that some plans are only offered regionally within a state while others are sold state-wide, we summarize plans by weighting by the fraction of the state’s population living in counties where the plan was offered. We chose this approach as it reflects consumers’ experiences in choosing between different plans, rather than networks.

WHAT WE FOUND

Figure 1 describes the distribution of physician networks, overall and by metal tier, in 2017. By our measures, 21% of networks are small or x-small: 9% of networks are x-small, meaning they include less than 10% of office-based practicing physicians in the area and another 12% are small, including between 10% and 25% of physicians. At the other end of the spectrum, 32% are x-large, which we define as networks that include at least 60% of physicians. There is little difference in network breadth across the most popular three metal tiers.

Most networks offered on the marketplace are Health Maintenance Organizations (HMOs), 58%, or Preferred Provider Organizations (PPOs), 20%. Since 2016, plan types on the marketplaces have shifted slightly, with more

Figure 1. Network size categories, overall and by metal

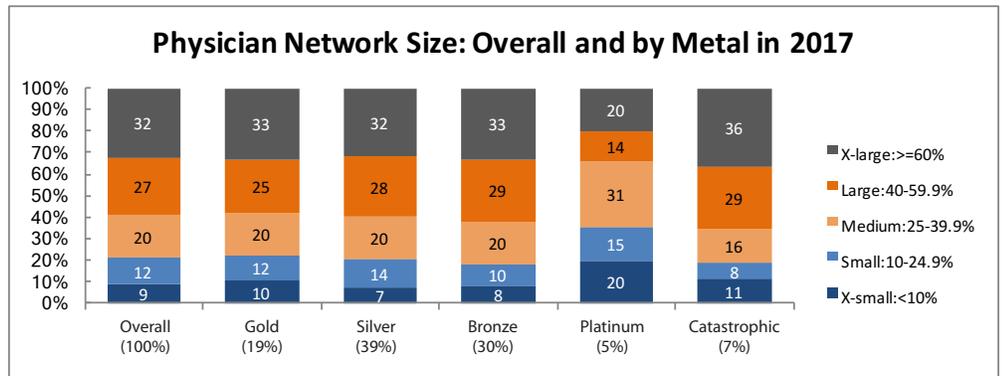
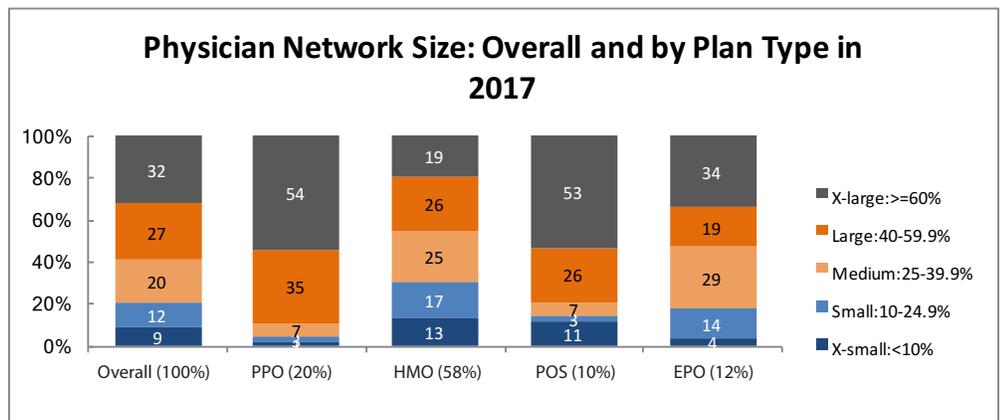


Figure 2. Network size categories, overall and by plan type



HMOs and Exclusive Provider Organizations (EPOs) (70% in 2017 vs. 62% in 2016) and fewer PPOs and Point of Service (POS) plans. As shown in **Figure 2**, 30% of HMO plans had narrow networks, compared to only 4% for PPO plans, 14% for POS plans, and 18% for EPO plans.

Not surprisingly, the plan types known for limiting coverage to participating providers (HMOs and EPOs) had a higher prevalence of small and x-small networks, while plan types that cover most providers (even if on a preferred or tiered basis—PPOs and POS plans) had the highest prevalence of large and x-large networks.

HMOs AND PPOs HAD A HIGHER PREVALENCE OF NARROW NETWORKS THAN PPOs AND POS PLANS.

Figure 3. Network size categories, overall and by provider specialty group

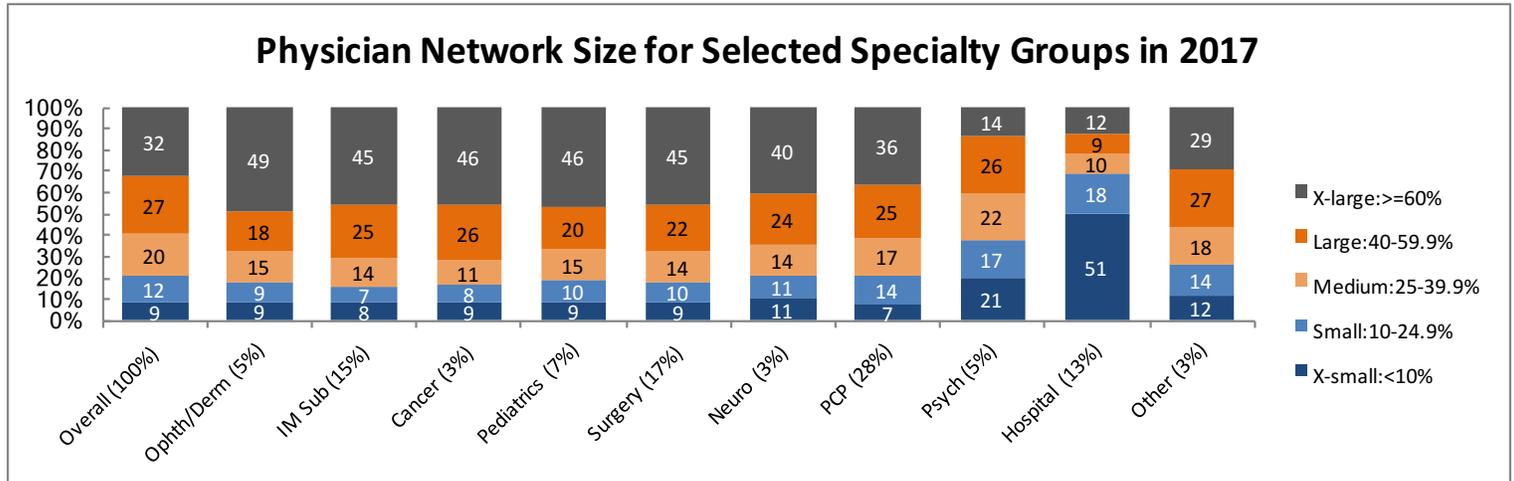
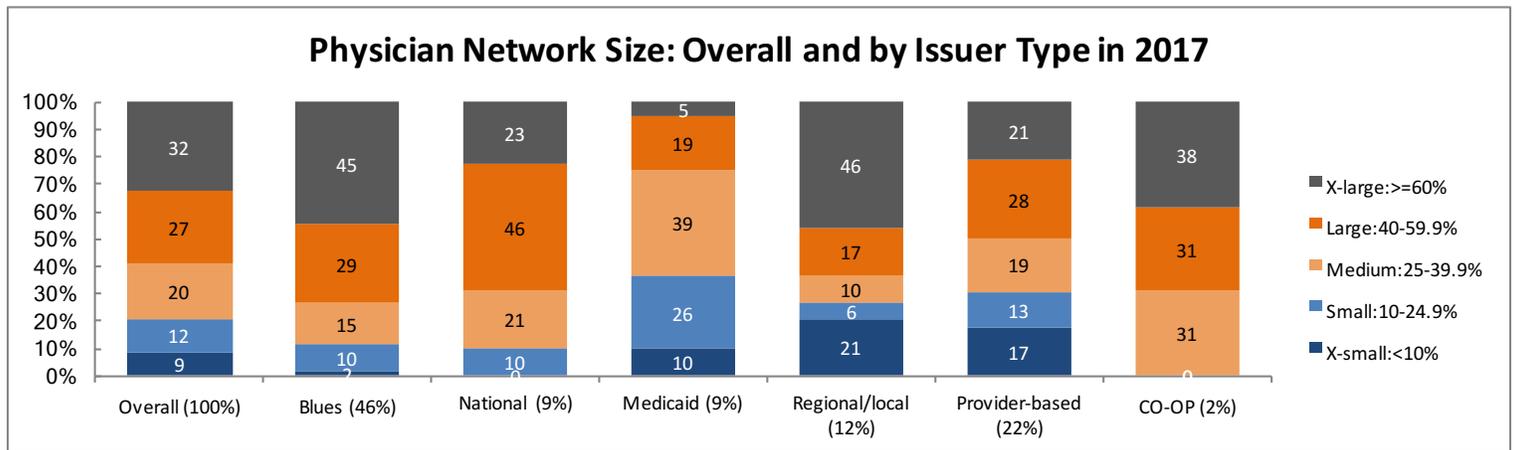


Figure 4. Network size categories, overall and by issuer type



The breadth of networks by specialty is important when considering the adequacy of networks, as sufficient inclusion of specialists is as critical a feature of networks as its breadth. The most common specialty groups among office-based practicing physicians are primary care (28%), hospital-based (radiology, anesthesiology, emergency medicine, and pathology, 13%), and surgery-related (17%). As shown in **Figure 3**, we find few meaningful differences in network size across specialty groups, except for psychiatry and hospital-based specialties. Network size for primary care physicians (PCPs) is the same as overall network size with 21% having x-small

or small networks. Narrow networks prevail in hospital-based specialties (69%) and psychiatry (38%). Specialists associated with cancer care and Internal Medicine subspecialists had slightly lower rates of narrow networks at 17% and 15% respectively.

Issuer-level Analysis

Different types of issuers (see **Table 1**) may have different strategies for developing and using narrow networks for their qualified health plans. We analyzed our results, by whether the issuer was a Blue Cross/Blue Shield affiliate, a commercial payer with a national presence,

a commercial payer with a local/regional presence, a payer that has traditionally primarily offered Medicaid coverage, or a payer that is also a provider/health system.

As shown in **Figure 4**, 36% of plans offered by traditional Medicaid issuers were narrow. This contrasts sharply with Blues plans and national plans where 12% and 10% of plans are narrow, respectively. Regional and provider-based issuers offer above-average levels of narrow network plans with a greater tendency to offer x-small networks.

Because the prevalence of narrow networks differs by plan type, we delved further into these differences by issuer type. We lumped the HMO and EPOs together as a relatively “closed” form of managed care (where patients have no coverage for out-of-network care) and PPOs and POS plans as a relatively “open” type (where patients pay some, but not all, the costs of out-of-network care). We find substantial differences by plan type (Figures 5A and 5B), with narrow networks concentrated in “closed” type plans in Medicaid, provider-based, and regional/local issuers. Only regional/local issuers made substantial use of narrow networks in their “open” plans.

State-Level Analysis

We found fairly dramatic differences in the prevalence of narrow networks by state, as shown in Figure 6. It appears that narrow networks are increasingly concentrated in specific states, while in other states, narrow networks are quite rare or non-existent. State-specific data are available in an online appendix (https://ldi.upenn.edu/sites/default/files/pdf/Narrow_network_2017_Appendix.pdf).

Given the patterns we see geographically, we analyzed network size by the type of state marketplace. As shown in Figure 7, we find that the prevalence of narrow networks is concentrated in the 12 state-based marketplaces with 42% of plans classified as having narrow networks. In contrast, only 10% of plans in federally-facilitated marketplaces were classified as narrow.

NARROW NETWORKS ARE INCREASINGLY CONCENTRATED IN SPECIFIC STATES.

Figure 5a. Network size categories, overall and by issuer type – open plans (PPO and POS)

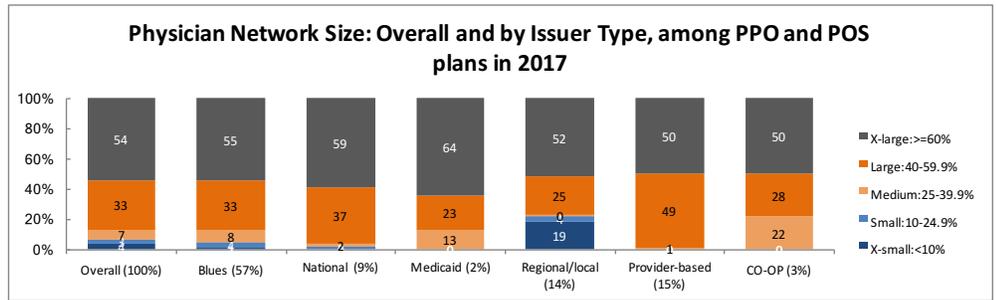


Figure 5b. Network size categories, overall and by issuer type – closed plans (HMO and EPO)

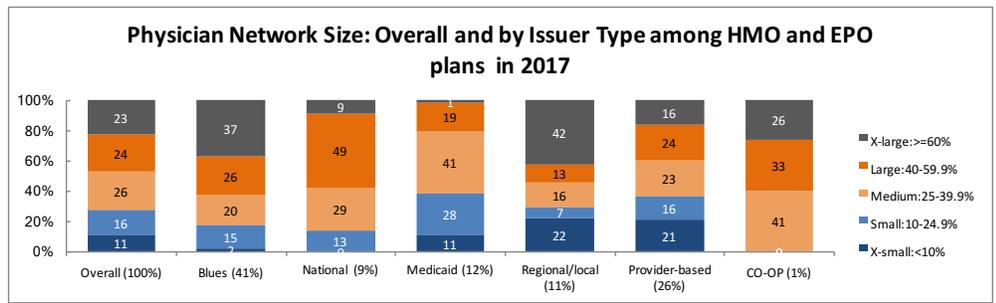


Figure 6. State-level percentage of narrow networks (plans with network sizes <25%)

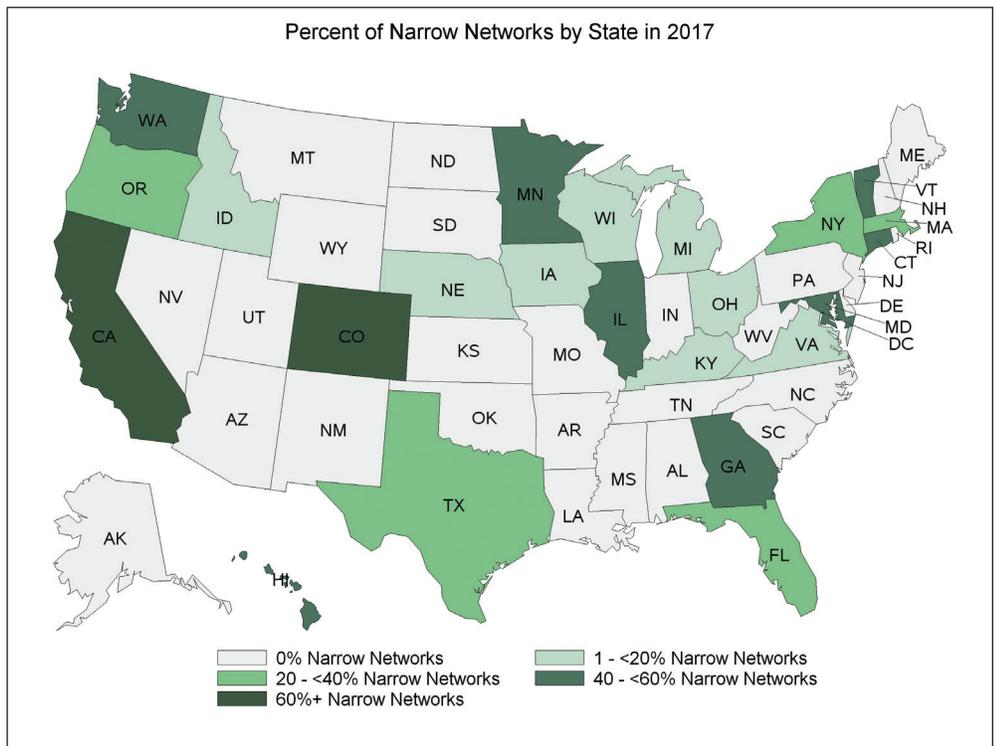


Figure 7. Network size categories, by state marketplace types

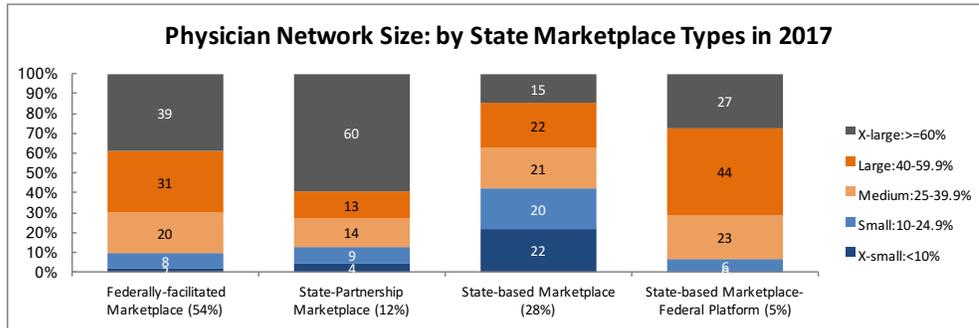
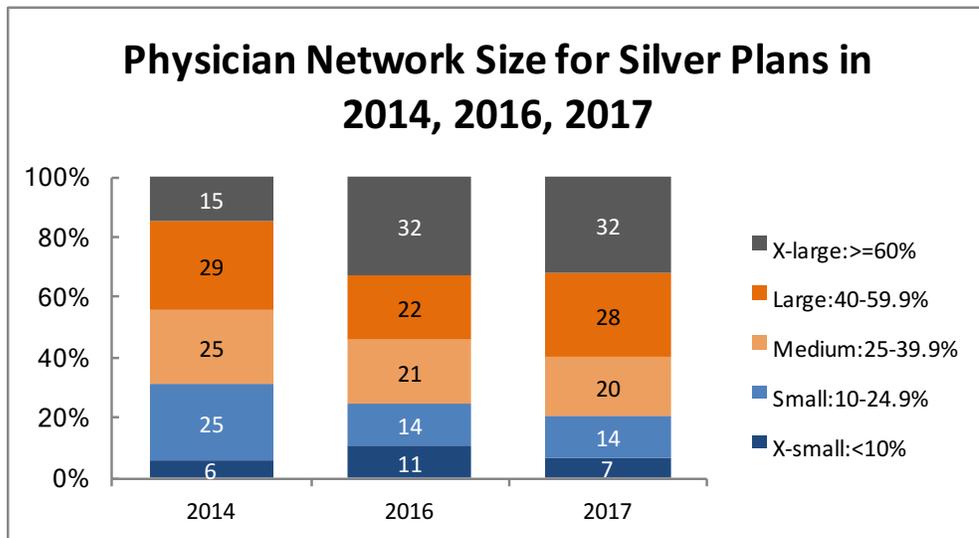


Figure 8. Comparison of network size for silver plans



Comparing network size in 2014, 2016, 2017

Looking across years (Figure 8), we find that narrow networks have decreased in prevalence, from 31% in 2014 to 21% in 2017. Although we had previously seen an increase in x-small networks from 2014 to 2016, that pattern did not continue in 2017.

TOPLINE FINDINGS

The following topline observations summarize the state of play for narrow networks among qualified health plans offered in the marketplace in 2017.

- The overall rate of narrow networks in 2017 is 21%, which is a decline since 2014 (31%) and 2016 (25%).
- We find that narrow networks are concentrated in state-based marketplaces, at 42%, compared to 10% of plans in federally-facilitated marketplaces.
- Traditional Medicaid issuers have the highest prevalence of narrow network plans at 36% with regional/local plans and provider-based plans close behind at 27% and 30%.

We will explore how characteristics of narrow networks in the marketplace have changed over time in an upcoming Issue Brief.

ABOUT LDI

Since 1967, the Leonard Davis Institute of Health Economics (LDI) has been the leading university institute dedicated to data-driven, policy-focused research that improves our nation's health and health care. Originally founded to bridge the gap between scholars in business (Wharton) and medicine at the University of Pennsylvania, LDI now connects all of Penn's schools and the Children's Hospital of Philadelphia through its more than 250 Senior Fellows.

LDI Issue Briefs are produced by LDI's policy team. For more information please contact Janet Weiner at weinerja@mail.med.upenn.edu.

COLONIAL PENN CENTER
3641 LOCUST WALK
PHILADELPHIA, PA 19104-6218

LDI.UPENN.EDU

P: 215-898-5611

F: 215-898-0229

[@PENNLDI](https://twitter.com/PENNLDI)

AUTHORS

Daniel Polsky, PhD, Executive Director, Leonard Davis Institute of Health Economics

Janet Weiner, PhD, MPH, Associate Director for Health Policy, Leonard Davis Institute of Health Economics

Yuehan Zhang, ScM, Statistical Analyst, Leonard Davis Institute of Health Economics

ACKNOWLEDGEMENT



Robert Wood Johnson Foundation

Support for this brief was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.