Assessing the State of Provider Networks in Federally-Facilitated Marketplaces
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The rise of “narrow network” plans on the Health Insurance Marketplaces has led to increased scrutiny for managed care provider networks. In 2017, the Centers for Medicare & Medicaid Services (CMS) will pilot-test a new measure of provider network breadth, known as Provider Participation Rate (PPR), which will classify marketplace plan networks as broad, basic or standard. While this new measure attempts to make provider networks more clear and transparent for consumers, a preliminary analysis of provider network data finds that across the U.S. there is substantial variation as to what constitutes a broad, basic, or standard network. We explore the causes of variation in how networks are classified according to the new PPR measure, discuss implications and offer recommendations for improving the measure to make it a more valid indicator of network adequacy, and therefore, a more meaningful benchmark for consumers.

INTRODUCTION

As the Health Insurance Marketplaces enter their fourth year, Qualified Health Plans (QHPs) will face two major changes amid concerns about the rise of narrow networks. First, plans will have to comply with new regulations requiring them to provide accurate, up-to-date provider directories to the public. Additionally, consumers shopping for a health plan on healthcare.gov in some states will find plans’ provider networks classified according to a new measure of network breadth, which CMS plans to pilot in 2017.

This new measure, called the Provider Participation Rate (PPR), is intended to make it easy for consumers to compare the breadth of provider networks across plans, classifying networks as either broad, basic, or standard.

We conducted an analysis of new provider directory data to explore how provider network size varies for Qualified Health Plans (QHPs) on the federally-facilitated Marketplaces. We also applied the Provider Participation Rate (PPR) to provider network data to see how it is impacted by factors such as geography and population density.

In order to understand the current state of provider networks in federally facilitated marketplaces, and how the new PPR measure will impact health plans and consumers, it is useful to recognize several key trends.

Narrow network plans are proliferating

In 2015, narrow networks were common in the Health Insurance Marketplaces: Four in ten provider networks had less than 25 percent of eligible providers participating in the network. These “narrow network” plans were available to 90 percent of consumers purchasing Marketplace plans. Narrow network plans predate the Marketplaces, having long been used by issuers in order to control costs. However, given that Marketplace customers generally favor low premiums to a broader provider network, there is reason to believe that insurers have a strong incentive on the Marketplaces to offer restricted networks in order to gain market share.

Consumers continue to face challenges in understanding provider networks

The proliferation of narrow networks may be due in part to consumer demand for lower premiums. However, it is worth noting that consumers often struggle to understand health insurance concepts, particularly the tiered network design commonly used in narrow network plans. A 2015 consumer survey found that nearly half of first-time Marketplace
customers – and nearly one-fifth of returning customers – were unaware of how their plan’s network was configured.\(^2\)

Further, provider directories are often riddled with inaccuracies that make it difficult for consumers to obtain even basic information about a network.\(^5\) As a result, consumers may make plan decisions based on incomplete or inaccurate information. State and federal regulators have begun to take action to ensure that provider network information is clear, transparent, and regularly updated.

**Network adequacy is increasingly regulated, but standards for how adequacy is measured are varied**

At the federal level, provider network adequacy has historically been regulated using “time and distance” standards, which require that plans have enough providers within a network such that consumers are able to access providers or facilities within a given commuting time and/or physical distance.\(^6\) Time and distance standards are common in Medicaid and Medicare managed care programs, whereas commercial plans have historically been regulated at the state level under less empirical criteria that merely seeks to ensure “robust” or “sufficient” provider networks, with varying criteria for measurement.\(^7\) In addition to various levels of oversight across states, the measures are for regulator review and are not consumer-focused, meaning that people are rarely made aware of network breadth and adequacy at the point of sale.

**New regulation attempts to make networks more transparent for consumers**

Recent regulation surrounding provider networks has focused on ensuring that provider directory information is not only transparent and accurate for regulators, but also that this information is made publicly available to consumers. California passed legislation in 2015 mandating that all health issuers post and maintain public provider directory databases on their websites in a machine-readable format.\(^8\) A similar requirement has been enacted for Medicaid managed care plans and the Health Insurance Marketplaces,\(^9\) and it is expected to be enacted nationally for Medicare Advantage plans in the near future.\(^10\) The Marketplace provider network data was made publicly available released in November 2015.

**A new measure of provider network breadth is designed to help consumers compare networks**

Recent regulation surrounding provider networks has focused in addition to requiring Marketplace plans to update and publically release provider network data, the Centers for Medicare and Medicaid Services (CMS) also plans to pilot a new measure of network breadth on healthcare.gov in 2017.\(^11\) This measure, called the Provider Participation Rate (PPR), aims to create a benchmark by which consumers shopping for Marketplace plans can compare plans’ networks within a given county. The PPR is the proportion of all providers in a given specialty in a given county that are participating in the issuer’s network. Once this proportion is calculated, it is then used to classify networks as either basic, standard, or broad, based on how far that network’s PPR differs from the mean PPR across all networks for that specialty in the county. A network with a PPR more than one standard deviation above the mean is classified as broad, while one with a PPR more than one standard deviation below the mean is classified as basic. CMS will pilot posting these network classifications for plans on healthcare.gov for three specialties in 2017 (adult primary care, pediatric primary care, and hospital facilities).\(^12\)

What sets the PPR apart from other measures of network breadth is that it is designed to provide a benchmark that is local and relative, rather than broad and absolute. The PPR accounts for the fact that certain counties simply have fewer providers in a specialty than in others, and all classifications are done within those counties to prevent uneven comparisons. However, this measure also implies that looking at PPRs across counties may not offer an apples-to-apples comparison, since what constitutes a broad or basic network is dependent on the base rate of provider participation within each county. In the next section, we present some initial findings as to how these classifications work in practice.

**APPLYING THE PPR TO 2016 QUALIFIED HEALTH PLAN MARKETPLACE DATA**

As the Health Insurance Marketplaces enter their fourth year, Qualified Health Plans (QHPs) will face two major changes amid concerns about the rise of narrow networks. First, plans will have to comply with new regulation requiring them to provide accurate, up-to-date provider directories to the public. Additionally, consumers shopping for a health plan on healthcare.gov will find plans’ provider networks classified according to a new measure of network breadth, which CMS plans to pilot in 2017.

As part of work on our Provider Network IQ tool, NORC has analyzed provider network data for all Qualified Health Plans (QHPs) operating in federally-facilitated Marketplaces in plan year 2016. Our dataset comprises 1,172,626 unique providers and facilities participating in networks from 233 QHP issuers.

NORC calculated the PPR for plan year 2016 in adult primary care for each plan network in all FFM counties nationwide and classified each network as either basic, standard, or broad using CMS’ methodology above.\(^13\) Overall, we find that 74 percent of adult primary care networks nationwide would be classified as standard under this methodology, with 15 percent of networks classified as basic and 11 percent classified as broad (Exhibit 1).\(^14\)
Network classifications differ depending on population density

The design of the PPR measure makes direct comparisons across counties problematic, because network classifications are based on the mean PPR of all networks within a given county. Indeed, we find that what constitutes broad or basic networks differs substantially both across states and within states, dependent primarily on the population density of a given county (Exhibit 2).

Exhibit 1. Proportions of Basic, Standard, and Broad Networks in Adult Primary Care

If we look at large metropolitan counties, we see that the overall split of basic, standard, and broad networks closely follows the nationwide trend. On average, a broad network in adult primary care in a large metropolitan county contains approximately 74 percent of providers, while basic networks contain about 24 percent of providers.

If we look at rural frontier counties, we see more plans than average are standard and fewer plans are broad or basic. We also see that the average PPRs that comprise broad and basic networks in rural counties are substantially higher than in large metro counties. On average, broad networks in rural frontier counties contain about 95 percent of adult primary care providers, while basic networks contain approximately 54 percent.

Exhibit 2. Average Provider Participation Rate Network Proportions for Basic, Standard, and Broad Networks in Adult Primary Care, in Large Metro Areas Compared to Rural Frontier Counties

A broad network in one county may be classified as basic in another, even within the same state

Further, even when we look within states, we see similar variation across counties as to what PPR is needed in order to be classified as a broad or basic network in adult primary care (Exhibit 3). In Illinois, the average PPR needed to achieve a broad network in primary care is approximately 82 percent, and the average PPR needed to achieve a basic network is approximately 34 percent. If we look county-by-county, we can see that the broad and basic PPR cutoffs do vary widely across the state. There is also some overlap in broad and basic cutoffs, meaning that there are a few instances in which the same PPR is broad in one county and basic in another.

Exhibit 3. Average Provider Participation Rate Needed to Achieve a Broad or Basic Network in Adult Primary Care, by County in Selected States

In New Hampshire, there is clear separation in cutoff types, and the spread across the state in broad and basic networks is much tighter, signaling that the classifications are more consistent across the state than in Illinois. Conversely, in Texas, we see wide variation in the cutoffs needed to achieve broad or basic networks. The average PPR to achieve a broad network in the state is 85 percent, while the average PPR needed to achieve a basic network is 53 percent, but the standard deviation of these cutoffs across counties is large (20 and 34 percentage points, respectively). We see that the two cutoff ranges have substantial overlap, meaning that there are many counties for which the same PPR could be broad in one and basic in another.

In some counties achieving a broad network is impossible, and in others it’s impossible to have a basic network

Further, in both Illinois and Texas, we also see that because of the wide spread in the standard deviation of the mean PPR,
Certain classifications are not possible. In some counties a network would need a PPR of over 100 percent to be classified as broad. In other counties, a network would need a PPR of less than 0 percent to be classified as basic.

In Illinois and New Hampshire, it is easier to make an apples-to-apples comparison of network classifications across counties, because even if the raw PPR figures vary, there are not too many PPRs that could be both broad and basic. However, in Texas, we see that comparisons are less valid, because variations are so large that the same PPR is often either broad or basic, depending on the county.

At a national level, we see that even after accounting for raw provider counts, the PPR measure sometimes does not foster strong cross-county comparisons (Exhibit 4). In an ideal world, all networks with low provider counts and low PPR (bottom left hand side of the graph) would be classified as basic networks (in red), and all networks with high provider counts and high PPR (top right hand side of the graph) would be classified as broad (in blue), with all plans in the middle being classified as standard. However, we see that this perfect separation does not occur at the national level in adult primary care, with some basic networks having high PPR and/or high provider counts and some broad networks having low PPR and/or low provider counts.

Exhibit 4. Network Classification by Provider Participation Rate and Raw Provider Counts in Network for Adult Primary Care, by County

NOTES: Figures above reflect unique combinations of a network and a specialty within a given county.

Certain network classifications are more common among certain issuer groups

Finally, it is worth noting that the distribution of network classifications in adult primary care differed by issuer group (Exhibit 5). In particular, we see that different carrier groups have distributions of network size that skew toward one of the three network classifications more than the others. Blue Cross networks tend to be primarily standard, offering relatively few broad or basic networks. National commercial and co-op carriers tend to more closely follow the national average distribution, offering higher proportions of basic and broad networks in roughly equal proportions. However, Medicaid managed care plans tend to skew more basic, offering relatively few broad plans. One carrier group in particular, Kaiser Permanente, would offer no broad networks under this methodology because of Kaiser Permanente’s provider network model.

Exhibit 5. Proportions of Basic, Standard, and Broad Networks in Adult Primary Care, ByIssuer Ownership Group

<table>
<thead>
<tr>
<th>Network Classification</th>
<th>BCBS Affiliate</th>
<th>Kaiser Permanente</th>
<th>National Commercial Issuer</th>
<th>Co-Op Issuer</th>
<th>Medicaid Managed Care Issuer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>8.1%</td>
<td>88.5%</td>
<td>20.5%</td>
<td>20.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Standard</td>
<td>84.8%</td>
<td>11.5%</td>
<td>54.0%</td>
<td>65.0%</td>
<td>76.9%</td>
</tr>
<tr>
<td>Broad</td>
<td>7.1%</td>
<td>0.0%</td>
<td>25.5%</td>
<td>15.0%</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

NOTES: Figures above reflect unique combinations of a network and a specialty within a given county.

POLICY IMPLICATIONS

The PPR-based network classifications will be pilot tested on healthcare.gov for the 2017 open enrollment period, and consumers will be able to directly compare network breadth across plans offerings. This marks one of the largest provider network transparency initiatives in recent years. As state and federal authorities continue to improve network adequacy standards over time, consumers will be better poised to make informed decisions about the tradeoff between monthly premium and network size.

However, the PPR measure in its current form falls short of providing a gold standard for network breadth in several ways.

Network classifications can vary widely, making comparisons problematic

We see that what constitutes a broad or basic network can vary widely across and within states, although in some counties or regions the spread of cutoffs is small enough such that adequate comparisons can be made. Further, because the network classifications are based on the standard deviation of the mean PPR of a specialty in a county, we also see that occasionally broad network cutoffs exceed 100 percent or basic cutoffs fall below 0 percent. CMS could consider clarifying the methodology to account for this fact and allow for adjusted classification determinations when network PPRs cluster around these upper or lower bounds.

Network classifications could also be more challenging in 2017 if issuers continue to reduce Marketplace offerings or exit the market entirely. Approximately 60 percent of counties nationwide are projected to have two or fewer issuers operating.
in 2017.\textsuperscript{15} If fewer issuers are competing in a given area, network comparisons may be less meaningful.

**PPR only addresses network breadth, not network composition or quality**

The PPR classifications also raise questions as to whether or not network breadth offers the best measure of network quality for consumers. Patients might be harmed if networks are severely restricted and they are unable to switch doctors, but some patients might indeed prefer smaller networks in order to save on premiums or would be happy sticking within a limited group of well-integrated providers. Additionally, closed health systems – such as Geisinger or Kaiser – might argue that their networks are narrow by design in order to ensure that only top-quality and highly-coordinated providers are able to serve their patient population. CMS might consider integrating measures of provider quality into future iterations of the network classification schema to better show consumers when narrow networks might actually be beneficial.

**PPR is only part of a much broader push toward greater network transparency**

CMS’ decision to pilot-test the PPR measure on healthcare.gov marks the latest step in an ongoing trend toward ensuring network transparency as well as network adequacy. The push by CMS and state governments to require machine-readable provider directories aims to help consumers determine not only how broad a particular network is, but also whether that network contains the providers they want.\textsuperscript{17} CMS is increasing audits and instituting steep fines for Medicare Advantage plans for inaccurate provider directories,\textsuperscript{18} and California fined two large Blues plans late in 2015 for inaccuracies, additionally requiring them to pay out refunds to consumers who received out-of-network care due to the errors.\textsuperscript{19} The PPR is intended to help consumers assess the size of provider networks, but it is part of a broader effort to ensure consumers are better aware of what providers they will have access to in the plan they choose to enroll in.

Despite its limitations, the PPR provides a stable way to compare provider networks within small geographic areas, and represents a step toward making provider network data more clear, transparent, and accessible for consumers. As CMS tests measures into healthcare.gov, policymakers will have a chance to assess how additional standards could be brought into plan shopping in order to ensure that consumers have the information needed to make informed choices.

*Update:* This issue brief was updated on October 27, 2016 to clarify that findings regarding network classifications among insurer groups refer to the distribution of network sizes rather than counts of network sizes.

**REFERENCES**


9. 81 FR 27497.


14. The 2017 Letter to Issuers, from which our methodology was drawn, does not make clear how classifications work if networks in a given county contain all providers (for a PPR of 100%) or no providers (for a PPR of 0%). NORC used a conservative reading of the methodology such that even if a network contains all providers, it cannot be classified as a broad network unless a PPR of 1 exceeds one standard deviation from the mean. A similar methodology was used if a network contains no providers and does not fall one standard deviation below the mean.

15. CMS presented results from its own analysis in the 2017 Letter to Issuers, finding 67% of all networks to be classified as standard and about 16% each as broad and basic. These numbers are to be expected at CMS statistically designed the PPR measure to have an approximate 67-16-16 split. Our numbers differ slightly due to the fact that we are only looking at adult primary care, and we expect additional differences based on our assumptions in note 13 regarding how classifications work when PPR rates are near the upper and lower thresholds. Given that the differences are relatively small, comprising a few percentage points, we feel our methodology is appropriate.


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