



The Skinny on Narrow Networks in Health Insurance Marketplace Plans

In-Brief

The Affordable Care Act (ACA) has prompted health plans to increase their use of “narrow networks” of providers as a cost containment strategy. These plans have proven popular on the ACA marketplace because they carry lower premiums. Yet consumers have little information to guide them on the tradeoff between lower premiums and network size when shopping among the various plans offered on the ACA marketplace. Regulators and policymakers also have little information on these networks. New federal requirements for updated, accurate provider directories create an opportunity to significantly improve consumers’ ability to make more informed health plan choices. The Leonard Davis Institute of Health Economics has assembled the first integrated dataset of physician networks for the plans offered on the ACA marketplace. This data brief uses this new resource to describe the breadth of the physician networks in plans sold on the state and federal marketplaces. The percent of physician networks that were classified as small or x-small came to 41% overall, 55% for HMO networks, and 25% for PPO networks.

The most favorable cost sharing arrangements offered by a health plan apply only when enrollees use providers in the plan’s network. When that network offers a limited choice of providers, it is referred to as a ‘narrow network’. These narrow network plans are particularly attractive to consumers who are willing to trade off provider choice for lower premiums and reduced out-of-pocket payments. Even though narrow networks have been around long before the Affordable Care Act (ACA), they have become an issue of increasing interest with the implementation of the ACA and the Health Insurance Marketplace (see Figure 1).

ACA provisions to create a fair and competitive marketplace – community rating, standardizing plans into tiers based on actuarial value of cost sharing, and removing limits on annual or lifetime benefits – left insurers with few options for offering lower-cost plans. Narrow networks have become an important feature of premium variation on the health insurance marketplace as they remain one of the only remaining pieces in the insurers’ cost-containment toolbox. The option of lower-cost plans in the ACA marketplace has proved to be important for price-sensitive consumers as enrollees have

reported that monthly premiums are more important than other factors in plan choice.

Insurers can use narrow networks to lower premiums in various ways. They can directly exclude high-cost providers from the network and direct patients to high-value providers. They can use the market power of networks to negotiate lower reimbursement levels with participating providers in exchange for greater volume, thereby keeping prices low. 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.

Narrow networks leave consumers vulnerable to the financial burden of out-of-network care; the challenge of navigating between in-network providers increases as the network size decreases. As a result, network size, even as a broad concept, is an important feature of a plan. Yet surveys and other anecdotal reports suggest that many consumers who selected narrow network plans largely on the basis of lower premiums were unaware of the network size of the plan they selected. Information on networks specific to specialty or geography is mostly non-existent.

Figure 1. Public Interest in Narrow Networks as Tracked by Google Trends



To date, the only work summarizing the network sizes among the plans offered on the Health Insurance Marketplace has been limited to hospital networks. [McKinsey & Co.](#) recently categorized the network size of plans on the 2015 marketplaces by the proportion of participating hospitals in a rating area. They found 39% of networks in plans offered in the marketplace to be “narrow”, defined as a network with fewer than 70% of hospitals in a rating area. This is a valuable though incomplete characterization of narrow networks, because it considers hospital participation only. It does not help consumers understand which physicians are part of the plan.

In this brief, we summarize network size using an integrated and standardized list of physician providers across the provider directories of all networks tied to the silver plans sold on the marketplaces in 2014. We describe the steps to create this integrated list and then we offer summaries of network size overall, by plan type, and by physician specialty.

The long-term goal of this project is to demonstrate how the provider data can be integrated to build a tool that can help those shopping for health insurance by improving the transparency of the network information for the market-based plans. Preserving the opportunity for health plan consumers to make an informed plan selection based on the tradeoff between the cost of their plan and the choice of providers will

require improving the information on the breadth of the networks associated with the available plans.

WHAT WE DID

From the 2014 list of all 1,065 unique silver plans (and 6,690 unique plan / rating area combinations) sold in the marketplaces for all 50 states plus DC as provided by [HIX Compare](#), we identified 395 unique provider networks offered by 268 different issuers. We used the publicly available provider directories on the issuer websites of individual marketplace-based insurance 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. We converted specialties, listed in more than 6,000 ways, into 47 specialty groups. Given the preponderance of errors in these lists including duplicates, misspellings, typos, misclassifications, and physicians who have relocated or retired, we confirmed unique physicians by matching the information to national provider datasets using a set of algorithms that allow for variation in the

About Plan Types and Cost Sharing

The primary characteristics of the most common plan types may signal some network characteristics. The main plan types are Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), Point-of-Service (POS) plan, or the newer Exclusive Provider Organization (EPO). The main distinguishing characteristics are provided in the table below.

Figure 2. Characteristics of Main Insurance [Plan Types](#)

	PPO	EPO	POS	HMO
Primary care physician (PCP) Required?	No	No	Yes, usually	Yes
Referrals required to see specialist?	No	No	Yes, usually	Yes
Pre-authorization required?	Yes, usually	Yes, usually	No, PCP referral is enough	No, PCP referral is enough
Out-of-network coverage?	Yes	No	Yes	No

From these characteristics we see variation in the penalty for out-of-network care. HMOs and EPOs offer coverage exclusively in-network, which means that the beneficiary is responsible for 100% of care from out-of-network providers. In PPOs and POS plans, where there is coverage for out-of-network care, from the 2015 HIX Compare data we found that cost sharing is typically twice as high. In silver plans using coinsurance the average is 50% for out-of-network services compared to 25% for in-network services. In silver plans using copayments for in-network primary and specialty care, the copayments range from \$22-\$28 for primary care and \$55-\$60 for specialty care. In those plans, going out of network will result in coinsurance rates of 50%. Additionally, plans covering out-of-network services (PPOs and POS plans) have higher average deductibles out of network (\$6,400-\$6,500) than in-network (\$2,700).

While plan type is a strong signal as to the penalty for going out of network, plan type does not necessarily indicate network size. For example, while HMOs typically have smaller networks than PPOs, HMOs may have broad networks and PPOs may have narrow networks. Plan type is not a sufficient proxy for network size.

data. The first provider dataset we used was the National Plan and Provider Enumeration System, better known as the [National Provider Identifier](#) (NPI) registry. This dataset allowed us to distinguish non-physicians from the physicians and then exclude the non-physicians. We then applied the fuzzy match algorithms using the [SK&A](#) dataset of over 700,000 physicians that have location and specialty information regularly telephone verified.

The records that could not be matched to at least one of these datasets were assumed to be invalid records and were excluded. We excluded physician locations that were not in rating areas in states where plans were issued. We excluded 40 networks and 17 issuers where the data gathering process failed to gather complete data. Our analysis dataset consisted of 450,232 physicians participating in plans issued by the 251 carriers across 355 networks where we were successful in gathering publicly available information on all physicians in these networks. We also created a dataset of the 199,000 physicians from the SK&A data that were found to not be participating in any marketplace network.

QUANTIFYING NARROW PHYSICIAN NETWORKS

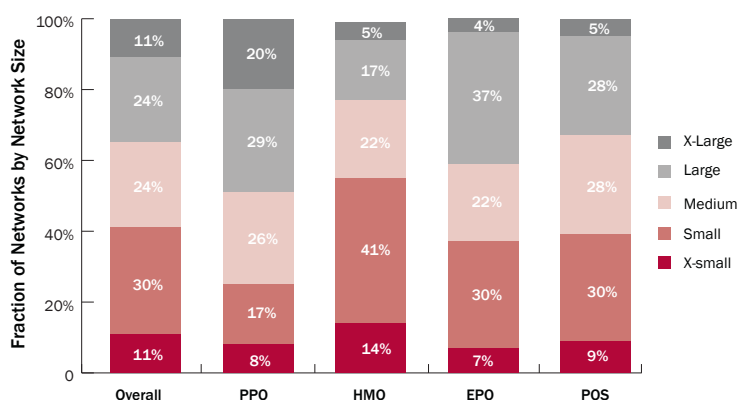
What determines a narrow network? The ACA provided a national standard for network adequacy, yet this definition has been difficult to put into practice. The definition states that marketplace plans must maintain “a network that is sufficient in number and types of providers” so that “all services will be accessible without unreasonable delay.” This identifies three aspects of the network: size, representation of provider types, and geography. There is also an element of uncertainty as to what should define “sufficient”. In this brief we combine all of these elements in our quantification of physician networks. We estimate network size based on the fraction of providers in participating rating areas within a state that participate in the network. We look for representation by provider type by tracking particular specialty groups. We are uncertain as to the appropriate threshold for “sufficiency”, so we categorized network size into five 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%).

WHAT WE FOUND

The distribution of provider networks seems to parallel the distribution of hospital networks as described by McKinsey. By our measures, 41% of networks are small or x-small: 11% of networks are x-small, meaning they include less than 10% of office-based practicing physicians in the area and another 30% are small, including between 10% and 25% of physicians. At the other end of the spectrum, 11% are x-large, which we define as networks including more than 60% of physicians.

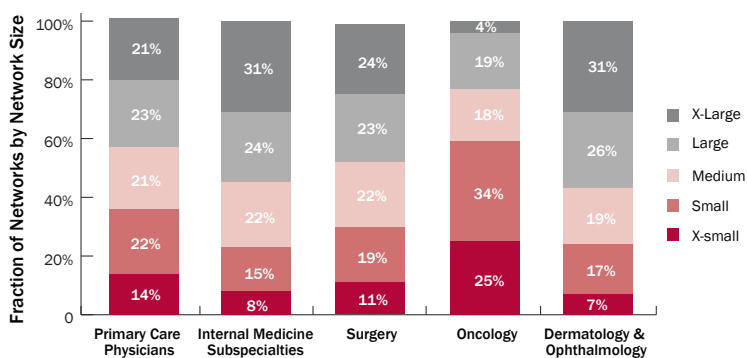
Most networks offered on the marketplace are either PPOs or HMOs: 37% are PPOs, 43% are HMOs, 8% are EPOs, and 12% are POS plans. Within each plan type we categorize network size. We find that the HMO and PPO distinction is meaningful, with 55% of HMOs having x-small or small networks, compared to 25% of PPOs. EPOs and POS plans fall somewhere between these two extremes with 37% and 39% of plans having x-small or small networks.

Figure 3. The Size of Physician Networks for Health Insurance Marketplace Plans: Overall and by Plan Types



When we sized networks within selected specialty groups we found 36% of primary care physician networks to be small or x-small. This is slightly lower than the 41% of small/x-small networks overall, suggesting that some specialties have smaller networks. One such specialty is oncology, where 59% of the networks of oncologists are classified as at least small. The other selected specialties listed are all even less likely than primary care physicians to have small networks.

Figure 4. The Size of Physician Networks for Selected Specialty Groups



Our measures of network size are based on the networks that cover the entire portion of a state where that network is attached to a plan offered on the marketplace. While these are useful summary measures that can describe the full breadth

Figure 5. Physician Network Participation for Insurance Networks for Plans Offered in Health Insurance Marketplace in Atlanta Rating Area Estimated within Selected Geographic Areas

INSURANCE NETWORK	GEORGIA	ATLANTA RATING AREA	ALPHARETTA 30004+10 MI	SE ATLANTA 30315+10 MI
Alliant POS	26%	21%	23%	8%
Ambetter HMO	13%	11%	11%	14%
Humana HMO	5%	5%	12%	4%
Kaiser HMO	11%	10%	8%	2%
Humana POS	13%	5%	3%	3%
Anthem HMO	24%	27%	37%	46%

of the network across the state, these geographic areas are much larger than the area that would be relevant for any single consumer seeking a physician provider. This point is an important caveat to consider going forward as we develop tools to provide consumers better information regarding network size. We take the set of insurance networks that are part of plans offered in the Atlanta rating area to demonstrate the difference in network size by the geographic area chosen (Figure 5). The same network can have a different breadth when considered state-wide, within an entire rating area, or over a smaller area. While the differences are minor for some networks, Alliant POS has a much smaller network around ZIP code 30315 than across the entire Atlanta rating area, while Anthem HMO has a much larger network around ZIP code 30315 than across the entire Atlanta rating area. This potential for variation in network size within a rating area suggests that rating-area specific network size information may not be sufficient for consumers.

POLICY IMPLICATIONS

Our findings demonstrate that networks can be measured along various dimensions in a way that is useful to consumers and regulators. These networks could be categorized into distinct, “T-shirt” sizes that make network information more transparent to consumers shopping on the marketplaces. The summary information provided also demonstrates the usefulness of a standardized and integrated “Find a Doctor” database for comparing network size between plans that would far surpass the utility of existing online plan directories. New federal

regulations require that plan directories be updated monthly, and available in machine-readable formats. This information can form the basis for consumer-friendly decision tools that make the network distinctions clear and meaningful.

Ultimately, these steps will improve health insurance coverage and health care access by improving 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 properly to ensure network adequacy. Our work has implications for employer-sponsored insurance as well, where plans are increasingly offering narrow network options.

In the near term, the Leonard Davis Institute of Health Economics has created a standardized and integrated dataset of providers in networks that is of immediate benefit to researchers, policymakers, and regulators. Researchers, under data use restrictions, will be able to access raw provider data to discover the underlying cost-quality tradeoff, as well as the actual value provided across various plan options. This dataset will be available in the coming months from the Leonard Davis Institute. A summary dataset by plan will soon be made publicly available. The public dataset will provide policymakers, developers, and other interested parties detailed information on network size overall and by specialty for every silver plan offered on the 2014 ACA marketplace. The summary information on the scope of variation in the choices available to consumers on the marketplaces with respect to network size will enhance transparency for consumers, regulators, and policymakers.

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](#) (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.

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