Provider Networks – Actuarial Perspective on Performance In and Out of Exchanges

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Contents

Acknowledgments **2**

Executive Summary **5**

Purpose of the Research Study **7**

Overview of the Data Sources and the Research Approach **8**

Section I: Buyers **9**

Impact on Individuals 10

Impact on State Management of Health Programs 13

Carrier Challenges and Opportunities 15

Section II: Networks **18**

Overview of Networks 19

High-Performance Networks: Actions Prior to Start of the Plan 26

Develop a Hospital-Based Strategy for Exchanges 31

Strategy and Feasibility of Hospital-Based Networks 32

Strategy and Feasibility of Physician-Based Networks 33

Higher Performing Networks: Ongoing Performance 37

Overview of Higher Performing Networks 39

Assessment of Network Performance: Priorities for HPNs 41

Section III: Providers **47**

Impact on Hospitals 48

Impact on Physicians 52

Section IV: Highlights of the Case Studies **55**

Highlights of Case Studies **55**

Structure of Case Studies 56

Alternative Network: Definitions 56

Major Observations **60**

References **62**

Appendices **68**

List of Appendices 68

A1 Key Terms Used in the Report 69

A2 Data Sources 72

A3 Lessons from Higher Performing Networks 75

A4 Major Provider-Based Initiatives 76

A5 Reduction of Wasted Services: Example 77

A6 Quality Metrics 78

A7 Pricing Alternative Networks 84

Evaluating Alternative Network Cost Savings 84

A Savings Model for “Alternative” Hospital Networks 86

Case Studies **103**

List of Case Studies 103

Case Study #1 104

Case Study #2 113

Case Study #3 126

Case Study #4 136

Case Study #5 146

Case Study #6 159

About The Society of Actuaries..... 169

Executive Summary

Affordable health care is an ongoing challenge in the U.S. Many parts of the industry are working to meet the three major national goals of "better care, smarter spending, and healthier members"[1] through a variety of public and private initiatives. Affordable care is particularly challenging for low-income people and the providers that serve them. It is a major financial drain for the individuals and then becomes unpaid for hospitals, physicians and other providers as costs rise.

Individual Health Insurance *Exchanges* (referred to as Exchanges in this report) were created by the Affordable Care Act (ACA) to help with these challenges by using a blend of public and private approaches. Funding from the federal government comes through premium subsidies and cost share reduction subsidies for low-income members choosing certain products. Product management comes from carriers and occasionally states. Health care service providers are increasingly becoming engaged in management through alternative narrow provider networks.

However, individual insurance, in general, and operating a successful Exchange are very challenging businesses. To have successful programs, many tasks must be done well. It is difficult to balance the three major goals of care, spending and healthier members through voluntary insurance—especially for low-income people. As a result, Exchanges work very differently across the country. In some states, there is a single carrier on the Exchange as other carriers have dropped out. In others, multiple carriers offer multiple alternative networks competing on premium, and sometimes there is active state-level management of the Exchange.

Alternative networks are a major strategy used to create more affordable programs for Exchange members. As documented in multiple sources, narrow provider networks have become a crucial component of some ACA Exchanges and created lower premiums. For example, a *Health Affairs* article found that "a plan with an extra-large network cost 13 percent more than a plan with an extra-small network."[2] This is consistent with other articles and our case studies. Given the wide variation, illustrations in this report primarily assume that alternative or narrow network products have 7% lower total premiums compared to a larger network product.

Many differences are found in the sustainability of Exchange products and financial results across the country. Network performance helps explain some of these differences:

- There is wide variation in rates and rate increases, and many of their products were not successful
- Alternative networks have become prevalent in some Exchanges
- Some carriers offered multiple network options, and some carriers replaced broad networks with alternative networks
- Carriers participate in only some locations, often where carriers can develop useful networks.

The perspective and evolution of networks is very different across states. Prior to the ACA, some states already had existing alternative networks with distinctly higher performance (called *higher performing networks* in this report). Customers in these states likely expected these alternative networks to be offered in Exchange products. In other states, networks were not available, or their premiums were not distinctly lower. Of course, not all alternative networks work; to be successful, alternative networks need to be well designed and implemented and committed to performance.

This report outlines the range of practice across the industry with respect to alternative networks for Exchanges. It starts with a basic overview and then moves through ways to drive higher performance based on the experiences of the authors of this report.

This report is primarily focused on carriers and their efforts to develop networks. However, it also presents the financial perspectives of the individual buyers, hospitals and physicians and state management of Exchanges. The body of the report is organized into four major sections:

[1]This is the new version of the triple aim at https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26.html.

[2]"Marketplace Plans with Narrow Physician Networks Feature Lower Monthly Premiums than Plans with Larger Networks," http://m.content.healthaffairs.org/content/35/10/1842.full.pdf, *Health Affairs* vol. 35, no. 10 (2016): 1842–1848.

Buyers	**Impact on Individuals** describes the implications of Exchanges to individuals. It summarizes the underlying financial problems and impact of Exchanges and networks on previously uninsured individuals that use Exchanges. **Impact of State Management of Health Programs** describes various approaches used by state purchasers to manage networks **Carrier Challenges and Opportunities** outlines the impact of the ACA and Exchanges on insurance carriers and explains why Exchanges offer a unique opportunity for carrier and provider collaboration on fees and management. The performance of each provider varies, and carriers can identify opportunities to use providers with solid and high performance in the networks.
Networks	**Overview of Networks** offers an overview of provider networks for those readers who have less experience with alternative networks. This includes discussions of network size as well as common features, contract terms, provider-based networks, regulation and various challenges of alternative networks. The **High-Performance Networks: Actions Prior to Start of Plan** and **Higher Performing Networks: Ongoing Performance** sections describe key elements and best practices that are used by some networks to achieve better financial performance. Each section discusses how to differentiate between networks with higher performance and those that offer little added value to buyers. The first section reviews the process used by carriers to develop networks and highlights several key actions that must occur before the plan starts, such as developing a provider strategy, identifying the right providers and agreeing on contracts. The second section discusses actions that happen during the year (as part of ongoing program management through network providers). A framework for assessment is developed and illustrated by examples from Exchange programs. **Appendix A7** presents various models and data sources for **Pricing Alternative Networks**. Financial models are used to estimate provider network savings and compare expected fees (i.e., the *unit cost* of health services). Detailed analysis is needed to evaluate provider fees, create more affordable programs and set rates. This appendix offers examples used to analyze the unique hospital arrangements for Exchange networks. Some hospitals accepted lower reimbursement for potentially more patient volume and increased revenue and marginal income.
Providers (Hospitals and Physicians)	The **Impact on Hospitals and Impact on Physicians** sections describe the impact of alternative narrow networks on hospitals and physicians. Exchanges have a unique business proposition, particularly for hospitals. Exchanges offer new opportunities for carrier and provider collaboration. • For hospitals, insured patients bring providers more revenue and marginal income. Exchanges have a major impact on hospital finances, as they make insurance available to many people who would not have purchased it otherwise. • Physicians can have an important and valuable role in networks. However, the impact on physicians varies widely depending on specialty, location and other factors.
Case Studies	**Highlights of the Case Studies** summarizes some important results of six case studies in ACA rating areas (markets) located in different regions of the U.S. The full case studies **(Case Studies 1 to 6)** are at the end of the report after the Appendices. Each case study discusses the network and shows the types of carriers, the size of the networks, the types of products offered, the size of the product service areas, the premiums and net member contributions and member enrollment by network and carrier. This includes national and regional carriers, provider-owned carriers, health care cooperatives and Medicaid carriers. Each market looks very different.

There is also various other background material in the other appendices.

This report is primarily focused on networks within Exchanges using information from 2016. However, the opportunities and challenges to improve health care using networks are not just about Exchanges. Many of the techniques presented in this report can be applied to improve any health program. In fact, in some locations, alternative networks are already a successful tool outside of Exchanges. They already demonstrated better performance before the Exchanges were available. These were offered to diverse populations including commercial insurance, government employees, Medicaid and Medicare Advantage.

Purpose of the Research Study

Alternative (or narrow) provider networks and new network reimbursement approaches have become widespread across the health industry. Provider networks with higher performance already drive commercial insurance, Medicare Advantage and Managed Medicaid programs in some markets. Leading providers, such as major hospital systems, physician groups or staff models, also drive networks in some markets. These alternative networks are also a major force behind many Exchanges. Their wide use in Exchanges has made their potential impact more visible across the industry.

However, in other markets, alternative networks have not been used. And, even if available, these networks may not be distinctly better than broad networks; their premiums and quality are similar to broad networks.

New ways to improve network performance also continue to expand. Analytic techniques have improved and are evolving. Leading carriers and providers are moving from provider arrangements based on a one-time analysis (such as provider profiling on historical data) to collaborative, ongoing improvement approaches as provider relationships evolve. Many of these techniques to improve network performance are lightly documented, which creates a wide information gap across the industry. This report attempts to close that gap by describing the approaches used by some of these leading organizations.

Some states have extensive experience with alternative networks. Others rarely see them which is even more challenging since information on alternative networks is lightly documented and often proprietary. This report presents situations and results from markets where alternative networks are used in Exchanges and shows their impact on product premiums and members' choice of products.

Since these alternative networks, when well designed and implemented, create better care, smarter spending and healthier people, the Society of Actuaries decided to fund a research study to expand knowledge of these topics. This report offers a deeper understanding of major issues as well as useful quantitative analysis and models, using the networks on the ACA's Individual Exchanges as the framework for the research.

The report is intended for multiple audiences who have a particular interest in the following:

- Networks on Individual Exchanges. It offers information on performance as well as six case studies of markets with multiple networks.
- Networks outside of Exchanges. Many approaches in the report can be applied for other populations and products. In fact, some alternative networks started outside of Exchanges. The major difference is enrollment; low-income members are more likely to consider an optional, less expensive alternative network for Exchange products.
- How to improve financial performance. It offers examples of key elements done by higher performing networks.
- Understanding of the provider perspective. The last two sections highlight key perceptions of hospitals and physicians.
- Real-life situations. The report shows actual results such as networks and premiums from multiple case studies.

Overview of the Data Sources and the Research Approach

The research for this report focused on four major sources of data:

1. The six case studies required extensive data on premiums, market share, network composition, products, service areas, benefit designs, enrollment and demographics in six different Individual Exchange markets. We studied two markets in the Southeast, two in the Northeast, one in the Southwest and one in the West.

   This involved the compilation of material from multiple sources, often collected at different times and in varying formats. We used multiple public data sources at the state and federal levels, rate filings, industry research and news articles. For consistency, we also used various Medicare sources for financial information on hospitals such as market share and their revenues from different types of payers. This was supplemented by the extensive experience of the authors on these topics.

2. We utilized various exhibits and tables to illustrate key concepts and important calculations and metrics throughout the report. They are based on the authors' experiences and compared to recent data for reasonability. In some cases, they are rounded for ease of reading.

   Most of the specific numbers are in the Pricing Alternative Networks appendix. They are derivations of data from historical Medicare fee-for-service claims from 2014; hospital self-reported discharges, operating expenses, gross revenues (i.e., *billed charges*) and all payer net revenues (i.e., allowed payments) for six- to 12-month timeframes from 2014 to 2015; and/or modified commercial claims and enrollment data from 2013 to 2016 (trended to 2016 with rounding) from a population of fully and self-insured, small- and large-employer group health insurance carrier members.

3. A variety of articles and public sources were used; most were articles on Exchanges. However, the section addressing higher performance networks used sources outside of Exchanges since much of the public material for this topic is not focused on Exchanges.

4. The authors applied their long-standing experience for qualitative aspects of the research approach and methodology used.

We recommend the Appendix for experienced readers who want more technical information about provider network development, network pricing and higher performance networks. Appendices A3 to A6 include exhibits and examples of best practices for higher performing networks and a discussion about quality considerations and quality metrics. Appendix 7 has substantial technical material about the analytics and data that are important for pricing provider networks and reimbursement terms during the network development process. Lastly, additional material on the data and information used in this report may be found in the References section and in Appendix A2: Data Sources.

Section I: Buyers

- Impact on Individuals
- Impact on State Management of Health Programs
- Carrier Challenges and Opportunities

Impact on Individuals

Overview

People with a low income face a major personal problem. Health care is expensive and hard to find. Prior to the ACA, few good choices were available for people with low incomes. Low-income individuals are the major target of Exchange products through premium and benefit cost-sharing subsidies.

These people face a complex and sometimes overwhelming health system, often with multiple providers that may have little connection to each other. Major health care decisions may happen during an emergency, and too often there is no ongoing provider connection to the patient. Patients often pay retail "list" price (*billed charges*) for services unless they are alert and healthy enough to negotiate reduced fees when they go in for services. For major services, these fees are often substantially higher than would be paid under insured contracts. It is difficult to understand total health costs since there is not a package fee for an illness; different fees apply to each health care service from each provider. If a person develops a major health condition, then costs become a major problem.

For example

Annual income (low income)	$30,000 (250% of single FPL) $61,000 (250% of four members-FPL)
Health expenses (using pregnancy through vaginal delivery) (all services)[3]	
Billed charge (retail list price)	$30,000
Contract fees (commercial insurance)	$18,000
Fees from Medicaid	$ 9,100

At 250% of the federal poverty level, and even if the person can negotiate a discount of 40% and come close to the insured contract fee, this is more than half of a single-earner's income and nearly 30% of the income for a family of four.

Insurance helps with some of these financial issues and insurance protects against the major costs of serious health conditions. However, premiums for insurance are also expensive. For a single person, the average annual premium for an Exchange Silver product before subsidies is $4,752.[4] This is before deductibles and coinsurance. The cost of health care for a typical American family of four is $25,826.

Annual income (see above)	$30,000 (single) $61,000 (four members)
Exchange premium	
Single person	$ 4,752
Family of four	$ 19,000

Again, for these sample members, insurance is very expensive. The annual cost of purchasing it is a large percentage of their income. If an alternative network offers a 7% lower premium, the family saves $1,330, which is a lot to these members.

ACA Individual Exchanges were created to help with these financial challenges. Once becoming a member of an Exchange product, many members receive subsidies through the Advanced Premium Tax Credit, lower out-of-pocket costs if a Silver plan is chosen through the "cost sharing reductions," support for chronic illnesses and connection with a physician rather than relying on an emergency department.

Exchanges offer many choices at the time of enrollment. This can include carrier, network, the product metal level (with

[3] http://www.nytimes.com/2013/07/01/health/american-way-of-birth-costliest-in-the-world.html?pagewanted=all&_r=0.
[4] https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf, p. 15. This average cost for all plans comes from the national database. Most, but not all, states are in the database.

multiple plan design options) and decisions about family members. Some states address some of this complexity; for example, only a few standard plan designs may be offered. Members can make product and network choices themselves, with web support, based on articles in the press, or get local help from assisters[5] or brokers.

Member perspectives on networks vary substantially across the country:

- In some locations, alternative networks were already available prior to Exchanges and may be expected. Their strengths and weaknesses and historic performance may be known. In fact, some networks are voluntarily created by the provider community to offer a better alternative than the traditional approach to health care.
- In other locations, alternative networks are rare, do not have distinct advantages over typical broad networks and/or face regulatory challenges. Networks in these locations can be a challenging public policy discussion. However, this seems to be changing since many Exchange members choose alternative networks with lower premiums.

Typical and alternative networks have an impact on members at three different periods of time: at the time the purchase is made, at their initial connection to the network and through ongoing support.

At Time of Purchase

In many locations, Exchange members are offered a choice of carriers and alternative networks (our case studies show six markets with many network options). Members typically see only their net contribution (after subsidy) rather than total premium. They may also see estimates of the out-of-pocket payment. Information available to members about the Exchange networks varies by state and carrier. As a result, the member decision may focus on the lowest net contribution (i.e., the premium net of subsidy). Or they may choose the product that offers their current doctor (although many Exchange members do not have an ongoing relationship with a doctor). Sometimes a member's decision about their product and network happens after the member received care from a provider, which can influence the member to choose a network that includes that provider.

Members may need explanations about networks both at the time of enrollment and ongoing during the year. Some members faced significant early challenges when Exchanges first started. Communication was particularly challenging in locations where alternative networks were not common and for members who were not familiar with how insurance uses networks. This has improved over time, but practical problems still exist. For example, doctors can move in and out of the network each month, so keeping provider directories up-to-date is still difficult (and some members who are new to insurance do not have access to or know how to use the provider directories).

Various advisors and websites are available to offer guidance to members, such as explaining the member's monthly net contribution, whether their physician is in the network and how to evaluate other criteria that matter to each person. The importance of issues other than premium varies with each person.

For example, the availability of brand name hospitals can be a visible discussion in the news media. For the carrier perspective, this is a very complicated and often expensive choice (as discussed in the Networks section and in Appendix A7). However, from the member level, it often boils down to a practical question: Will the member pay more each month to have the possible option of using the name-brand hospital instead of another hospital?

Initial Connection to the Network

Low-income individuals can get emergency department or inpatient treatment at any hospital (given state laws), but they have limited access to physicians and services in other settings. This changes when members become insured. Some Exchange members have immediate urgent conditions, and others need care for ongoing illnesses. The stronger Exchange networks connect at-risk members to the right support more quickly (physician, emergency department, nurse, staff or hospital).

[5] https://www.healthcare.gov/apply-and-enroll/get-help-applying/.

Different states and carriers use multiple approaches, which are listed in the table below. The effort to prescreen providers varies because of many factors that are particular to a state or specific market.

Approach 1	Patient chooses from a broad list (all available providers).
Approach 2	Patient chooses from a screened list (excludes the poorest performing providers)
Approach 3	Patient chooses from a short list (highly screened by either carriers or provider organizations)
Approach 4	Patient chooses from a short list (only physicians who have committed to be responsible for performance). Given this performance commitment, the physician or staff reach out to review the patient's situation and match the patient to the right resource.

Note: Some managed Medicaid programs assign each patient to a specific physician at the start of the year. Although this may not be used on Exchanges, members who have been on Medicaid may be familiar with this type of connection.

An analogy of a subcontractor can be used to describe approach 4. If a person wants basic home repairs, a general list of names can be quite useful. However, if important work is needed, such as major repairs like a room addition, people choose a general contractor who then arranges for a team to do the work.

Ongoing Support: An Added Value of Certain Alternative Networks

One possible value of alternative networks is financial. From a financial perspective, Exchange products offer a far better financial result than being uninsured for people with serious illnesses.

However, the better alternative networks are committed to all three national goals mentioned earlier: "better care, smarter spending and healthier members."

What is the impact of some of these networks for members?

- Lower premiums and net contributions. Our case studies and other results indicate that some alternative networks have worked financially; they generated more affordable programs than broader networks. Lower net contributions mean more money is left for the members, especially those with no subsidies. Other alternative networks have premiums close to the broad network products.
- Lower fees. Members do not need to negotiate provider fees. All networks have contracts with many providers. The alternative networks may have also screened their providers and may avoid providers with the poorest performance (such as those with very high fees without demonstrated value).
- Support within the system. The initial choice of an Exchange network is complicated. But the stronger networks make it easier for members once they are enrolled:
    - As discussed above, the network may act as general contractor to organize providers across the complete course of treatment.
    - Providers may have integrated working relationships with each other and other support services. This reduces wasted time and unnecessary services for both providers and members.
    - The member has help to navigate the health system and deal with the health system through a dedicated primary care physician or other staff.
    - The provider team has experience working together during critical times for both outpatient and acute inpatient care. Hospitalists may be available for inpatient care.

Members may have only a few pieces of information to evaluate their network at time of purchase: the premium, their net contribution, whether their doctor is available in the network or the size of the hospital network. Other important considerations such as performance are less visible.

Ultimately, Exchanges are about offering members meaningful and practical choices. As discussed in the next section, some state purchasers monitor and attempt to improve the performance of the networks.

Impact on State Management of Health Programs

Substantial differences are seen in networks and Exchanges in various markets and states. Financial results and number of participating carriers and networks vary widely. Given this large variation, each state needs to make decisions about its role and level of involvement in networks for Exchanges and other health programs that it manages.

The first half of this section gives an overview of the various state management approaches to networks. The end of this section offers various techniques used in some states to address networks in Exchanges or other programs.

Overview

Health Exchanges are a combined effort of federal and state governments. Funding for subsidies and cost-sharing reductions come from the federal government, which brings additional money into the states. Many core operating rules are set at a national level. However, states can take a variety of roles for both the Individual and SHOP (small employer group) Exchange marketplaces.

Although there are federal requirements for networks, most of the network decisions and regulations are done at the state level. State decisions allow for consistency with the state's insurance requirements and leverage the capabilities of state insurance staff. State approaches to Exchanges can also be affected by the way Medicaid is handled, and decisions on Medicaid Expansion, since some Exchange members move in and out of Medicaid.

Given the direct impact on state budgets, Medicaid and coverage for a state's own employees are ongoing topics of discussion. However, the situation is different for Exchanges. Since funding for subsidies comes from the federal government, the state role in Exchanges varies widely. States also have various approaches to networks inside and outside of Exchanges.

- For states that already have distinct alternative networks in some markets, these networks may be expected to be offered on Exchanges. In many cases, alternative networks were used before Exchanges for other lines of business, such as non-Exchange individual and/or group insurance programs, self-funded employer programs or Medicaid programs. These states have existing expertise and regulations to manage carriers and the underlying networks.
- In other states, alternative networks are not prevalent, or alternative networks may not offer distinctly better performance.

We find multiple approaches to state management of health programs, providers, carriers and the underlying networks. The approach is customized to each unique population: employees of the state, Medicaid and Exchange programs. Health care and its management are often both a major policy decision and a series of detailed tactical steps:

1. Medicaid management. State standards and participation for Medicaid networks are very different than commercial insurance. Some Exchanges include Medicaid carriers, which makes different network standards more visible. And, even if Medicaid carriers do not participate, some Medicaid members shift in and out of Medicaid, so there is an overlap with Exchanges. Medicaid funding is a major budget item that limits funding of other state government services, so many states are managing their own Medicaid programs including provider-based networks and pilots.
2. State employees. Another major state budget item is health care for the employees of the state. Direct costs for their own employees continue to increase faster than other budget items. Network activity varies, and in some states, large percentages of state employees are enrolled in alternative networks. If the regulators have experience with networks for themselves as state employees, this influences their perception of Exchange networks.
3. Regulation of insurance products. State insurance departments regulate non-Exchange insurance products. Many of these rules apply to Exchanges. There are also basic standards from the National Association of Insurance Commissioners (NAIC)[6] and the federal government,[7] but, as well, major variations in the states' role related to networks. Some discourage alternative networks and others actively manage them, while others take a neutral position. Topics can include mileage-based access standards, "any willing provider laws," balance billing requirements or other public policy issues.
4. Indirect effects of rising health costs and declining insurance enrollment. As the costs for health care continues to rise,

[6] http://www.naic.org/store/free/MDL-74.pdf.
[7] https://www.federalregister.gov/documents/2017/02/17/2017-03027/patient-protection-and-affordable-care-act-market-stabilization.

commercial insurance and employer coverage can become unaffordable, particularly for employees with high contributions after any subsidy. As more people become uninsured and/or join Medicaid, there are additional members and related costs for the state. Some states see this indirect cost as a reason to be involved in Exchanges and networks.

5. Management of Exchanges. A few states have official "active purchaser"[8] Exchanges, and others manage elements of Exchanges but without the official title. However, other states have little involvement in Exchanges. The list of different state roles at the end of this section describes approaches taken by some states.

6. Other policy actions. A few states regulate provider fees (reimbursement levels), require ongoing reporting of cost drivers and investigate providers with high fees. States that offer alternative networks to their own employees may also develop dedicated management teams with expertise in insurance, financial analysis and network management. A few states are very active in networks and provider performance outside of Exchanges.

As mentioned earlier, size is a very visible issue for network discussions. However, size is only one of many ways to evaluate networks. At the state level, any policy discussion of network size must reconcile different coverage between Medicaid and commercial insurance. Medicaid networks of physicians are often a third smaller than commercial insurance networks. Uninsured members may consider their local clinic or emergency room their network.

In addition, regulatory or legal requirements on size must be crafted carefully to avoid inadvertently creating financial challenges. If a carrier is required to include all hospitals in an Exchange network, carriers lose negotiating leverage, hospital fees increase and premiums rise.

Role of States on Exchanges

Wide variation is found in the roles of states in the management of ACA Exchanges. There are various opportunities but also major challenges. The opportunity comes from the offer of federal funding to address a major financial problem for members and providers. Carriers, members and providers have a unique situation with some aligned business interests. On the other hand, Exchanges are very difficult to manage for various reasons; for example, premiums are very difficult to set because some members are already sick and healthy people often choose not to purchase insurance. Also, provider fees can vary widely for the same service at the same provider, depending on the carrier, and provider fee levels affect premiums.

States take very different approaches to deal with carriers, networks and providers. The following lists potential actions of some states in their management of Exchanges and other health care programs:

1. Monitor the carriers and their approach to providers and networks.
2. Build a management team with existing experience in managing carriers and/or networks for commercial and/or Medicaid populations.
3. Set additional rules for the Exchange program (for example, limit the number of plan designs or require assignment of a primary physician).
4. Understand the carriers' existing efforts to design networks and encourage improvements.
5. Monitor network best practices from across the country and push the carriers to use them.
6. Move from a one-time annual (or multiyear) approach to renewals (a negotiation) to ongoing performance tracking and management of the health plan. For example, if cost increases are too high, a trend improvement plan is developed and monitored.
7. Review Exchange and other commercial results across carriers and markets within a state (or benchmark to other states).
8. Examine carrier approaches to ongoing network improvement.
9. Understand the perspectives of large providers/provider systems across the state.
10. Track the basic network metrics required by federal and state law.

[8] At the beginning of Exchanges, the federal rules offered states a choice of a "clearinghouse" or "active purchaser" model.

11. Assess network performance and see if it improves over time. Various approaches to assessment are discussed in the section on higher performing networks.

Carrier Challenges and Opportunities

Overview

ACA Exchanges offer a difficult mix of challenges and opportunities for carriers. Alternative networks are one major strategic option that carriers use to meet these challenges.

The following discussion describes the ACA Exchange situation in the middle of 2016. The current level of federal support for Exchanges is unclear, and future changes could impact the concepts presented here.

For carriers committed to more affordable health care for more people, the original Exchange opportunities were clear:

- A major financial commitment from the federal government to subsidize premiums and benefit cost sharing for low-income members, as well as federal investments in other programs to mitigate program risks to the carriers—reinsurance, risk-corridors and risk adjustment (the "3 R's").
- A highly visible and widely known program, with enrollment, marketing and communications support (the Exchanges).
- There is high financial value to hospitals when more low-income patients have insurance. In some markets, this added value from Exchanges enables significant strategic discussions between carriers and important hospitals and physicians, and helps to improve some of those working relationships.
- Many new members have become covered though Exchange programs, including some previously uninsurable people. Thus, Exchanges increase membership for participating carriers.

Despite the opportunities, ACA Exchanges bring many difficulties to carriers. There is high financial risk and a lot of administrative and regulatory complexity.

Individual insurance has always been a very challenging product; few carriers participate in this product line because of the interactions of the following common challenges:

- Health insurance is expensive relative to average incomes and many people cannot afford to buy coverage.
- People with serious illnesses see insurance as a very good deal and are more likely to purchase a product.
- Low income people without a serious illness often see insurance as a bad deal and do not purchase it.
- Some people drop insurance after the illness ends.

This combination of an expensive product at the option for members to buy creates a selection problem. It makes it very difficult for carriers to set appropriate rates or create a sustainable insurance program. Rates high enough to cover sick members discourage participation by healthier potential members. In addition, members who are not eligible for subsides see the full premium, whereas members with subsidies see much lower net premiums. The impact of subsidies and the individual mandate partially dampened the selection problem. But, as discussed in the Impact on Individuals section, many of these individuals eligible to buy insurance in the individual ACA market have a very low income, so many still do not purchase insurance until the individual feels they need or will need health care services.

Another major rating challenge is risk adjustment. This changes total revenue after the fact. An analysis determines measurable differences in risk between the members enrolled in each different carrier. Funds are moved between carriers after the end of each year. Since premiums change, but costs remain the same, there is a highly leveraged financial impact on carriers[9]—there are major swings in losses or gains. This retroactive adjustment makes it difficult to set premiums. In addition, little information on risk adjustment is known until several months after the end of the calendar year, after the next year's rates must be set.

[9]Risk adjustment in Exchanges is a transfer of money between insurers and does not add new funds. This is different from the risk adjustment used for Medicare Advantage programs that may bring additional funding into the system.

The perception and availability of alternative networks vary widely by state. In some states, carriers offered alternative, narrow networks for many years with other products, well before the ACA. These previously available alternative networks were expected to be continued by the carriers within the new Exchanges. In other states and situations, alternative networks have not traditionally been used by carriers (or did not deliver better care at a distinctly lower premium).

The difficulties with the individual ACA market are reflected in the mixed financial results for carriers across the country. Multiple carriers have been able to continue to offer products in some markets (as shown in our six case studies). However, in other markets, Individual Exchange programs have not been sustainable for many carriers, and many have left the more challenging markets. Carriers' rate increases are high in many parts of the country. Many carriers no longer offer broad networks in Exchanges. Some, but not all, alternative networks remain in Exchanges and support the overall program.

Selection and the Impact on Carrier Premiums

As an example of challenges to carriers, we will use the selection problem, which is a fundamental challenge. It is very difficult to set premiums for individual products, especially with the ACA laws requiring guarantee issue and community rating. Those with serious illnesses buy insurance, while many others do not. The subsidies and individual mandate penalties offer only limited support given their small size and uneven enforcement; thus many healthy low-income members do not purchase insurance as discussed above. The following example shows the serious nature of this problem.

For this example, the Exchange has three potential members: one expects $2,000 in claims, another $4,000 and the last $6,000. To set rates, one must understand how many people will enroll.

If all members participate, a premium can be set at the average cost (excluding administration) of $4,000. In the first pass at rates, a premium of $4,000 is developed. However, the first potential member may not participate because the expected claims are far less than the premium. Therefore, the average cost for the remaining two members would be $5,000. (The first member is no longer considered.) This leaves the carrier with a loss: the premium of $4,000 does not cover the $5,000 cost.

In the next attempt to set premiums, the carrier may develop a higher premium. However, there is still a problem. If the premium is raised to $5,000, this is still not a good deal for both the first and second potential members. The product may be bought by only the most expensive member. The result is another loss for the carrier.

Nothing eliminates this potential problem. However, some alternative networks with higher performance can help reduce the problem because they create more value to members through better care, lower fees, lower premiums and/or improved health. Not all alternative networks are higher performing networks (HPNs), and the better care, lower fees, lower premiums and improved health are more likely if a HPN is used. A few highlights of the value of alternative networks and some HPNs include the following:

- The negotiated provider fees in a carrier network are lower than full or discounted *billed charges* paid by many individuals if they do not have insurance. This is a value of any insurance product but can be an even higher value with alternative network products, since some hospitals make further reductions in their contractual fees to attract Exchange members.
- Premiums for alternative network products start lower (7% on average based on various sources) compared to broad networks and more traditional products. The percentage impact will be much higher than 7% for some potential members given the subsidy. For example, if half of the cost is subsidized, the member contribution for the alternative network is 14% lower.
- Generally, lower premiums attract nonsubsidized members and support a better mix of health risks. This means premiums must attract members and not just match the market. However, the impact is complicated by any retroactive risk adjustment payment.
- Some Exchange members are sick, often with chronic or urgent conditions. Providers that reach members more quickly and get members to the right treatment at the right fees early avoid additional complications or wasted effort. This creates lower expenses if these higher performance providers and networks are used.
- Members may be directed to providers with better performance through primary care assignment (or gatekeeper in an HMO). This can limit expensive out-of-network costs while avoiding the most expensive providers that do not show clear added value for treating specific illnesses.
- The better providers make major differences for some large claims if they improve a member's health earlier or reduce

complications. This happens even if the providers do not take financial responsibility for large claims.

- In some markets, staff model HMOs or provider-owned carriers participate in the Exchange networks. Some, but not all, offer lower premiums. Their administrative costs may also be lower than competitors.

These advantages of alternative networks can make programs somewhat more attractive to healthier members, but the fundamental problem of selection remains since members with low risk are still unlikely to participate.

Section II: Networks

- Overview of Networks
- High Performance Networks—Actions Prior to Plan Start
- Higher Performance Networks—Ongoing Performance

Overview of Networks

This section gives an overview of provider networks and network development, provider contracting and network management. This section covers:

- Background information
- Network size and performance
- Provider-based networks
- Contract terms between payers and providers
- External review and
- Major challenges for alternative networks.

Background

Networks used for insurance products are comprehensive and required by state and federal law to include all types of health care providers. A network would include hospitals, free-standing surgery centers, physicians (primary care and specialists), other types of facilities (e.g., radiological diagnostic centers or independent laboratories) and other health care professionals (e.g., physical therapists).

Some networks use providers only in a specific state, while others use providers throughout the U.S. This nationwide access is important to large clients and for some Exchange members. However, most of the services needed by Exchange members are local (except for in some rural areas or for members who travel or live in more than one location).

Networks can be created and developed by carriers or providers. Carrier-based programs are offered in all markets. Provider-based networks, discussed later in this section, exist in some parts of the country.

For the Exchange, networks are offered in each rating area and are subject to state regulations; therefore, our research evaluates the provider networks within "markets" using ACA Exchange rating areas to define a market. ACA Exchange rating areas are defined by groups of counties within each state. Most network regulation occurs at the state level as discussed below and in the Impact on State Management of Health Programs section.

This report uses various general industry words and abbreviations. This includes words and abbreviations like carrier, product, type of product (HMO, PPO, EPO and POS), premium, subsidy, member contribution, billed charge (i.e., list price or retail fee) and contractual fee (e.g., allowed amount or discounted charge). In some cases, these are different from the official words used for Exchange products. For example, the government pays an Advance Premium Tax Credit (APTC) to lower the cost of the Exchange products to members. We simply use the word subsidy. Key terms are described in Appendix A1: Key Terms Used in the Report.

The report, particularly the case studies, also uses various specific definitions of the various sizes of alternative networks as discussed below.

Network Size and Performance

Size offers a visible a starting place to view networks. However, modern network designs focus far more on performance than size. Thus, size is only one of many criteria for understanding and measuring networks. In fact, many Exchange programs are built around existing alternative (small) networks as the use of broader networks has declined in Exchanges.

A provider network can offer almost all providers (a broad network) or develop alternative networks using subsets

of providers. For example, a broad network might include almost all hospitals and specialists in an area, whereas a narrow network might include only one or two hospitals and related specialists.

For this report, we focus on hospital networks given the visibility of hospitals and available data sources. The report uses various adjectives to describe the size of the hospital networks and the product service areas. The definition details are in Appendix A1: Key Terms Used in the Report. These adjectives are used extensively in the six case studies within this report.

An adjective such as "narrow" simply describes the size of the hospital network. The adjective is not a statement about value. It does not reflect the depth, integration or level of performance. For instance, the network for a staff model HMO network may be "local" and "very narrow," but it could offer extensive highly integrated services within the community it typically serves. In many parts of the country alternative "narrow" networks are expected by the community.

Exchanges require sustained strong performance. But size, by itself, does not equal performance. Some alternative networks are not distinctly better than typical broad networks. Others have much better quality and efficiency. High performance is essential to create ongoing Exchange products. As a working definition that will be refined later: a *higher performing network* (*HPN*) is "A critical mass of responsible providers … which performs significantly better than the typical health program with its broad network"[10].

Provider-Based Networks

In many locations, the providers voluntarily affiliate with other providers. Some of these are loose affiliations (which are not the focus of this report). However, some provider organizations are important forces in their markets. These may be formal organizations with extensive connections across multiple types of providers. In effect, these become a "provider-based network" that is created and managed by provider organizations.

The largest examples of provider-based networks manage their own health system with centralized control over many aspects of care. Their providers may include hospital systems, various physician specialties, a hospital-owned carrier or a combination. These provider-based networks have been operating for a long time. They deliver services and manage networks from a different foundation than carrier-based networks.

Until recently, most of these organizations stayed in their local markets. It was hard to re-create this infrastructure and presence from scratch in a new market. However, provider-based networks are expanding into other locations given major improvements in systems, niche vendors, educational materials and leaders who share expertise with other providers.

There has been wide growth in Accountable Care Organizations, Patient-Centered Medical Homes and provider-based networks working for Medicaid and Medicare Advantage programs. The performance of these newer programs varies widely. Many have demonstrated distinctly better performance. Some are heading in the right direction but are making only incremental progress. Others have not made progress. And some simply seek to consolidate their local negotiating power rather than improve performance.

Hospital-based networks grow from hospital-owned health systems and their affiliated providers. For example, in a three-hospital city, one hospital may have one-third of the admissions but own a large group of local physicians and key suppliers. Hospital-based networks are powerful forces. They can improve or hinder performance depending on their goals and direction. Hospital-based networks may include the following:

- Some hospital systems own their own carriers. They often offer health plan products for different business segments: Medicare Advantage, Managed Medicaid, commercial insurance and employers. These often have a major local presence and impact. The case studies include several of these provider-owned carriers.
- Staff model networks are available in some locations and focus on providers within their system. They have their own carriers and physician groups.

[10] http://www.pbgh.org/storage/documents/commentary/HiPerfNetworkBrief_Final3.pdf.

Physician associations sometimes consolidate physicians for negotiations. However, in some markets, physician-based networks take a broader role and create a group of physicians that have a broader management role. When successful, they become a significant force to produce higher performance. Existing high-performance providers in Medicare or commercial lines of business may move into other lines of business such as Exchanges and new programs like federal ACOs. Physician groups typically align with a carrier partner to deliver a full network and insurance expertise.

Some of these existing provider-based networks have been the foundation for Exchange products. In fact, several case studies presented in this report include at least one provider-based network. Since these networks start with providers, they work primarily within their own affiliated providers. None of these is a broad network; provider-based networks are almost always local and/or very narrow.

Each type of network operates very differently. Their size, expertise and role in the community can offer very different strengths and weaknesses. For example, physician-owned networks have less concern about the impact of reducing inpatient treatment since this does not impact their revenue. Some, but not all, provider-based networks are HPNs (discussed later in the Higher Performing Networks: Ongoing Performance section).

Contract Terms between Payers and Providers

Provider networks are composed of individuals or organizations that have contractual agreements to deliver health care services on behalf of carriers to their patients. These agreements define the types of services covered between the provider and the carrier and specify how providers would be paid for performing the services. The agreements can be made between carriers and individual providers (e.g., an agreement with a hospital). Or, there may be provider-based organizations that represent many other providers (e.g., an independent practice association [IPA] with physicians from multiple specialties).

These networks are available for all lines of business (commercial insured, self-funded employers, government employers, Medicare or Medicaid). There are also private rental networks that may be used occasionally by carriers on Exchanges for out-of-state provider coverage.

Carriers have a variety of contract terms for providers within networks. A basic list is presented below. The list starts with the first two practical topics: agreement and compliance with the contract terms, and the care coordination rules that apply to all the carrier's networks, including broad networks. The other topics have been seen in some markets for years and have been extended to Exchange members in more parts of the country.

For smaller providers, the carrier has more leverage, so these contract terms are standardized and may automatically renew after a period with an updated contracted fee. In most cases, Exchanges were not covered in historic contracts, so each provider was offered the option to participate in the Exchange, often as a simple update to the previous contract.

However, with large providers, especially major hospital systems or groups of physicians, the provider has significant leverage. This also happens in locations where some providers, such as specialists or full-service hospitals, are scarce. Terms of the contract are subject to intense negotiations every few years. Generally, if there are major disagreements, contracts might not be finalized until late in the year after premiums are approved and presented to members.

In 2014 the first year of Exchanges, most contracts had already been finalized for the Exchange products. However, many of the initial Exchange contracts are now expiring. Many carriers explicitly discussed with providers the potential for increased volume as part of the business case for a unique Exchange contract (such as expanded membership and excluding other competing providers) since subsidies would bring in many previously uninsured people.

The first two requirements below apply to all networks, including broad ones. The remaining items are more typical in alternative networks, but still subject to negotiation:

1. Compliance. Contracts specify the carrier's rules and processes for claims payment and other operations. These documents are often available to providers on the web.

2. Care coordination. Providers agree to follow care protocols that could improve member health or quality. This includes programs such as prior authorization and utilization management for inpatient admissions and carrier-based chronic care support as well as newer initiatives such as on-site nurses in the physician office or efforts to reduce the gaps in care. Other examples include use of lower-cost free-standing surgery centers for less complex surgeries, referrals to high-performing specialists or hospitals, or "after-hours" care to mitigate patient emergency department usage. As more responsibility is placed on the provider, this is often supported by specific incentive payments (subject to any legal requirements).

3. Primary care. Some products identify a primary care physician for each member who supports the member and determines a plan member's pathway for care before they could see a specialist or receive other services (e.g., diagnostic imaging). There is often an additional payment to physicians in either the base contract fees or using an alternative payment. Some HPNs rely on primary care physicians to drive quality and efficiency.

4. Alternative payment. Many programs are moving away from fee-for-service payments with certain providers and are including illness-based initiatives. Modified reimbursements could be incentive programs, shared financial risk (based on cost and/or quality targets), full capitations, partial capitations, global payment, episode payments, on-site support or other variations in payments that are designed to improve performance. Providers that participate often see more members. These programs are common in alternative networks outside of Exchanges.

   This move to alternative payment is a major force in the overall health industry. However, alternative payments are not a focus of this report since these were applied less in the early years of Exchanges.[11] Our sources indicate that the structure for any alternative payment program may be applied across all lines of business (i.e., the structure is not usually unique to Exchange members).

5. Performance. Fee-based networks were historically used but just used providers with low fees. Modern approaches primarily focus on performance. Modern alternative networks base their selections of provider performance on quality and efficiency (fees are only part of performance). For example, providers with higher fees need to demonstrate better quality than competing providers. The review may also include local reputation, public data or formal studies.

   Some alternative networks have been operating over quite a few years (prior to Exchanges) and can demonstrate their performance. Some do not have distinctly better performance, and these networks may have comparable premiums to those with broad networks. However, some alternative networks have much higher performance than the typical network for quality and financial performance. These HPNs operate differently. These networks form the foundation for some continuing Exchange products. Further information on performance is available in the Higher Performing Networks: Ongoing Performance section.

6. Special contract terms for Exchange products. Special contact terms can be used for Exchange contracts. Some reflect the federal and state rules for Exchanges. Others record important joint agreements such as exclusive working relationships, increased volume or the unique support for Exchange members. For example, new insured members may need guidance on insurance. This is particularly important for hospitals given the strategic implications of Exchanges on hospital finances.

[11] As described in the carrier section, it is difficult for the carrier to set premiums for the product. These same challenges apply when alternative payments are offered to providers. In addition, the high deductibles in Exchanges raise technically complex issues for physician payment. For example, capitation for primary care physicians is much lower under a high-deductible product.

External Review and Regulation

The external perception of alternative networks varies widely. In some states, alternative networks are common and their participation in Exchanges is expected. In other states, alternative networks are rare or, if they are available, offer no major advantages over traditional networks. There are also wide differences in the legal and regulatory environment.

Some states are highly active in the management of health costs and networks outside of Exchanges. Their role in Exchanges varies. More information on state roles is included in the Impact on State Management of Health Programs section above. As an overview of the impact, states' roles include the following:

1. Regulation. Regulation of networks is primarily done through state insurance departments. The state insurance requirements apply to Exchanges. There are also less specific federal regulations on Exchanges.

2. Management by Exchange purchasers. A few states have very active management of Exchanges including dedicated organizations and experts in insurance, financial analysis and network management. They may do formal bids for Exchange products including specific questions on networks.

3. Provider and network performance outside of Exchanges. Health care is expensive for states. They pay for state employees and Medicaid. For example, one major state has 80% of their employees in alternative networks. There are also indirect costs states are concerned about, such as when people drop insurance coverage and more people become uninsured. Some states are very active managers of networks and provider performance.

4. Medicaid management. States are actively managing their Medicaid members. Many pilots and alternative approaches are being implemented. Some Exchange members shift in and out of Medicaid.

External perceptions of alternative networks often start with size as a basic and visible measure of networks. Alternative networks typically include only a subset of the hospitals and physicians in an area, so they are clearly smaller. However, size is more complex than a count of providers. For example, most Exchange networks have more physicians than state Medicaid programs, but fewer than for broad networks used for commercial insurance products. Thus, an Exchange network may look broad to a Medicaid member, but narrow to a member familiar with traditional insurance products.

Challenges with Alternative Networks

Although alternative (narrow) networks create opportunities for better performance and more affordable care, they offer many challenges.

This impact is very different depending on the state. States with existing networks have already dealt with these topics and have ways to address them. In addition, these issues are much smaller if HPNs are already used. On the other hand, in states with few alternative networks, there can be significant challenges.

The following table lists major practical challenges with alternative networks and ways that they were addressed.

Note: This section and the table below are only about network challenges. They do not cover challenges for Exchanges outside of networks that are mentioned in the carrier perspective section. For example, selection caused by existing illnesses is a problem in setting rates, or whether the member will keep coverage the full year. These are not directly related to network.

Network Challenges	Management
Exchange members are often uninsured prior to purchasing Exchange coverage	Typical premiums for individual ACA business are high. To get to a lower price using an alternative network, some carriers target a 10% to 20% reduction from their standard commercial network provider fees for hospitals to be included exclusively in an alternative network.
Difference in premium between broad and alternative network may not be readily visible	The majority of Exchange members are low income and very price sensitive. Even small premium changes can make a large difference to the member if the subsidy is low. However, the member usually sees only the premium after subsidies. This makes the dollar cost lower, but makes the percentage difference higher between broad and alternative network products. Some carriers test multiple variations of networks and price points. Products with low premiums can be made more visible to members. Some articles, websites and educational material make comparisons easy. Others make comparisons very difficult.
Decisions on brand-name hospitals	Brand-name hospitals can be far more expensive than other hospitals for less complex illnesses. Some alternative networks use these hospitals only for illnesses that require their unique expertise. Premium and physician network participation are typically the most important criteria for low income members. Carriers develop approaches to guide members to network hospitals and anticipate occasional exceptions for unique services.
Admitting privileges at network hospitals	With smaller hospital and physician networks, some physicians may not initially have admitting privileges to the specific hospitals used in the alternative network. Carriers identify potential problems and address them before the network is implemented.
Physician referrals	Some physicians have working relationships with certain other physicians, often specialists. Alternative networks may create challenges if referral patterns are not considered when developing the network. However, there are analytic methods for reviewing referral patterns (such as cluster analysis).
Out-of-network	Out-of-network use can be a financial drain to carriers and/or members from alternative networks due to referral patterns of in-network providers to out-of-network providers, for example, it includes higher premiums (to the carrier) or balance billing (to the member). Some alternative networks develop various ways to retain members in-network including notification systems for emergency department use. The legal environment related to out-of-network provider reimbursement, particularly with “surprise bills” (ending up with an out-of-network anesthesiologist when at an in-network facility, for example), is different in each state.
Capacity	Capacity in an alternative network that is a smaller or narrow network may be challenging for some physicians who may see many new members. However, it is far less challenging for hospitals and physicians if they were already serving low-income patients before the ACA.

	Fees for physicians for Exchanges are often higher than Medicaid fees, so Exchange products may have more capacity than Medicaid programs. Some providers that typically serve Medicaid members may accept new members if they get a higher fee.
Claims processing and systems	Alternative networks can be a complex challenge for some carrier computer systems and claims processing units. Legacy systems can substantially delay the implementation of alternative networks. Some carriers have already dealt with this. Others are building it into their planning process and timelines.
Legal and regulatory requirements	Networks and carrier products must comply with the different regulatory requirements for Exchanges. In some states, this makes alternative networks very challenging. Various education and policy approaches have been taken by some states to discuss this with key decision makers.
Fee-based network (rather than performance)	Some carriers based their network decisions on low fees rather than performance. Products based primarily on low fees are difficult to sustain. Contract renewal and future fee discussions can be very contentious. Some carriers accept temporary low fees and deal with renewals later. Other carriers build networks on solid providers with low to moderate fees and existing higher performance.

High-Performance Networks: Actions Prior to Start of the Plan

This section discusses what carriers do to develop networks generally. The first part of this section focuses on process—the many actions that a carrier takes to select providers and develop any network before the start of each coverage year. The end of this section provides a deeper discussion of one of the most important steps that drives higher performance: network strategy and selection of providers for the network.

This section ends once the network is developed. It does not cover the ongoing operations of the network and provider actions that make the difference between typical performance and HPNs. These other elements that create more powerful networks are covered in the next section on Higher Performing Networks: Ongoing Performance.

The initial actions and the ongoing operations must be aligned. The network strategy and provider selection are supported by ongoing monitoring and support for the providers and staff who work with members. This integration is necessary for any product and is especially important given that Exchange members often face difficult financial pressures. In addition, the external environment continues to change: important hospitals and physicians change their interest in participation, and state and federal governments continue to modify the Exchange program.

Network Development

Broad networks are used to some degree in almost all markets. But even broad networks do some screening of providers. They validate the credentials of providers and addresses. They negotiate contracts since billed fees (retail list prices) vary widely. This often creates much lower fees. However, variation is still found between providers in a network.

Almost all carriers have staff and processes to operate existing networks. The basic process to develop networks is similar on the surface. However, variations exist in the depth of work needed depending on the business goals of the carrier and the external environment.

- Carriers that generally use broad networks work primarily on internal operations, periodic negotiations with major hospitals and ongoing provider working relationships.
- Alternative networks for Exchange members offer a wide range of opportunities and challenges as discussed in other sections. This requires a very different approach to provider contracting and from historic approaches.
- Carriers where alternative networks were already available before the Exchange may have departments with more extensive roles and responsibilities. They may already deal with variation in provider performance. However, even in these markets, Exchanges provide unique requirements, opportunities and challenges.

Low premiums are particularly important for low-income individuals. In the short term, an alternative network with a moderate premium advantage picks up significant market share. In the medium term, a strong network may create a lasting sustainable advantage. Carriers with HPNs can lower premiums to bring in more members and market share. Or they can offer comparable premiums and create higher margins. Carriers with poor performing networks are at a competitive disadvantage. However, carrier results have been very uneven; it is difficult to create a sustainable Exchange product.

The increased enrollment and market share for network products is widely seen and documented in various articles on Exchanges. At the same time, broad networks have not been sustainable in locations where lower-cost alternative networks are available. It also happens in our case studies. Case Study 1 has only alternative, narrow networks. Case Studies 2 through 4 have alternative networks with significant enrollment. If premiums are similar, such as Case Studies 5 and 6, broad networks from a name-brand carrier splits the enrollment with alternative networks. (Note that the case studies are a snapshot at a point in time. The premiums are a projection and do not reflect the full financial picture such as the actual claims experience of the product or uncertain future risk adjustment payments.)

Given the potential impact on premiums, significant thought, research, analysis and effort goes into the process of developing a provider network. Many tasks are needed. The carrier's team must, for example, understand the population and market, develop a provider strategy, determine the feasibility of Exchange products, assess provider performance, establish or consider current business relationships with the providers' management teams, negotiate contractual terms, evaluate alternative payment models, project the impact on premiums, disseminate information to other departments and develop provider network lists/directories. Therefore, the carrier relies on a team of business leaders, legal/compliance staff, provider relations experts, clinical experts, analytics departments and actuarial expertise.

Access to relevant, credible data for decision making can be a major challenge, especially when working at the market or individual provider level. Interpretation and data adjustments are often needed in the analytical models; otherwise, information would be missing or just unavailable. In either event, the analyses that must be relied upon and the data needs are complex. Extensive and organized data management and analytical processes are needed.

The following section outlines one approach to develop networks.

Process to Develop the Network Each Year

Many ways can be used to develop networks. Some carriers may focus on the large and powerful providers in the community. Others focus on performance. The following list outlines one of many possible versions of the process and fundamental steps. In this version, the focus on performance is at the middle and end of the process. This is highly summarized (a full process map is a major document). And, as might be expected, these steps are not linear. They happen in different order given the business situation at the current carrier. Also, many steps are not needed for networks that are already in place.

Several steps are particularly important for Exchanges and require unique approaches. There is wide variation across carriers in their depth of work on these topics. Two important steps are developing provider strategy and alliances (steps 9 and 10). These are listed with boldface headings. If the network being designed as a HPN, then this process must also be aligned with the overall strategy and ongoing provider role (discussed in the Higher Performing Networks: Ongoing Performance section).

1. Identify the potential covered patient population and consider the general type of health products to be offered, in this case, an Individual Exchange product.

2. Understand the general demographics of the population and the expected types of services and providers that would be necessary to offer a comprehensive set of services. For example, maternity and mental health programs may need additional development.

3. Define the geographical area where the population resides and begin to identify the available providers in the area that could possibly participate in the provider network.

4. Review the regulatory and compliance rules for the types of coverage. This includes service and rating area definitions, parameters and constraints, and any rules, regulations and methodologies specified for patient access to care. Evaluate any regulations on the distance a patient travels for certain types of care, types of providers and the state requirements to develop alternative networks (such as "any willing provider" rules). Exchange rules may be different from non-Exchange insurance or Medicaid programs with which the patient is already familiar.

5. Gather and organize internal claims and other data. Depending on the internal systems capabilities this can be an extensive project, especially if individual provider evaluation is needed. Competitive assessments of networks of other carriers that might be competitors is important and complex—studies of their network structure, provider partners, provider fees and/or existing product premiums are performed.

6. Understand the local market.

    a. Find public sources of data and use available private sources to create lists of the providers by provider type. This includes federal data for a marketplace. Some states also have extensive all-payor databases that may be useful and available.
    b. List hospitals, free-standing surgery centers and radiology centers, plus various physician specialties.
    c. Identify providers with common ownership (e.g., a hospital system might own and/or operate several hospitals). This can be a major challenge in network development. Providers may not enter agreements unless all their affiliated facilities/practitioners are included in the contract for clinical and/or financial reasons (there may be an exception when the facility/practitioner is outside of the proposed service area).
    d. Create subcategories that demonstrate distinct, material differences between the providers listed in the category. Examples could be educational institutions (e.g., a university-owned hospital), specialty hospitals (e.g., pediatric, obstetric or a heart hospital), uniquely branded hospitals, locally "visible" or "brand name" hospitals (requires local market knowledge and judgment).
    e. Study data and consider market perception to understand the potential patient volume and provider capacity.

7. Understand the population risk and funding implications for the carrier. One major factor is formal risk adjustment, which happens at the end of the year to transfer funds across carriers. Preliminary tests may be done to anticipate the impact and determine any operational challenges. The Exchange requirements for risk adjustment are unique.

8. Provider historic performance: Analyze historical performance of major providers. Provider performance measurement is important to identify potential allies and improve the network over time. Many analytical techniques are used depending on the situation and available data. The level of detail of the analysis varies widely by organization. Some carriers already do extensive analysis. In addition, different data sources are used. Some analysis is specific to the Exchange product. Other analysis, particularly the analysis of provider performance, uses multiple product lines or outside data sources to add additional volume.

    a. Given the importance of fees (*unit costs*), extensive analysis is done. (Examples are available in Appendix A7: Pricing Alternative Networks.)
    b. Traditional analytic tools, such as risk adjustment, type of service analysis and reserving, continue to be refined. For example, risk-adjusted market analysis is historically done to compare one major location to another. This can be modified to compare physician organizations on a risk-adjusted basis to identify higher performing physician organizations.
    c. Illness-based analyses continue to improve and are being extensively used to measure provider performance. This includes analytic systems built around total costs and episodes of care. And, increasingly, the analytic approaches used for bundled payments are being used for analysis in addition to payment.

9. **Provider strategy and alliances are particularly important to Exchanges. (An expanded discussion is available on page 31):** Determine the provider strategy for Exchanges. Exchanges are unique, and providers and networks are integral to sustainable Exchange programs. Exchange allies are an important strategic decision with long-run implications.

    a. **Hospital strategy.** As discussed in the Impact on Hospitals section, hospitals have a unique interest in Exchange members because many of them would be uninsured without Exchanges. This offers the potential for unique working relationships and alliances between providers and carriers. An aligned hospital strategy and related fees are essential before even considering an Exchange in a location.

Some Exchange carriers developed a sophisticated value proposition to show hospital executives why they should participate in Exchanges.

b. **Physician strategy.** Although hospital strategy drove the early process for Exchanges, a strong physician strategy is essential to sustain and improve the performance over time. The right physicians with carrier support create major improvements in network performance and sustainable networks.
c. **Feasibility**. The goal is an early decision on feasibility. Should the carrier and key providers invest time in an Exchange product for each location? For some carriers, this is a "go/no go" decision.
d. **Reimbursement methodologies**. Evaluate proposed reimbursement methodologies (e.g., "DRG" case rates, capitation, gain sharing or incentive payments). The carrier and provider analytic teams meet and build the reimbursement terms for both organizations and their individual providers. This is often a multiyear contract with selective changes in yearly performance targets.

This strategy may be completed across the entire market for multiple lines of business. If so, the bulk of the work is done much earlier and outside the process of network development for Exchange products, and the results from the previous work is used at this step.

10. **Evaluate various sets of working relationships with various providers and determine your preferred allies.** Hold initial meetings with key provider executives. Use the results from previous steps and determine potential preferred allies.

    Exchanges offer a unique challenge and opportunity for providers, particularly hospitals given the large potential increase in paid patients and higher net income for the hospitals.

    Additional background is available in the Providers sections: Impact on Hospitals and Impact on Physicians.

11. Establish target fees and contracts in provider agreements. Evaluate existing competition and your existing products/networks and contracts to determine the fees needed to achieve targeted premiums. This includes analysis of fees (*unit costs*), the types of networks currently offered in the marketplace, competitor alliance with efficient allies and service area variations where local networks are available. After adjustment for insurance costs, this establishes cost targets that would achieve the desired premiums. These fees may be discussed with major provider allies if there is common interest in premiums and enrollment. A complicated balance between the network size, expected premium level and enrollment is needed during these discussions.

12. Develop contracts and build relationships. Begin detailed discussions with potential allies. After agreement with them and their affiliated providers, develop contracts for other providers. Discussions with the most important allies often involve communications including things such as extensive analysis of fee proposals.

13. Develop an approach for out-of-network providers. Out-of-network providers are very expensive, and the expense levels vary depending on state regulations on balance billing and network access. Analysis and incentives to encourage the use of in-network providers by members is needed. High member payments for out-of-network services may limit this problem in some locations; however, the member, carrier and provider interactions can be contentious without legal support to remove the patient from the middle of balance billing situations.

14. Reassess the cumulative impact of previous steps and make decisions. This step is often iterative as new information becomes available, including the status of ongoing provider discussions. Decisions include the type of product, service area, key providers, supplemental providers and fundamental decisions for whether to offer the product in each market.

15. Monitor the process: This is a long process with multiple components and many iterations. Process support like project managers, decided milestones and cross-department teams are needed to move the process forward. It is also essential to keep ongoing contact with key providers. Some carriers set up ongoing monthly executive

sessions to ensure communication across the different organizations. Warning flags for important changes are also used.

16. Scenario testing: Once basic decisions have been made, models can be built to assess scenarios of included/excluded providers and provider reimbursement levels. The team considers the likelihood of each scenario and identifies potential challenges (e.g., What if a key provider drops out, or if physician participation is too low?).

17. Final contracts: Eventually contracts are finalized and need to be implemented by the provider and carrier.

18. After the network contracts are completed the information from the contracts is disseminated throughout the carrier's organization. For example, the financial terms are incorporated into the premium pricing process and the claims payments system, while the provider lists are used to develop provider network directories for members and for marketing the products.

These steps help create the network that will be used for the following year. This is just the start of the ongoing process that must happen during the year. Exchanges are very difficult to manage and sustain; a strong network can provide substantial support as the year moves forward. As mentioned earlier, the work before the year must be integrated with efforts during the year.

Develop a Hospital-Based Strategy for Exchanges

High-Performance Networks: Strategy and Provider Selection Expanded from Step 9 Above[12]

Hospital strategy is important for all insurance programs. Hospitals receive the most money and have high fees per service. Only a limited number of hospitals are found in each region (and some hospitals have powerful positions). In addition, a hospital strategy is particularly important for Exchanges and often is the first stage for developing alternative networks. For carriers, subsidies help with selection and partly reduce the risk of insurance. For hospitals, Individual Exchanges offer a unique financial opportunity. Uninsured members typically lose money for hospitals because of the "cost of uncompensated care."[13] Exchanges typically generate gains for hospitals given the much higher fees paid by the carriers when the uninsured member gets insurance coverage.

The hospital perspective is described further in the Providers: Impact on Hospitals section, and the carriers' perspective is explained in the Buyers: Carrier Challenges and Opportunities section.

Thus, the incentives of hospitals and carriers are aligned for Exchanges, which helps Exchange network negotiations to move beyond the typical intense carrier/hospital business relationships and have more balanced financial negotiations. There can be common goals of membership, access to federal subsidies and the potential for an improved financial impact for hospitals.

The following pages outline the first stage of a carrier's hospital strategy. At this stage, the main objective is to identify potential allies—identify the right set of hospitals, begin executive discussions and assess if an Exchange product with lower premium is possible for the highly price-sensitive Exchange members. Three criteria are particularly important for sustainable hospital strategy for Exchange programs:

- Hospitals with better historical financial performance and efficiency
- Hospitals that are interested in both subsidized and nonsubsidized low-income members
- Hospitals with a strategic commitment to improve financial performance and reduce waste (while delivering better care and healthier members). This may be a future commitment and not reflected in current performance.

Some hospitals have this strategic commitment. Many hospitals do not. So, in many ways, this is a feasibility test (a "go/no go" decision) for the local market for both the carrier and the hospital. Exchange programs are very complex for both carriers and providers. It is easy to get things wrong. If the hospital and carrier have aligned goals, such as lower premiums and higher membership, the inevitable issues are handled in collaboration. If goals are not aligned, each major issue may be a struggle.[14]

For Exchanges, a strong hospital strategy and implementation can have an immediate impact. Revised contracts and choice of the right allies creates the potential for decreases in premium (from 3% to 10% to overall premium) and better financial performance for hospitals. Below we present an example of the project flow for assessing the strategy and feasibility of a hospital-based network. Also, illustrative examples of measurement of hospital savings are found in Appendix A7: Pricing Alternative Networks.

[12]This discussion expands on material on Step 9 from the prior section.

[13]It is important to distinguish between bad debt and the lower "cost of uncompensated care." "Bad debt" is an estimate of lost revenue. The "cost of uncompensated care or unpaid expenses" estimates the direct dollar impact to the hospital. http://www.aha.org/content/16/uncompensatedcarefactsheet.pdf.

[14]Although it is not common, the private sector has seen several major hospital systems with very high starting fees offer lower fees for a set of clients who are considering a competing network. Ongoing performance improvements were not a major part of the proposal. This proposal creates very complex business proposition with ongoing strategic implications. It requires extensive analysis. For example**, s**everal of these programs had lower premiums in the initial year but high premium increases in later years. It is hard to sustain premiums based on fee concessions without change in performance.

The figure below illustrates how this works. The numbers tie to the specific elements of the assessment approach described below in the Higher Performing Networks: Ongoing Performance section under Priorities for HPNs. At this stage, elements 1 (financial initiatives), 8 (a goal to reduce wasted resources) and 10 (analysis) are particularly important. For example, the goal to reduce waste is demonstrated by specific initiatives and analysis. Other elements remain important but can be handled later as part of the continuing improvement process.

There are three major sets of tasks.

(Green boxes) Internally, the carrier does financial analysis to understand historic performance based on claims, contracts and other sources. This is done for the particular hospital and is also compared to other hospitals in the same community. There are a variety of analytical techniques. The carrier also assesses quality and many other business factors.

(Orange boxes) Externally, discussions with potential allies are started. Initial executive meetings assess possible common goals, which are then tested against the actions to see if the hospital's initiatives confirm the stated goals. Multiple discussions with one or more potential allies may be done to see if an alliance seems feasible.

(**Purple** box) If the results of the internal and external assessment are positive, contracts for Exchange members are discussed.

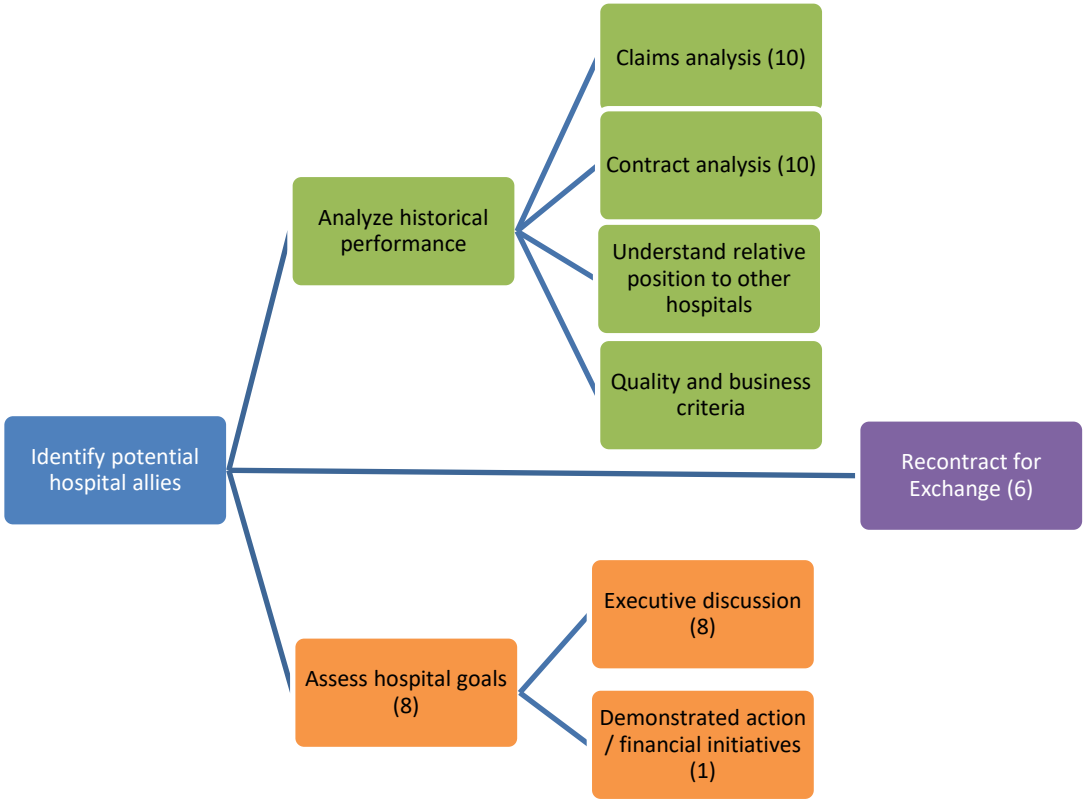


Figure 1 Hospitals (numbers refer to HPN elements)

Note: The numbers in some boxes cross reference the framework explained in the Higher Performance Networks: Ongoing Performance section under Priorities for HPNs.

Strategy and Feasibility of Physician-Based Networks

Done through Individual Physicians and/or Physician Organizations

A strong physician strategy is essential for both short-term gains and long-term sustainable performance improvement. Even before Exchanges were developed under the ACA, physician-based networks often drove better performance. Many physician networks are successful in Medicare Advantage, Medicaid ACOs, Medicaid and commercial insurance programs. Physicians create trusted relationships with patients, drive resource use and act in real time (earlier than most carrier programs).

Physicians typically share many goals with carriers that offer Exchange products and can become strong allies. For example, lower premiums and better financial performance, such as avoiding an admission or treatment at a more efficient site, does not lose revenue for physicians.

There are multiple approaches to physician networks that reduce premiums while maintaining comparable or improved quality.[15]

Physician network savings vary widely given the design of the network, depth of technical analysis and practical adjustments in the network. Initial financial analysis using tools like episode-of-care analysis often indicates more than 10% savings from midsized changes in physician networks. However, this is the purely analytical answer. Actual savings are less for various reasons. Future performance will revert to the mean for many physicians. Some physicians with lower financial performance are kept in the network because of quality results. Or to keep a deep network, or because of negotiating power, an entire group of physicians may be included rather than just the efficient physicians.[16]

- Low end of savings. In many markets, a small set of physicians are consistently far more expensive than their peers with no clear quality or other offsetting advantage. Although numbers vary by market and specialty, a network without these physicians can lower overall claims at least 2.5% [17]

  Variations in performance for a particular Illness and specialty have been shown in various published studies. This started with work from Dartmouth and has expanded over the years. One recent public state-wide example is the Arkansas Payment Improvement Initiative.[18]

- High end of savings. Organizations with years of experience focused on efficient quality care can have savings above 10% with comparable or higher quality.[19] This does not happen immediately; it is built on the ongoing improvement elements discussed in the next section.

- Many other physician approaches fall in the middle of the approaches discussed above.

The early Exchange results reinforced these estimates. Broad networks were often more expensive than alternative networks. However, the direct measurement of the gap between broad and alternative networks is becoming difficult to measure since in some markets broad networks are no longer offered in the Exchange.

Some carriers are deeply committed to physician-based programs. They have seen strong performance and lower

[15]This discussion summarizes a wide range of results. It reflects the experiences of the two primary authors in conducting or reviewing multiple unpublished analyses of physician performance and subsequent discussions with physicians; premiums are reduced while measurable quality is comparable or improved. This includes both insured and self-funded programs. Although most work is unpublished, the following footnotes highlight a few key published articles that show comparable results.

[16]Physician and hospital performance analyses have been done by some carriers and consultants for many years and have become quite refined. However, these results must be adjusted for Exchanges, for example, the impact of risk adjustment. In addition, Exchange savings can be harder to measure, and fewer and fewer broad physician networks participate in Exchange markets. There are wide differences among actuaries about how difficult it is to obtain savings.

[17]These results are based on multiple provider profiling projects implemented by the authors. There are two primary sources of savings. A small group of physicians is consistently much more expensive than their peers, and, in some locations, one hospital charges much higher fees than comparable organizations.

[18]Figure 1 at http://healthaffairs.org/blog/2014/03/18/the-arkansas-payment-reform-laboratory/ shows the variation in physician financial performance for one illness. The full Arkansas site shows multiple other examples.

[19]http://www.iha.org/sites/default/files/resources/issue-brief-cost-atlas-2016.pdf. Comparable results are also seen in the published premiums for the multiple networks and carriers offered by the California Public Employees Retirement System.

administrative costs in some programs. Other carriers are concerned about the extensive effort needed to start these programs and concerned about local reactions. There is also a mixed reaction from small carriers. Some find physician networks daunting. Others have built deep relationships with key local physicians (some successful small carriers use an ongoing improvement approach rather than the extensive analysis described in the next few pages.)

Sample Process: Strategy and Feasibility

There are two different carrier approaches to physician networks. These are not specific to Exchanges but are used across multiple lines of business. This gives volume to physician allies and lets them deliver consistent treatment across all members.

One approach works through individual physicians. The other works through physician organizations. The visual for each approach is given below.

Both start with the same overall objective of high physician performance. This can come in two ways: find existing, responsible physicians with high performance and build working relationships, and/or find physicians with solid performance and help them improve.

The common first step is to understand the unique strength of physicians (discussed in the Impact on Physicians section). Physicians can act earlier and more effectively than a carrier with a broad but disconnected network. For example, some patients who purchase an Exchange product at the beginning of the year during open enrollment already need medical services. So a physician may be the first point of contact with the patient. The physicians' strengths are also very different from the hospitals' strengths.

The carrier decides whether to work through individual physicians or groups or both. This is both a practical decision based on the existing physician structure in each market and an important strategic decision, since an individual or group approach has very different strengths and weaknesses.

From here the process is very different depending on the strategy chosen. The following pages and related figures show how the process might work for individual physicians or physician organizations.

Note: Each of the following figures has numbers in some boxes. These numbers cross-reference the framework explained in the Higher Performance Networks section under Priorities for HPNs and built on the key elements that drive higher performance, which are outlined in Appendix A3: Lessons from Higher Performing Networks.

The following figure shows a process for networks built around individual physicians. As mentioned earlier, some tasks may already be done for other products and then customized for Exchanges. There are four major sets of tasks.

(Gray box) As mentioned above, the first step is to understand the unique strength of physicians.

(Green boxes) For large carriers, the feasibility stage often starts with an analysis of physician performance (Element 10).[20] Claims analysis is done with episodes across illnesses. Assessment of quality is done from carrier and/or public sources. This analysis is quite complicated. In some markets, this analysis has been done for years and has become quite sophisticated. Previous analyses may need adjustment; for example, new hospital contracts have been created or specialist participation changes for Exchange networks. Although data and allocation to individual physicians can be challenging, other aspects of performance are also assessed. Quality is almost always measured (starting with HEDIS data). Other business requirements such as geographic needs or availability of key high-end specialists are often considered.

(Light blue box) Additional physicians are added to fill business needs, such as admitting privileges to certain hospitals or physicians who are affiliated with other powerful local providers.

(Orange boxes) The carrier then begins to build relationships and offers Exchange participation to the potential physicians as the process moves to the next phase.

This figure shows one of many possible versions of approaches to build networks around individual physicians.

- Small carriers may have limited data, so they often rely on relationships with key physicians, ongoing capabilities and the HPN key elements (see the Higher Performing Networks: Ongoing Performance section) to select providers.

- Some networks are built around primary care physicians and related clinics. This creates a very small, but tightly focused network. However, it is not easily expanded and can face capacity problems if used in a large regional Exchange.

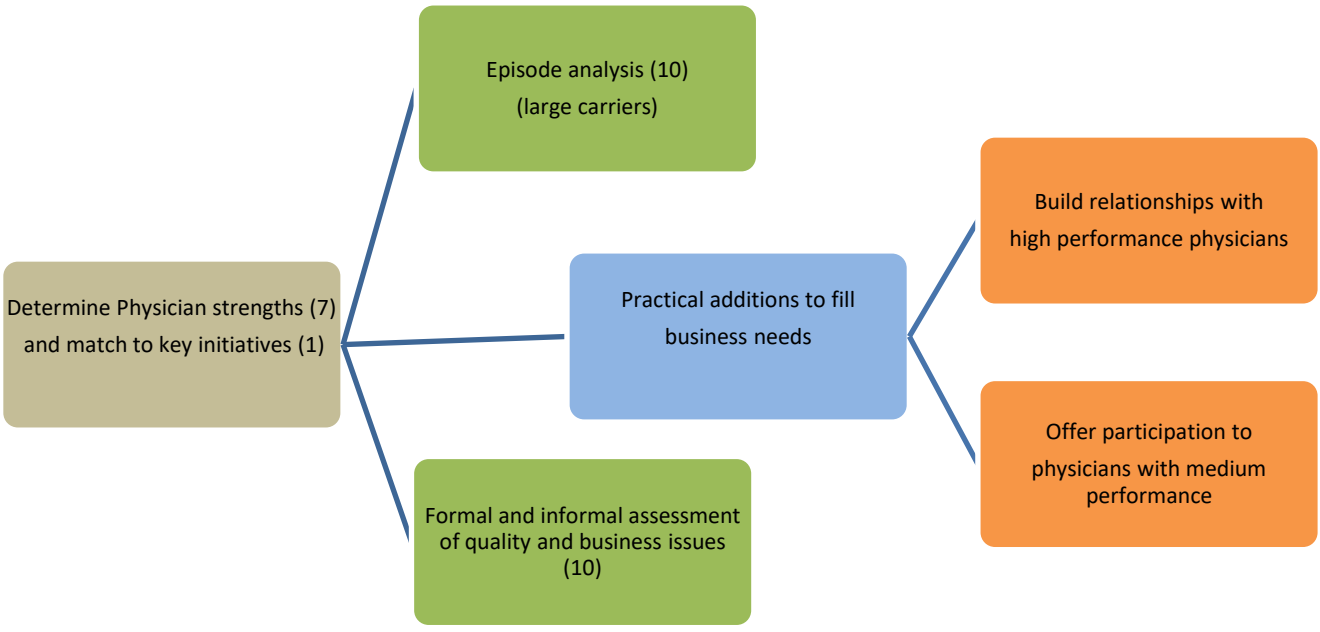


Figure 2 Individual Physicians (numbers refer to HPN elements)

Note: The numbers in some boxes cross-reference the framework explained in the Priorities for HPNs section.

[20]For smaller carriers, the approach is quite different. Allies with aligned goals are identified, relationships are built and ongoing improvement is focused around key elements discussed in the Higher Performance Networks—Ongoing Performance section. Poorly performing physicians may not choose to join the program. Short-term savings are often lower given start-up problems.

Strategy and Feasibility of Networks Built around Physician Organizations

In some markets, carriers use physician organizations as the basis for networks. Some physician organizations may have similar performance to broad networks, but some physician organizations have sustained the savings of more than 10% discussed earlier. There are four major sets of tasks.

(Gray box) As mentioned above, the first step is to understand the unique strength of physicians.

(Green boxes) A financial evaluation is done to find groups of physicians who have sustained high financial and measurable quality performance. The financial analysis uses average costs with adjustments for risk and mix of illnesses. Measurable quality starts with HEDIS results. Many other business issues are also evaluated. For example, an assessment of the capabilities of key physician groups may be performed using a variety of approaches including questionnaires or on-site reviews.

(Orange boxes) The final decision may be to work only with high-performance physician groups, particularly on Exchange products. For example, some networks are different than those used for typical HMO products outside of Exchanges. On the other hand, products that include medium performers create larger networks and support organizations with future potential.

In some cases, physician organizations are available, but an HPN network does not prove feasible. The most common example occurs when the physician organizations simply mimic the financial performance of the market. In this situation, some carriers may not offer an Exchange product. In others, they may work with individual physicians instead of physician groups (as discussed above). Again, multiple variations of this process are used.

(**Purple** box) In some situations, the physician groups have a lot of leverage in negotiations with the carriers. Alternative payment methods may be used. For example, some physician organizations get additional incentive-based compensation to pay for management of Exchange members, which can be passed along to participating physicians.

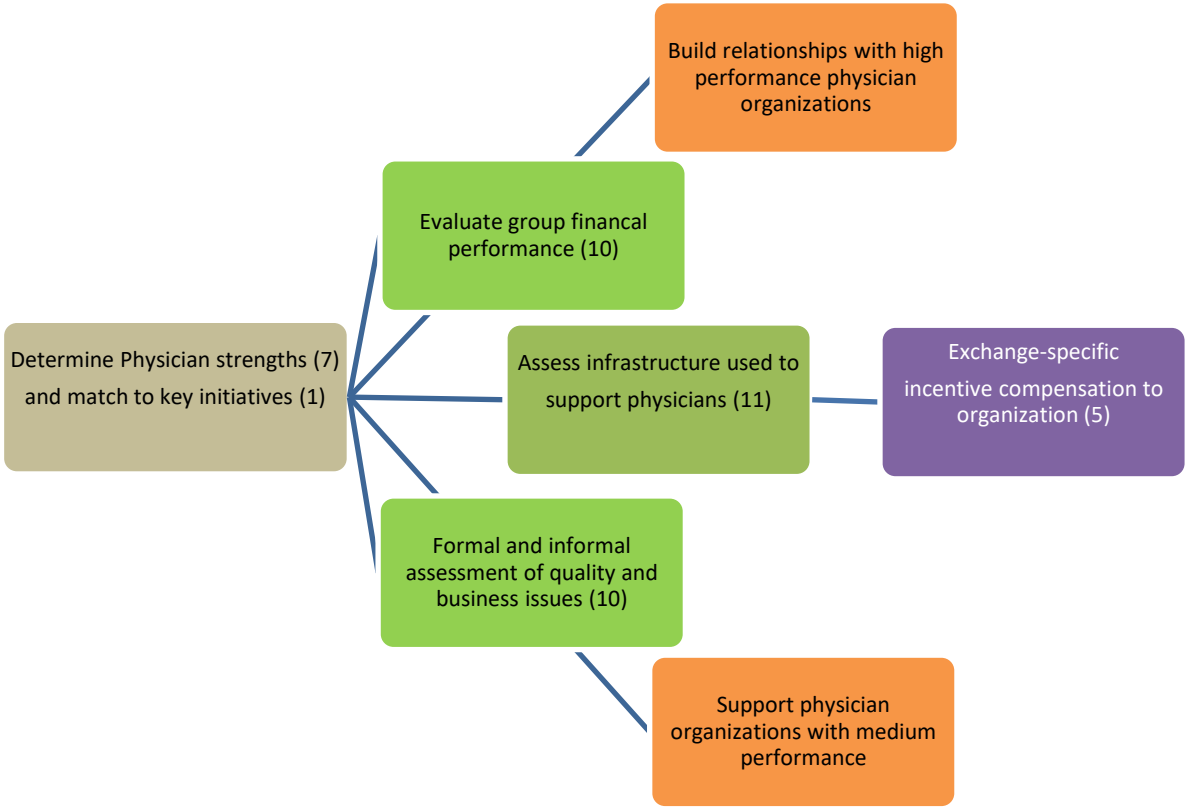


Figure 3 Physician organizations (numbers refer to HPN elements)

Note: The numbers in some boxes cross-reference the framework explained in the Priorities for HPNs section.

Higher Performing Networks: Ongoing Performance

The previous section (High Performance Networks: Actions Prior to the Start of the Plan) outlines the process to develop networks, focusing on the carrier actions that happen before the program starts. For example, a HPN must have strong contracts with the right providers, particularly hospitals, before the program starts. This phase is an essential first step to even begin development of an Exchange product. But this is only the first step. The final results depend on the actions of the providers within the network during the year.

This section focuses on what happens after the program starts: real-time actions by providers during the year. It also addresses the management and infrastructure needed to support ongoing provider initiatives.

Using a sports analogy, the prior section is about the role of the general manager of a successful team. They run the operations, manage a stadium, find the right players, agree to contracts etc. This section is about the players and coach. Each player needs to use his or her unique talents. Management needs to get them support. Management needs to monitor and improve performance during the year. And so on.

This section has three parts:

- Definition of Higher Performance Networks
- Overview
- Assessment of network performance, including a framework to assess networks and a few examples of how key elements work in Exchanges.

Sources

Before getting into the content, here is a quick summary of the sources of information for this section.

Ongoing network and provider management happens behind the scenes and evolves over time. Practical working details of HPNs are typically confidential and proprietary and are rarely communicated outside of their organizations. Thus, detailed information on network performance within Exchanges is scarce. Isolating the effect of networks is difficult given all the other problems that face Exchange products. Fortunately, there are sources of information outside of Exchanges. Many HPNs working for Exchange members were originally developed for other lines of business (commercial insurance, state employees, large private sector employees, Medicare Advantage or Managed Medicaid). These other sources can supplement Exchange information and offer insights into what distinguishes HPNs from other networks and let us move beyond the limited public information specific to Exchanges. The material in the rest of this section is a composite of work done across different HPNs.

This section uses the findings and framework from the "Lessons from Higher Performing Networks" report published by the Pacific Business Group on Health. This was written in part by one of the co-authors of this report. This report examined multiple real-world HPNs and identified 12 elements that distinguish HPNs from typical networks. The one-page Executive Summary is available in Appendix A3: Lessons from Higher Performing Network, and information for the full report is in the References section.

Definition of Higher Performing Networks (HPNs): This is a network (or health system) that has goals to deliver "better care, smarter spending and healthier members.[21] HPNs have a commitment to all three goals across the entire system. This is not just a focus on a few chronic diseases or metrics like readmissions or emergency visits. Systematic work is required to improve care and reduce wasted services (and related expenses) across the system. Smart spending includes paid claims, carrier expenses, provider expenses and creation of economies of scale. Commitment to all three goals, including smart spending and more affordable programs, is fundamental. A provider-based network that focuses on "better care" that offers a promising "population health management" program may be useful but may not be considered an HPN.

One practical way to move toward the three goals noted above is to create a "network" with a "critical mass of responsible providers with the right support, authority and aligned financial incentives (that) will perform significantly better than the typical health program."[22] Most HPNs help their individual providers and staff improve member health. But they do not stop at member health improvement; they also manage the local health system.

[21] https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-03-03-2.html.
[22] http://www.pbgh.org/storage/documents/commentary/HiPerfNetworkBrief_Final3.pdf.

A carrier can influence but not directly control network performance, since action happens during the year by providers working in real time. However, aligned financial incentives, provider support, monitoring and improved working relationships can make high performance more likely. Some carriers take a broad management role to develop and support key providers. Others delegate substantial responsibility and authority. Other carriers primarily focus on broad networks.

Various elements drive this improved performance. Many targeted, useful initiatives are built into normal practice patterns and performed by providers on an ongoing basis. This may also be supported by well-designed alternative payment systems that are supported by various management techniques and infrastructure.

At a practical level, three overall measures determine whether an alternative network is committed to financial performance as an HPN.[23]

- Premiums for ACA Exchanges. Products with HPNs sustain distinctly lower premiums as compared to broad network products over time. If premiums are not much different from broad network products, the underlying network is not an HPN as defined in this report.[24] In addition, quality scores and other performance metrics are at or above average.
- Results for other products. HPNs sustain better premiums for members in other lines of business (such as commercial, Medicare Advantage or Medicaid). Quality scores and other performance for these programs are at or above average.
- Network capabilities and operations. These can be assessed through techniques like questionnaires or on-site review. This analysis can be based on various frameworks, such as using the key element list from the Lessons report used in this report.

[23]The report does not take the position that participating in the Exchange automatically means higher performance. Higher performance requires sustained lower premiums, measured quality, *and* ongoing management. Lower premiums for alternative Exchange networks can be measured directly if broad networks are still available in the Exchanges.

[24]As used in this report, HPNs are about lower premiums (financial performance, reduced waste etc.) They use some of their improved performance to gain market share and maintain more members over time. A more efficient network which matches market premiums is not likely to be an HPN unless they have clearly better quality or other performance.

Overview of Higher Performing Networks

The performance of networks varies widely. Some offer only slight improvements over a broad network. Others have demonstrated much lower product premiums with comparable or better quality even before the advent of Exchanges. These networks with historically high performance may have become a major presence in their market. The stronger networks with higher performance (the HPNs) are a valuable component if they decide to participate in Exchange programs. Outside of Exchanges, some show premiums savings in the high single digits or in a few cases over 10%. If fees below typical contracts are offered by providers for Exchange members, savings within Exchanges can be even higher.

We have labeled some of these programs Higher Performing Networks—these already exist in some parts of the country. There are many versions of HPNs. They come from both medium and large organizations. The management team for HPNs can come from carriers, hospitals, physicians or a hospital-owned company. Some have a deep expertise in specific illnesses and act through local allied carriers. The providers in an HPN tend to work differently from providers in a broad network. At a minimum, the HPN may not include the providers with very poor performance.

HPNs and their providers often take on broad responsibility for performance. Their providers move beyond the historic mindset that treatment begins and ends with the office visit or admission. Some HPNs do not consider themselves "insurance" products. They consider themselves a health delivery system that offers health care at a prepaid total premium. However, in exchange for this broad role, HPNs leverage the expertise of their key professionals. As an example, physicians may accept the ultimate responsibility for patient engagement and health, while other, more administrative work may be reduced to let them focus on the most meaningful tasks.

Although each network version operates differently, common elements are found across these networks. Each element can be implemented separately or combined to create synergies and stronger performance. In fact, many of these HPNs were built over time, since most started from scratch. Some of these elements can now be implemented faster and improved over time.

If successful, an HPN contributes in many ways:

- Providers have direct contact with members.
- Their work is ongoing, in real time (while carriers are often involved much later).
- HPNs or carrier allies build expertise and infrastructure that can be applied to Exchange and non-Exchange members.
- The providers and management team work locally and have a deep and current understanding of the local medical system.
- In broad networks, carriers and providers often operate independently and work at cross-purposes. There are also disconnects between providers. HPNs work as an alliance. There may be disagreements between providers and carriers, or between different providers, but, at a minimum, HPNs tend to leverage the unique expertise of each player (carriers, hospitals, physicians and staff).
- HPN providers contribute to financial performance. If payment systems are more aligned, providers, such as primary care physicians, actively manage wasteful services and unnecessary costs as if it were their own money.

Interested providers may voluntarily join the network, while providers with less interest often do not to participate. In fact, if poor performing local providers are not in the network, their poor performance may become more visible as it is no longer averaged with other providers.

For example, often one hospital system has much higher fees or worse efficiency than its competitors (after case mix and quality adjustments). The following simplified example shows the impact assuming two hospitals in a market each with equal market share:

Premium (if all services are done at more expensive hospital)	$4,200
Premium (if all services are done at less expensive hospital)	$3,800
Average premium (if 50% of all services are done at each hospital)	$4,000

The difference in performance is not visible to the member, who sees only the average premium of $4,000. An optional

alternative network including only the lower cost hospital would lower premiums by $200 per year. Or, if both networks are offered in direct competition, the member sees a $400 difference in premium. Occasionally the more expensive hospital will offer a more aggressive fee schedule to participate in the new Exchange program. This creates a very complex situation and requires a complex long-term strategic analysis.

Lower premiums are driven by the distinct nature of HPNs. The better networks:

- Use the right providers. This includes existing high-performance providers and the many other providers that are willing to improve performance in the right environment.
- Focus on actions and initiatives. The initiatives they choose offer a quick test on whether their goals include financial performance (smarter spending).
- Move beyond the traditional versions of care coordination and quality. They work on all illnesses over time, not just the key chronic conditions. Initiatives may use sophisticated systems to identify high-risk patients. They expect improved performance within and across the entire health system.
- Run businesses and understand financial implications. They may take financial risk through incentives or total-cost contracts and move selectively away from fee-for-service payments to providers. This has occurred outside of Exchange products, in commercial, Medicare Advantage and Medicaid programs, and in some cases within Exchange products as well.
- Develop strong management teams and use the full resources of providers. They reduce wasted resources in the system (both their internal expenses and paid claims). Providers operate in real time and take many important actions that cannot be done by carriers or members.
- Build infrastructure to support providers and help them improve performance. This has an enormous impact particularly on physicians, who rarely have economies of scale or capital.
- Make good use of performance gains. Most HPNs pass some of their performance gains back to buyers as lower premiums or better benefits to gain members.

Most actions occur at the provider level, but network management and infrastructure do not have to come from providers. This is a change from the historical approach where many HPNs were started by the providers in their local community. Nowadays, the driving force and overall management of an HPN can come from vendors, carriers or buyers as well as providers. This is possible given improvements in technology, analytics, aligned payment, economies of scale, working relationships and other expertise to develop and expand HPNs.

Assessment of Network Performance: Priorities for HPNs

How Do You Assess a Network (and Distinguish Typical Performance from Higher Performance)? How Does This Apply to Exchanges?

Networks are large and complex. Many actions happen behind the scenes as part of an ongoing business operation. This can appear to be a black box. However, a network can be broken into its components and understood. A network is just a combination of various elements: provider selection, illness-based initiatives, payment, management, infrastructure etc. The underlying elements can be understood and assessed. Initiatives can be identified and tracked, payment systems can be evaluated, and capabilities and infrastructure can be examined.

There are various approaches to understand and assess networks. As briefly mentioned earlier, this report uses the 12 elements from the "Lessons from Higher Performing Networks" report as the framework for discussion. The report examined multiple networks across the country and identified 12 elements that distinguish between typical and higher performance networks.

The chart below outlines 12 key elements that drive network performance. This is followed by examples of how key elements work in Exchanges.[25]

Many actions are needed for higher performance in Exchange networks. But HPNs are built over time. The following table offers suggestions on where to start:

- The first column lists the elements from the "Lessons on Higher Performance Networks" report that was discussed above (a one-page executive summary is in Appendix A3). Element 0 is not from the table, but it is the foundation throughout the report.
- The second column highlights the timing of key elements; whether completed prior to the start of the plan (prior) or ongoing (during the year). For example, Elements 0, 1, 8 and 10 are completed before the coverage year starts.
- The third column highlights early priorities within the other elements.

[25]The chart is extracted from the executive summary of the full report. The full report is listed in the References section. As a reminder, the original report was based on multiple lines of business (not just individual Exchanges).

Table 1 Priorities for HPNs
Targeted for Individual Exchange Products

The Foundation (Element 0)

Element number and summary	Timing	Initial priorities within each element
0. Work with the right providers	Prior	Essential = expanded discussion on hospital and physician selection on pages 31 to 36

The Other 12 Elements
(From the report)

Initiatives		**Comments**
1. Multiple financial initiatives	Prior	See Appendix A4: Major Provider-Based Initiatives
Care Coordination and Quality Measurement		
2. Care coordination/member engagement	During	Address Exchange-specific illnesses
3. Future high-risk members	Early and ongoing	Some new members have urgent illnesses that need early identification, and high-risk members need to be identified An example is below.
4. Value-based measures	Ongoing	Exchanges typically use existing metrics
Payment Models		
5. Contracts on overall costs	Prior	At minimum, traditional contracts but ongoing reporting At maximum, risk-based, incentives or value contracts An example is below.
6. Individual provider contracts	Prior	Hospital contracts may be Exchange-specific Physician fees and incentive structure often use existing contracts (see following discussion)
Management, Roles and Responsibilities		
7. Full provider resources–executives and individuals	Prior and ongoing	Early executive discussion is needed (see the discussion on hospital and physician selection starting on page 31). Examples of ongoing actions are on page 44.
8. Reduce wasted resources and related costs	Ongoing	Essential criteria for hospital and physician allies Examples of ongoing actions are on page 44.
9. Blunt communication with allies	Early	Set up executive and operational communications
Infrastructure for provider action		
10. Useful reports from multiple data sources	Ongoing	Uses mix of claims data for payment information and clinical information for faster action
11. Infrastructure to support individual providers	Ongoing	Physician-centric reporting, use of other professionals to replace time, education, training etc.
12. Create economies of scale	Ongoing	Challenging if only Exchange products use the HPN. May be done across all or multiple products or lines of business. HPNs may have unique opportunities for economies of scale for specific illnesses.

The following pages offer deeper discussion of some of the more important and/or urgent elements for higher performance for Individual Exchanges. This discussion gives examples for elements 3, 5, 7 and 8.

Examples of Key Elements

Element 3: Future High-Risk Members

Exchange members may have existing illnesses. Rapid identification of the member's specific situation becomes essential. Traditional claim-based tools are less useful, given the lag in reporting claims. A combination of carrier enrollment, hospital notifications, provider outreach and/or pharmacy information can speed the connection to the patient. If members remain with the program, various other tools including claims can be useful. HPNs have broader sources to identify future high-risk members, while providers working in typical networks can only identify future high-risk patients when the patient reaches their office.

In addition, members may be facing urgent situations, which means the carrier and provider networks may be involved in the middle of the course of treatment. This is very challenging under commercial insurance or traditional networks. In some cases, HPNs can have a significant immediate impact; for example, some have hospitalists on staff who can become involved in the middle of an admission.

After the initial contact with high-risk members, the better networks then work to stratify members using additional sources such as real-time clinical reporting or personal assessments. They then develop initiatives for those at the highest risk. This element then drives actions addressed in other elements. For example, better patient targeting creates economies of scale (Element 12).

Element 5: Payment: Overall Costs

Contracts that give provider organizations risk and responsibility for overall costs are widely discussed in the industry (within both the ACA Exchange business and other lines of business). The number of contracts is growing. Many different approaches exist with varying levels of success. Capitation, gain sharing, performance incentives and other arrangements have been widely discussed across Exchange products. However, private conversations indicate that, although they are used in some instances, they are not widely used for Exchange products, at least in the short term. This reflects the continuing challenges of Exchange business. When setting member premiums for Exchanges, benefit designs are complex, patient turnover is high, regulations continue to change, often after rates are set and so on. It is very difficult to set premiums; it is equally difficult to set appropriate financial targets at the provider level.

Performance incentives or other arrangements are more often used by HPNs than other providers, for example, capitation, which pass a high level of responsibility and risk to providers. Regardless of the formal contract, total costs are tracked and communicated to important allies. In addition, some provider-based HPNs receive a service fee to support Exchange members, for instance, for immediate support from hospitalists in emergencies.

As a reminder, even though the contracts may be different, providers from HPNs are often used within Exchange networks given their high historical performance.

Element 7: Full Provider Resources—Executives and Individuals

Given many sick Exchange members, both urgent and ongoing health problems may need support. The right support is needed. For example, if the first clinical service is an emergency department, it may be more difficult to establish a support system or person to help with next steps.

The lack of coordination in broad networks is quite challenging. Carriers, hospitals, specialists, primary care and other providers work in silos with limited or poor communication and working relationships. HPNs can apply existing resources and techniques to more quickly address the immediate emergency and connect the patient to ongoing resources that can solve problems without another emergency visit. They build on the unique strengths of each part of the health system, such as:

- Primary care physicians—diagnosis of problems, guide the course of treatment and use of resources system, relationships with members and ongoing monitoring of progress
- Specialists—deep understanding of complex illnesses and complication reduction
- Hospital—acute care management, inpatient quality improvement and management of large health projects
- Carriers—complete data on payments, out-of-network contracts, insurance and economies of scale.

As examples:

In one market, the provider and carriers have developed an immediate notification system for emergency department visits that lets the primary care doctor take an immediate role.

For education and member engagement for low-income members, networks may use lay people with expertise or common social backgrounds to build rapport and enhance action.

Given many previously uninsured deliveries (many individual insurances prior to the ACA did not include maternity as a covered service), maternity may be important for Exchanges. An HPN can provide a broad set of resources over the course of the pregnancy: early support from staff, major treatment decisions by physicians, use of midwives and active management of complications and neonates by the hospital and/or hospitalist.

Element 8: Reduce Wasted Resources and Related Expenses (i.e., Smart Spending)[26]

Low premiums for Exchange members requires the management of resources, less wasted services and smart spending. This improved efficiency lets the Exchange products meet financial performance goals and sustainable low premiums. As discussed in the earlier discussion on selecting providers for the network, this element is a critical distinction between a typical provider and a higher performing provider. For example, most hospitals are working to reduce readmissions. HPNs also work on many other initiatives.

This can be difficult to assess. Much of the extensive work to reduce wasted resources is performed internally within an HPN and not visible outside of the organization. Although a full discussion of the opportunities and risks is beyond the scope of this report, the following material offers some highlights.

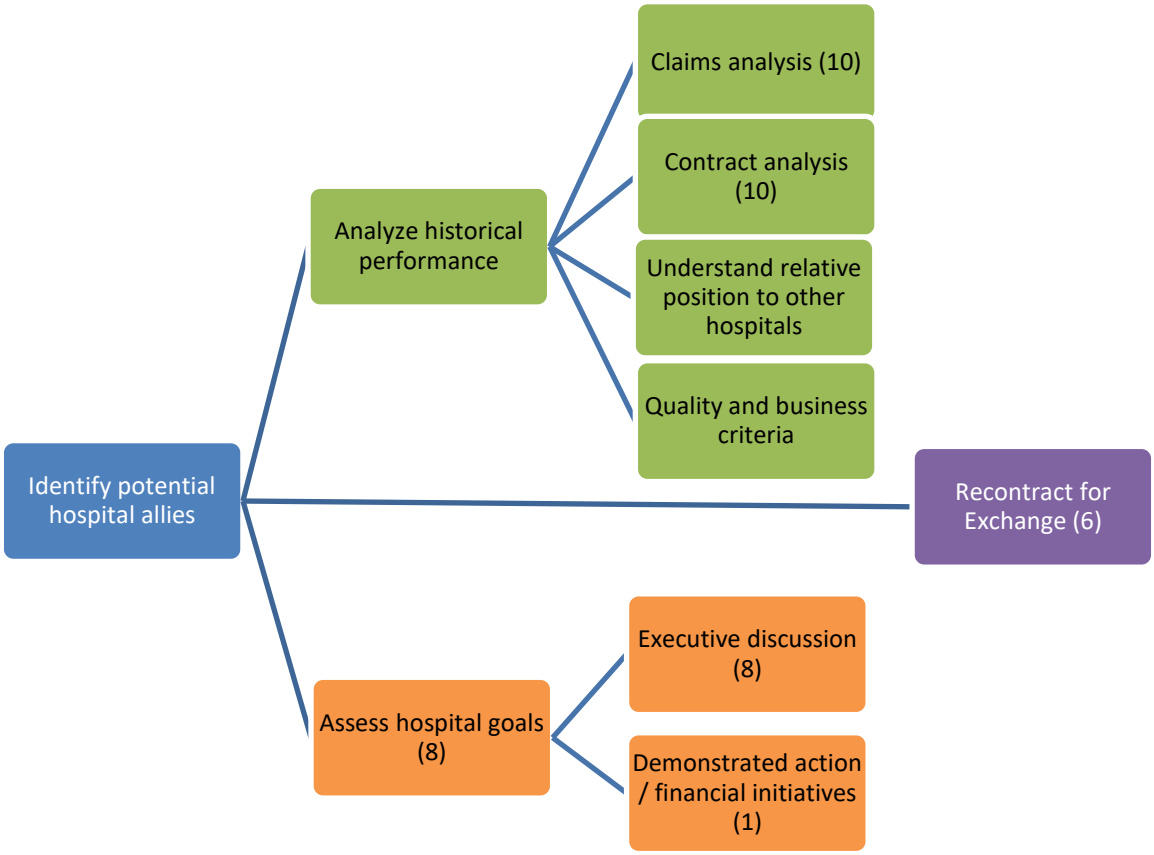
This is a complex and fundamental practical and political problem for the industry, particularly hospitals. Fee-for-service revenue from claims is essential to cover overhead at least in the short term. A reduction in wasted services often reduces margin (lower expenses are more than offset by lower fee-for-service revenue for a hospital). The challenge of wasted resources is widely discussed, but not widely implemented. When implemented, various techniques (such as supply chain management, complication reduction, lower readmissions, staffing changes and reengineering) are used to reduce services and relate expenses. These techniques are more useful if applied across all populations (Exchanges and other lines of business)

A small subset of hospitals has found business solutions for this issue. A real-life example is included in Appendix A5: Reduction of Wasted Services.

[26]As mentioned in the Key Terms Used in the Report appendix, the terms *smart spending* and *reduction in waste* mean the same thing within this report.

Example of Multiple Elements

The four examples above focus primarily on a single key element. However, part of the power of HPNs is that various elements work in combination and reinforce each other. To see how this works, let's revisit material from an earlier part of the report. Figure 1 above outlines one possible process to select the right providers for the Exchange network. It is repeated below.



This shows an integrated approach to select providers using a combination of elements 1, 7, 8 and 10.

Selection of providers is essential to create HPNs. An early assessment of providers (using a combination of four elements) works together to assess the feasibility of each business alliance.

Various financial analyses are performed (element 10).

Analysis of current contracts shows the relative current position of the potential hospital ally. If a hospital starts with higher fees than the market, larger fee reductions may need to be discussed. Additional analyses (element 10) of historic provider financial performance can be conducted using episodes, bundles or other modern techniques. This added analysis tests the value of the contract in a more global sense. It also can indicate the network utilization and efficiency outside of the hospital to determine strengths and weaknesses. This analysis may connect the physicians to the hospital to understand the broader network efficiency.

Meet with executives to determine the hospital's interest in Exchange members and commitment to reduce waste for Exchange (element 8).

Wide variation is found in hospital goals and level of commitment to performance. An alliance with a hospital with little interest in ongoing management of claims or internal expenses may work in the initial year but become more challenging in later years.

The carrier can verify if the initiatives are underway to validate the verbal commitments by the executives. The hospital should be able to demonstrate that they are already taking action on other lines of business (element 1).

If these key elements and the other business discussions are productive, the hospital and carrier can move to negotiate a contract and financial terms (element 6).

Comparable Approaches to Physician-Based Networks

Similarly, multiple elements assess individual physicians and/or physician groups (Figures 2 and 3). However, the key elements are different. This can provide insight into the value of different networks. As quick highlights:

- For networks based on hospitals, it is critical to assess the direction of the executives. They face financial constraints and large overhead that can limit action over time.
- For networks based on physician groups, their existing infrastructure and management can be assessed. This indicates their short-term success and gaps for improvement.
- For individual physicians, initial selection offers initial projected results, but limited infrastructure and management focus on physician support are obstacles to ongoing improvement.

The next two sections have additional material on hospitals and physicians.

Section III: Providers

- Impact on Hospitals
- Impact on Physicians

Impact on Hospitals

Hospitals historically face ongoing financial challenges for uninsured and low-income patients. Although a small subset of these patients makes some payment for early services (at high *billed charges*), most make minimal payments as costs get higher. Once illnesses become serious and expensive, these people no longer cover the direct expenses of their care, let alone contribute to hospital's overhead and margin. And insurance is a problem: premiums are high, so many low-income patients do not purchase insurance.

This creates an ongoing financial and business challenge for hospitals. Their role in the community, reinforced by state legal requirements, means that they must deliver services to these members despite the frequent lack of payment. The "cost of uncompensated care" is a major drain.[27]

Exchange products offer a direct solution to this long-standing problem.[28]

To summarize earlier material: Losses (due to minimal payments from uninsured members) are replaced by financial gains since typical fee-for-service contracts with carriers often pay far above Medicaid or Medicare payment levels. The substantial federal subsidies for Silver products in Exchanges reduce premiums, which brings new insurance enrollment. More enrollment means more claim payments and less uncompensated care. Members with low incomes may also get subsidized plan designs. The overall objective for hospitals is clear: join Exchange product networks and move uninsured patients into these programs.

However, hospitals need carriers to offer products. Carriers have a different business situation. For carriers, Exchange products are optional and risky. This changes the tone of conversations between carriers and hospitals. The typical carrier-hospital negotiation is often intense and aggressive, particularly for large hospitals. Instead, Exchange negotiations may be more balanced and in some cases collaborative. Hospitals with low fees or better performance may even seek carriers that offer Exchange products.

Hospital alignment with specific carriers is done in some, but, not all states (this alignment occurs in all six case studies). In the case studies, some carriers and their networks are directly connected to a specific subset of hospitals. These include hospital-owned carriers as well as one-time alliances for Exchange products.

This section outlines the perspective of the major hospitals. It starts with an overview of the financial implications of Exchanges, the market assessment and fee levels and highlights a few other key decisions.

Financial Implication of Exchanges

Individual Exchanges offer an opportunity to solve one of the hospitals' most challenging financial problems. Without Exchanges, the hospital industry faces the risk of an ongoing "fee spiral."[29] This spiral is different from the carrier "death spiral," which is more commonly known.

As the fee spiral continues, there are fewer paying members, and the fees and premiums continue to go up. Using business terms, it is difficult to sustain a business that loses customers, still offers services and then must raise prices for the remaining customers to make up the difference. For most hospitals, funding losses on uninsured members are offset by high fees for other purchasers (primarily insured programs and self-funded employers). Some federal programs reimburse some of the hospital's "cost of uncompensated care." These were modified to reflect Medicaid expansion and Exchanges and continue to change as the federal approach to health care changes.

[27]As mentioned earlier, the "*cost* of uncompensated care" reflects unpaid expenses and estimates the direct dollar impact to the hospital. This is different from "bad debt," which is an estimate of lost revenue.

[28]Hospitals have a long-standing interest in health insurance. They were the key force that created the early Blue Cross insurance companies. Patients could prepay for possible hospital admissions through insurance pooling.

[29]The carrier spiral reflects the selection problem from low enrollment from low-risk members (discussed earlier in the Impact on Individuals section). The hospital version is more challenging since hospitals cannot turn away any patient.

The following illustrates the magnitude of the financial problem. For simplicity, this model shows only the average hospital cost per admission. Full analysis of all services is much more extensive. This table shows revenue (the claims or gross income), variable expenses and net income (margin). "Variable expenses," the direct costs of care, are very important for financial management but are difficult to measure.[30]

Illustrative Financial Impact—Per Admission

	Revenue/Claims	Variable Expense	Margin (Net Income)
Uninsured patient	$ 1,000	$14,000	$–13,000
Insured patient	$20,000	$14,000	$ 6,000
Difference	$19,000	—	$19,000

The insured patient generates far more revenue and margin, and the financial impact is reversed; a large loss becomes a moderate gain to cover overhead.

Market Assessment

This section discusses a market where alternative networks are available and various hospitals and carriers need to determine their allies, fees, and network structure. Other situations, such as locations where networks face regulatory obstacles, require different tactics.

Hospitals need to understand the competitive landscape and make strategic decisions. For example, a dominant local hospital with high fees may prefer broad networks and multiple carriers. On the other hand, a major hospital with better efficiency and lower fees may leverage their position through a narrow network with one carrier. The carrier and hospital may choose to use the hospital's efficiency to create lower premiums, gain members and build a bigger ongoing presence for both entities. This important topic is discussed in prior sections.

Hospitals need to understand the other hospitals in the market:

- Services and business structure of other hospitals in the market
- Competitive position (contracted fees, billed charges and efficiency)
- Working relationships with primary care physicians and key specialists
- Regulatory position on issues such as out-of-network payment for PPO and HMO products and
- Quality perception and reality (a few standout programs or broad distinct differences).

The hospitals also need to understand the existing Exchange situation. For example, products, premiums, subsidies, income from risk adjustment, adjustments to member cost sharing and hospital/carrier alliances.

Hospitals already have a general understanding of their position in the market, but, for Exchange decisions, they need to understand the details. For example, the relative competitive position on contracted fees and billed charges can be assessed using public sources like Medicare Cost Reports. And, in some states, these sources can be supplemented by charge masters or statewide claims databases.

The case studies in this report show the wide variation in hospital decisions from these assessments. They may own their own carriers or participate only in broad networks. There are also various examples of hospitals building a major connection with a single carrier to offer products in a specific service area and distinguish their program from the broad and more expensive networks offered by other hospitals and carriers.

This type of assessment helps the hospital make internal decisions. It also lets them develop their business case and their approach to carriers that might offer potential Exchange products.

[30]"Variable expenses" (in the accounting sense) are expenses that "vary" as volume changes. Other expenses are "fixed expenses." Variable expense for each service are hard to determine. Depending on the methodology used, specific numbers can vary widely.

Fee Levels

The level of fees is a very important decision for hospitals for many reasons. Low-income patients are price sensitive, so they do not buy traditional insurance (although subsidies help some potential members on Exchanges). In addition, given potential losses and other challenges discussed earlier, carriers typically are reluctant to invest time and energy into Exchange products at current fee levels.

However, the most important issue is that Exchange products offer hospitals an opportunity to reconsider their business model for low-income patients. The existing business model is: high margins and high hospital fees for funding coming from having insurance. This leads to expensive insurance premiums, which means lower enrollment. This business model does not attract people with low income.

If hospitals reduce fees and carriers reduce premiums, they may see more members, which could increase their total marginal income.

This essentially becomes a complex version of a supply-and-demand curve from microeconomics: An organization can reduce prices and still increase total profit if you get enough new clients (in this case paying members).

Our impression, based on articles, private conversations and anecdotes, is that some hospitals and carriers made a conscious decision to lower fees and administration expenses to attract more members. In fact, in some rural locations, hospitals drove these conversations.

If alternative fees are considered, many different options are often tested. This includes the following:

1. Review existing fees, enrollment and Exchange membership
2. Evaluate existing commercial contractual and Medicaid fees (as a baseline)
3. Evaluate various fees between Medicaid and commercial
4. Estimate potential volumes of new members (particularly those previously without insurance)
5. Calculate a breakeven membership for each fee level
6. Consider different adjustments for inpatient, outpatient or specific conditions, such as maternity and
7. Estimate the impact of in-network and out-of-network payment. In many situations, if a hospital is out-of-network, fees are much higher, but the utilization is far lower. This has complicated short- and long-term financial impacts on the hospital.

The specific calculations are very complex depending on many factors, including the ratio of insured to previously uninsured members, local income levels in the hospital service area, major illnesses, marketing campaign, public perceptions of affordability, state regulations on balance billing and other issues.

Determine Carrier Alliances

As a reminder, the hospital and carriers have very different business interests in Exchange products. Individual Exchange members are a clear gain to hospitals. But, as results have shown, the carrier's financial results can be poor given the illness burden of the patients in the program, technical challenges in setting premiums and regulatory and other issues. Because of this, some hospitals have developed unique carrier relationships for Exchange products, while others just use their normal negotiating approach with carriers.

Enrollment is a joint goal, but the details are different. Hospitals want as many members as possible. Carriers want a mix of risks with known illnesses so that premiums can match the risks taken.

Hospitals want at least one carrier to develop an Exchange product in the local market. This brings federal funding into the local community. Then, if possible, some hospitals would prefer a narrow network committed to them if premiums are low enough to attract meaningful membership.

Various criteria are used to assess potential carrier allies, including the following:

- What are the goals of the various carriers considering Exchange products? Is their strategy aligned with the hospital? For instance, is the carrier committed to lower expenses and efficiency? Will lower hospital fees be passed along to members

to increase enrollment? How will the carriers set premiums?

- How much volume could a carrier deliver?
- What is a carrier's plan to attract a mix of members (rates, marketing, sales and support services)?
- Is the carrier willing to make the hospital its core hospital within their Exchange product?
- Can the executive teams work together?

Another important consideration is whether other carriers in the market will continue to offer Exchange products. If so, some hospitals will see funding for low-income members from other carriers, even if they do not participate in the Exchange directly. However, volumes may be lower. In some cases, extensive modeling is done on this.

In some markets, there are successful hospital-owned carriers competing in other lines of business, with an ongoing presence in their community. This includes both staff model insurance companies and hospital systems in a few markets. If the hospital owns an insurance company, it needs to decide if their insurance company should continue in the Exchange.

For a hospital that owns a major facility within their local market, some clear advantages exist in being able to offer an Individual Exchange product. At least one Exchange product will be available to bring in the federal funding from subsidies and cost-sharing reductions. There are common ownership, management and implementation teams. Affiliated physicians and an emergency response system may be able to channel members to its facilities and raise volume. The carrier overhead is often far lower than competing carriers given the working relationships and alternative payment arrangements; the lower administrative costs allow higher funding for providers in the network (assuming comparable premiums). A visible Exchange product may also reinforce the long-standing mission and perceived role of the hospital in the community.

On the other hand, this needs to be balanced against the significant risks of insurance, as well as the time and energy to manage an insurance population of low-income members. Many difficult tasks need to be completed (attract members, set premiums, managing the health system, supporting members, risk coding etc.).

The hospital needs to determine potential market share, relative contractual fees, internal transfer fees, as well as try to anticipate the actions of the other carriers. For example, in some markets, including several of our case studies, when one hospital owns a carrier, the other hospitals align with other carriers and offer their own alternative networks. This can create very complex and sensitive contract negotiations.

In fact, the hospital-owned carrier may lose money on Exchanges while the hospital sees gains. High renewal increases in premium may weaken the hospital reputation. And so on.

Impact on Physicians

As discussed throughout this report, uninsured patients have trouble paying physicians and other providers for health care. Individual Exchanges have a positive impact on funding for physicians.

In addition to the direct impact on payment, there are many other business implications. These vary substantially for each physician depending on many factors such as specialty, location, volume and mix of patients, capacity and working environment. An inner-city physician working at a clinic for low-income members has a very different perspective than a sole practice, suburban physician working primarily on insured patients. The perspective of a specialist is very different from a primary care doctor or obstetrician. Often, there is wide use of nonphysician staff for low-income and uninsured members.

This section offers a snapshot of the many diverse business situations and factors that impact development of physician networks for Exchanges. It also outlines how physician-based networks can provide strong support for physicians while improving performance.

Payment (Fees and Other Compensation)

Without Individual Exchanges, many low-income patients will pay directly for health services. They may get a slight discount for immediate payment but often pay the full billed fee over time. This means uninsured members face the highest fees (an individual person does not have the leverage of the government or carrier to obtain substantially lower fees from physicians). This is particularly an issue for urgent and emergency services; the patient often cannot shop for a better deal. Thus, if collected, physician payments from uninsured members are slightly higher for a while. However, these are more than offset in the long term. As illnesses become more serious, nonpayment becomes very challenging at the same time as the number of services and outstanding bills rise.

There are some other sources of payment. Some low-income patients are covered by Medicaid although coverage may be intermittent. Other patients may be partially funded through waivers, grants or special programs. If payment comes through Medicaid, the fee schedules are much lower compared to other payers like Medicare and commercial insurance. Many physicians do not participate in Medicaid because of these low fees and other challenges that come with serving these members.

Most physicians have a choice of patients and whether to serve patients who do not pay their bills. This is very different from the hospital situation. Physicians do not face a large unpaid bill such as a hospital admission.[31]

Physician payment under Exchange products is typically better than Medicaid, although the physician still must collect the deductibles and coinsurance. Funding under Exchanges improves for some of these reasons:

- Medicaid carriers that offer Exchange products often offer to increase their existing fees for Exchange members.
- Some traditional carriers continue the same fee schedules and contract terms for Exchange members. Providers are offered increased volume at the same contract terms. This is particularly true if an HPN is already offered to non-Exchange buyers. Existing efficiency means lower premiums and less need for reduced fees.
- Some carriers asked physicians to take lower fees to attract more price-sensitive Exchange buyers—in effect, more buyers and revenue, but at a lower per-service fee. Anecdotal information and personal experiences say that this offer (lower physician fees) was not common. Also, even if the carrier proposed lower fees, some physicians did not accept.
- Higher fees for Exchange patients as compared to Medicaid or uninsured patients mean more physicians participate and offer services.
- Some Exchange programs also raise total compensation by including various bonus payments for quality, efficiency or service (particularly if these payment arrangements are already available from carriers).
- The payments are only one of the business considerations. Each physician still needs to evaluate the impact on their own situation. The impact on any particular physician varies widely.

[31]Exchanges are very important to hospitals given their overhead and regulatory requirements to cover unpaid admissions and emergencies. This is discussed in the Impact on Hospitals section.

Capacity

If many existing patients are uninsured, a physician's decision to participate is clear; it increases funding for the same patients and has little impact on capacity. But, for some physicians, Exchanges bring in many new patients, which can strain capacity. There were many early articles about physician participation, poor communication and outdated network directories. However, access and capacity are part of a complicated long-standing problem for low-income members and Medicaid. Various stakeholders have very different conflicting perspectives.[32] Exchange networks offer only a partial solution to a complex problem.

Mix of Patients

Some physicians primarily work with low-income or Medicaid patients—for example, an inner-city practice or a Federally Qualified Health Center (FQHC). They understand the characteristics of these members and how to address their health and other circumstances.

Other physicians have a mix of patients including insured and uninsured patients. For example:

- A primary care physician who works mostly with insured patients may continue services when a current patient becomes uninsured or faces financial challenges.
- Rural physicians may serve both types of patients as a normal part of practice.
- Physicians often specialize in certain types of populations; some already work with low-income patients. These people can start with serious health conditions, face special challenges and come from a different social environment. These clients are attractive for some physicians, but not others.

Exchange members come with different administrative rules than Medicaid patients, and the physician's administrative staff would need to adapt to new rules as the patient mix changes.

Location

The location of the physician has a large impact on enrollment and patient characteristics. Networks historically are more common in urban or suburban locations, so most Exchange networks simply use their existing networks or a subset of providers within those networks.

Rural networks offer special challenges. In rural communities, there is often a shortage of physicians, particularly specialists. Many rural hospitals do not treat all illnesses. In other rural locations, a general hospital may treat most illnesses but be the only available hospital with leverage to raise prices.[33] With only one hospital, admitting privileges are needed. When the local hospital wants to participate on an Exchange the carrier would include the local physicians. Physician participation is usually straightforward since physicians can increase revenue given access to insurance. For missing specialties, the carrier or provider makes special arrangements to bring the appropriate resources to the community. Some Higher Performing Networks extend their core specialist network into outlying areas. Locations where some services are not available also have different regulatory access requirements.

Specialty

Each specialty has a unique view of Exchanges. As a few examples:

- Many babies are delivered to low-income mothers and the physician is unpaid. Thus, Exchanges can have a positive impact on revenue and net income.

[32]A physician expects choices: Participate in a particular product at a particular payment? Close their office to new members at some point? Treat difficult patients? This is different from the perspective of the states and carriers, which want many participating providers to serve their members.

[33]Our rural area case studies (nos. 4 and 6) focus on larger rural areas. They have multiple hospitals with a wide array of services. This is not common.

- Primary care is crucial, but the supply of primary care physicians can be a challenge.
- Mental health problems can be a major factor for some patients.
- Some specialties have more leverage and can negotiate much better insured fees than others, so Exchange coverage may increase fees substantially. Whereas for other specialties, the fee changes from Exchange products is more moderate.

The short-term financial impact is generally positive for all specialties, as uncompensated or underpaid services become paid. However, this is dampened by deductibles and coinsurance if they may not be collected from low-income patients. However, the long-term impact of Exchanges can be less clear. For example, emergency physicians see many low-income patients, so Exchanges offer an immediate increase in funding, although emergency volume may decrease over time, if members replace emergency care with improved access to primary care or other support.

It is also important to consider the impact on other professionals. Many low-income members get support from nonphysicians. Members often build relationships with nurses and nonprofessional staff. For example, some Medicaid programs find that patients are far more receptive when health improvement advice is offered by nonprofessionals. They see this as a conversation rather than an office visit. Staffing for Exchange programs is not just about the doctors and professional staff.

Working Environment

Historically, many physicians worked in small practices in many locations. But, in some parts of the country, physicians work as part of larger organizations (in effect, "physician-based networks"). This includes staff models, independent practice associations (IPAs) and hospital-owned physicians in both the commercially insured and Medicare Advantage markets. There have also been physician-based networks focused on Medicaid populations, either within clinics (e.g., FQHCs), managed Medicaid, special grant-funded programs or other special programs for specific health conditions.

Recent years have seen a large growth in the role of these organizations, ranging from pilots to large programs throughout various parts of the country.

There are various voluntary physician organizations with a wide range of roles including lobbying, clinical initiatives, fee negotiations, performance improvement or other topics. A subset of organizations can create higher performance, and this subset can be very useful for Exchange networks. In fact, physician-based "networks" are an important force behind some continuing Exchange networks. In most cases, these physician-based networks were used for other insured products before they were applied to Exchange products.

Higher performing physician-based networks are difficult to develop, but when they work, their performance gives them a strong role in the community and brings various advantages for physicians beyond just better fees. Funding from performance-based bonuses pays for infrastructure and education to support physicians and patients. Physicians may see more career satisfaction as member care improves. Lower overall expenses through economies of scale result in higher net income.

The stronger programs may include:

- Performance-based bonuses
- Physicians that build management expertise and visible leadership
- Infrastructure to support and improve physician performance
- Reports that are useful and intuitive to physicians
- A strong education program with social reinforcement
- Links created between doctors and members based on member choice at the time of enrollment and
- Physician-based organizations that create a counterbalance to other large and powerful organizations in the local community.

Section IV: Highlights of the Case Studies

Highlights of Case Studies

Affordable, Individual insurance is challenging to deliver. In some locations, alternative networks are a core component of Individual Exchange products. In others, alternative networks are not available. The report has picked six markets with multiple networks to show how networks work in various markets. Each market is different and changes over time, so although these case studies are informative, these are not intended to represent other markets.

The case studies include large urban markets, suburban/rural markets and one medium sized urban market. For comparison, for two states, we show two markets: a large more urban market as well as a nearby suburban/rural market. This allows comparisons between the two environments.[34]

As shown in Table 2, each of the markets has a very different mix of carriers and networks, with some carriers offering more than one network.

Table 2 Carrier Types and Number of Networks

Location	Case study	Size/Type of Market	Types of Carriers					Number of Networks
			Total	National or Regional	Medicaid	Provider-owned	Co-op	
Western	#1	Medium/Metro	4	0	1	2	1	4
California	#2	Large/Metro	6	2	2[35]	2	0	9
Northern state								
—	#3	Large/Metro	4	3	0	1	0	7
—	#4	Small/Rural	4	3	0	1	0	6
Southern state								
—	#5	Large/Metro	8	5	1[36]	2	0	11
—	#6	Small/Rural	5	4	1[37]	0	0	7

There are three parts of this section:

- Structure of Case Studies
- Alternative Network: Definitions
- Case Study Highlights

[34]The case studies do not list the names of carriers, products or states. This lets the reader focus on the network situation rather than any particular carrier or state. Also, given the rapidly changing Exchange environment, a one-time snapshot may not reflect the current situation.

[35]One carrier is dedicated to Medicaid. One additional carrier in California operates in many lines of business but has a substantial Medicaid enrollment.

[36]The Medicaid carrier was new to the Exchange and did not get much enrollment.

[37]The Medicaid carrier was new to the Exchange and did not get much enrollment.

Structure of Case Studies

Each case study shows a variety of information about carriers, products, premiums, network composition and service areas for six different Individual Exchange markets. Each case study offers the following pieces with various supporting tables:

- Market profile
- Key statistics
- Hospital network by carrier
- Carriers, metal plans and member statistics
- Other information and
- Conclusions.

As described in the full report, each case study is based on multiple sources of data and published articles. Most of the data were straightforward, although the enrollment data were challenging given the multiple sources, formats and slightly different timeframes. The report focuses on hospitals rather than physicians given the limited and different sources on physicians across markets.

Alternative Network: Definitions

Modern programs in states where networks are common focus far more on performance than size. However, size is one major criteria and offers a visible starting place to view networks. Many Exchange programs are built around existing alternative networks since they have sustained better performance than broad networks. Some broad networks are no longer available.

Each case study measures the coverage of hospital networks since the hospital coverage is visible and useful public data sources are available.

The provider network can offer almost all providers (a broad network) or develop alternative networks using subsets of providers. A broad network might include almost all hospitals and specialists in an area, while various alternative networks include fewer providers.

The report uses various adjectives to describe the size of the hospital network in the six case studies.

These adjectives simply describe the size of the hospital network; the adjective is not a statement about value or performance. It does not reflect the depth, integration or level of performance. For instance, a staff model network may be listed as “local” or “very narrow” but offer extensive highly integrated services within the community it serves. In certain locations, with many alternative networks, a choice of networks is expected. The full set of network definitions is below:

Hospital Network Coverage Definitions

- “Broad” hospital network has hospitals with more than 80% of the hospital admissions.
- “Alternative networks” means various smaller networks within the report, that is, any network that is not broad. We use a finer breakdown within the case studies:
    - “Narrow” hospital network has hospitals with 20% to 80% of the hospital admissions.
    - “Semi-narrow” hospital network is like the “narrow” network. It still excludes a major hospital or excludes several small hospitals, but it covers enough services and geography to have many characteristics of a broad network.
    - “Very narrow” hospital network has hospitals with less than 20% of the hospital admissions. This is often used in limited service areas or by provider-owned carriers.
    - “Local” network is only available in a small number of counties or ZIP codes within a county that is aimed at a small subset of the market. A local hospital network often parallels the service area definition (and often does not

contract with hospitals outside of the local community).[38]

Most of the carriers in the six case studies offer products in most counties and ZIP codes. However, some products are offered only within certain local communities that are part of the larger rating area, particularly in case studies 5 and 6. This local network coverage may be a small percentage of total admissions within the full rating area, but may be broad for admissions within the local community. It is important to understand the network "service areas" as well as the hospital coverage within those areas. More definitions of service area are in Appendix A1: Key Terms Used in the Report.

As a final note, Exchanges require sustained strong network performance. Many criteria are used for evaluating network performance. Size, by itself, does not equal performance. Some smaller alternative networks are not distinctly better than typical broad networks. Others have much better quality and efficiency. As stated in another report by a co-author, "a critical mass of responsible providers . . . performs significantly better than the typical health program"[39] that has a broad network. Some networks in the case studies have much lower premiums to members than broader networks. This is one criteria to be an HPN in the context of this report. Assessments for whether any of the networks in the six case studies are an HPN is beyond the scope of this report. However, the full report has an extended discussion on assessing higher performance.

Case Study Highlights

Before getting into these six markets, let's summarize the national situation. At the beginning of 2016, 12.7 million members were enrolled in Exchanges. The average premium was $396 per month with a $106 net member contribution after the subsidy (premium tax credit). The subsidy was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average.

For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in each case study.[40]

The next few pages cover various highlights. The final page of this section consolidates the key charts from each case study; it shows the annual premiums, hospital coverage and enrollment for each case study market.

Although each market was different, several consistent findings were made across all case studies:[41]

1. Hospital systems in many locations voluntarily aligned with specific carriers. There was a wide range of hospital coverage in each market.

2. Many alternative networks had lower premiums. Broad network premiums were higher than average and sometimes were the most expensive products.

3. When alternative networks had a much lower premium, the network generally had a large membership and market share.
    a. Case Study 1 saw only alternative networks offered.
    b. Case Study 2 had more than 80% of Exchange members in alternative networks.
    c. Case Studies 3 and 4 have most of their enrollment in smaller hospital networks.
    d. In Case Studies 5 and 6, alternative network premiums were not much lower and their market share was less.

4. Lower premiums offset smaller hospital coverage in the markets for Case Studies 1 through 4.

5. Slight differences in premiums (and the resulting net member contributions) did not have much effect on member product selection. Thus, if premiums are similar, a member does not have a compelling reason to choose an alternative network instead of a broad network.

[38]Other articles often define this situation as a "very narrow" network since it covers only a very small percentage of the admissions in the full rating area. However, given the much smaller service area, this situation (a network built around a few local hospitals) seems to warrant its own unique adjective. This is a subjective judgment.
[39]http://www.pbgh.org/storage/documents/commentary/HiPerfNetworkBrief_Final3.pdf.
[40]Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.
[41]As mentioned before, these reflect the six case studies in markets with multiple alternative networks and may not apply in all markets.

6. Depending on the market and specific organizations involved, each type of insurer (national, regional, Medicaid, provider-owned and cooperative) had products with below average premium and higher enrollment.

Premium and hospital coverage are two of the many factors that lead a member to choose a network. Other factors include availability of their physician and carrier perception and continued enrollment with an existing carrier (unless they face a large increase in their cost). Comparative shopping can be difficult, so there can be a large impact from the press coverage, marketing, communication, web support and/or advice from their advisors.

Each market has its distinct characteristics (as shown in the charts below):

- Alternative networks are common in Market 1. The Exchange has only alternative networks (including one from a Medicaid carrier). Each hospital system aligned with a different carrier.
- Alternative networks are common in Market 2 and have more than 80% of the enrollment. Most hospital systems are aligned with multiple carriers. Multiple carriers and products are available and split the enrollment.
- Two alternative networks products have most of the enrollment in the Northern state (Markets 3 and 4). Broad networks are more expensive, in some cases, the broad network is much more expensive, except when offered as a "local" network in only part of a rating area.
- The Southern state has a particularly complex environment, and the results are different from the other case studies. It is hard to summarize without losing important details, but, as a quick summary, there is very little difference in premiums for any of the programs. Broad networks were slightly more expensive than other products; they had half the market share while alternative networks split the remaining enrollment. This may be partly because of the carrier and hospital business decisions. The two major hospital systems only contracted with the broad network. The Medicaid insurer just entered the market and had minimal enrollment.

  In addition, there are many local (small) service areas in this state. The major carrier with the largest enrollment covers the entire service area. Many other carriers had smaller service areas. This partly explains the smaller enrollment and hospital coverage. Some carriers had alliances only with local hospitals within the service area.
- HMOs with alternative networks were the most common product across the case studies. In the Northern state, one carrier offered Exclusive Provider Organization (EPO) products, which had the most enrollment (Case Studies 3 and 4). From purely a network perspective, an HMO and EPO are similar and appear to have filled the same role in their respective markets. PPO networks had far less enrollment than other products (possibly because of the financial impact of out-of-network payments).
- POS products were not common in most case studies; however, an "open access" POS network has the largest enrollment in the Southern state (Case Studies 5 and 6). However, as discussed above, this is a very complex market, and the type of product probably was not a major driver of enrollment.

The following charts show key results for each of the six markets. Note that the charts for Markets 5 and 6 are complex and should be read cautiously: the hospital coverage percentages do not reflect the local service area and understate their local presence.[42]

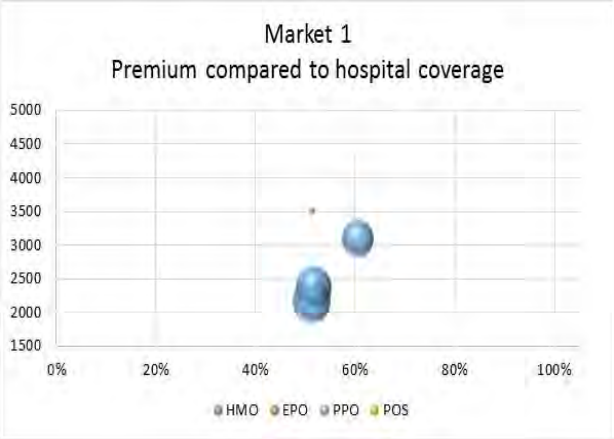
The annual premium is shown on the left, and the hospital network coverage (the "size of the network") is shown on the bottom as a percentage. The size of the bubble shows relative market share for each network. The color of the bubbles shows the type of product. As shown in the table:

- The products with higher enrollment have the largest bubbles. As mentioned above, these primarily show up on the lower left side of the grid: alternative networks tended to have smaller networks, lower premiums and greater enrollment.
- The products on the bubbles on the right side of the grids (i.e., those with the biggest hospital networks) are typically smaller bubbles (i.e., have lower enrollment) and are on the higher half of each chart (i.e., higher premiums).
- As mentioned earlier, the situation in the Southern state (particularly Market 5) is unique given many small service areas.

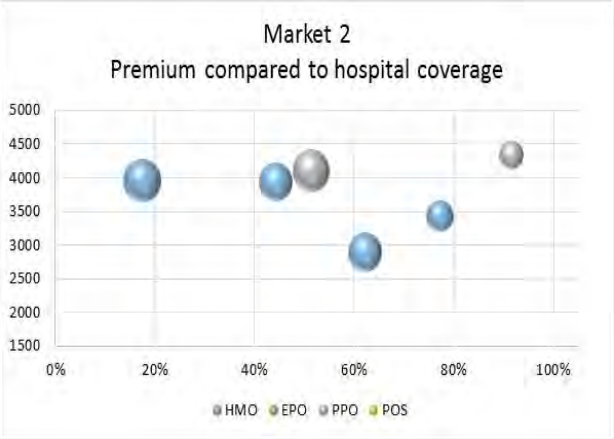
[42]As discussed in the case studies, the hospital coverage percentage is calculated across the entire rating region. A more appropriate percentage comparison only to hospitals in the local service area could not be done given data limitations.

In addition, premiums are similar across the chart. The broad network POS product (the large bubble on the right) has the largest enrollment.

Western State

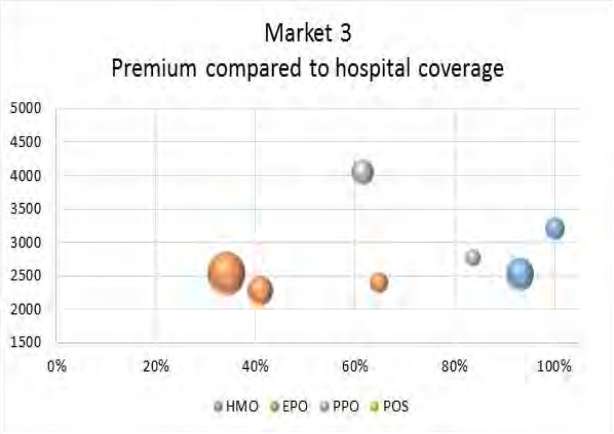


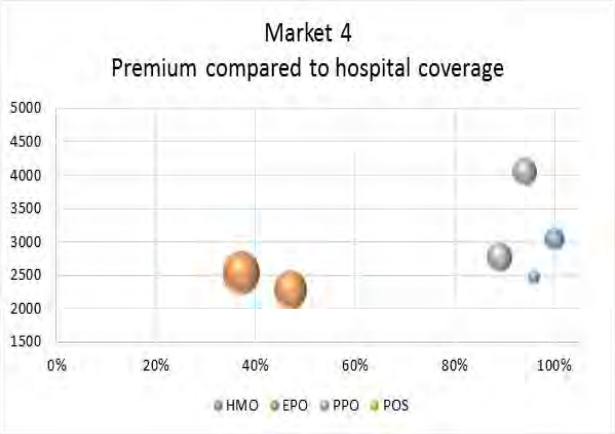
California



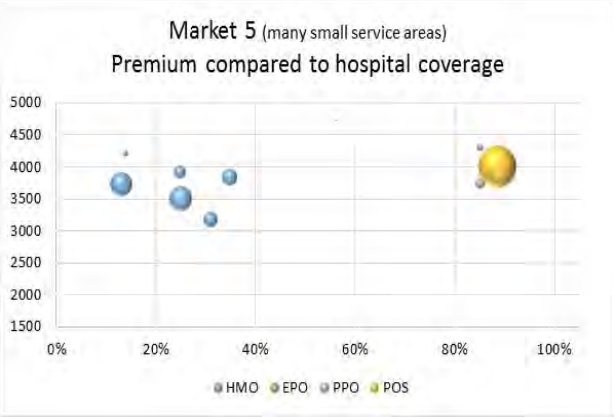
Market 2 shows carriers (not networks) given limited data

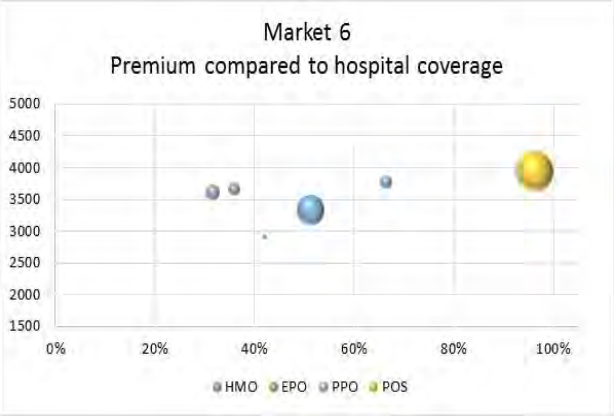
Northern State





Southern State





In Market 5, many carriers on the left only served small service areas. This partly explains the smaller enrollment and lower hospital coverage.

Major Observations

Affordable health care is an ongoing challenge in the U.S. and is particularly difficult for low-income people and the providers that offer services to them. Individual insurance through Individual Exchanges was created by the PPACA legislation to work on these challenges. There is wide variation in results across the country.

At the same time, alternative (narrow) networks are used in some parts of the country to create more affordable programs outside of Exchanges. These network approaches have been used in some parts of the country to lower premiums for Exchange products. The results vary widely. Given this variation, perceptions on networks and Exchanges vary widely cross the country. Approaches used in one part of the country are often not known in other locations.

This report provides a consolidated source for information about networks. It offers various case studies, discusses the impact of networks on the key stakeholders, provides sample analysis and shares information about approaches to develop, assess and improve networks.

The following material highlights our major observations and identifies the part of the report that addresses each observation (in italics and parentheses):

1. Health care is very expensive for people, especially those with low incomes:
    a. The costs of services or insurance are a very large percentage of income. Networks and Exchanges offer them a much better financial position but complex choices. *(Impact on Individuals and each case study)*
    b. State governments have taken many different approaches to networks for their low-income populations. *(Impact on States)*

2. It is very difficult to create sustainable, low-premium individual insurance products. *(Carrier Challenges and Opportunities)*
    a. Some, but not all, alternative networks help to lower premiums. *(highlights of case studies and each case study)*
    b. Rate increases for Exchanges across the country continue to be very high. In many states, most carriers have dropped out of the market. In other states, there are still multiple carriers. Our six case studies are pulled from states where there are still multiple carriers and show that some alternative networks produce much lower premiums.

3. Exchange members choose products with lower premiums even if the network is smaller. *(highlights of case studies and each case study)*
    a. The case studies show snapshots of how Exchanges work in six different markets where members can choose from multiple networks. Although each market is different, the financial implication is consistent. Most members chose alternative networks that have lower premiums. Fewer members chose products with high premiums whether the network is broad or narrow. This is most visible in the first four case studies.
    b. In the last two studies, the premiums are close together without a distinct low premium carrier and some alternative networks cover only some counties. In these studies, the broad network and various alternative networks split half the membership.
    c. Each full case study at the end of the report offers much more detail and multiple statistics on each market.

4. Many alternative networks happen when a key hospital system or physician group aligns with a key carrier:
    a. Most alternative networks are alliances between carriers and providers. Most of the examples in the case studies are hospitals. This includes some hospital-owned insurers. The California case study includes both hospital and physician-based networks. *(each case study)*
    b. Exchange products offer hospitals an opportunity to solve a major financial challenge—how to get paid for low income patients. As a result, some have joined alternative networks. *(Impact on Hospitals and each case study)*
    c. Physician groups in some locations ally with carriers and take a larger role in population health and management of their local health system. *(Impact on Physicians)*

5. There is a wide variation in network performance; many elements are needed to create HPNs.
    a. The report outlines major elements that drive higher network performance. Some happen before the plan year since the carrier must decide on their provider strategy, identify potential allies, set fees and reach agreement before they decide to offer an Exchange product. (*High Performance Networks: Actions Prior to the Start of the Plan)*
    b. HPNs and their physicians work throughout the course of the year to create higher performance. Various ways to assess and improve network performance are discussed. *(Higher Performing Networks: Ongoing Performance)*

6. Given the large financial impact of strong networks, deep analysis is needed to develop higher performing networks.
    a. Multiple types of analysis are done on networks, but hospital contracts have been one driving force for network performance on Exchanges. Often this uses existing internal carrier data but may require outside sources. Various detailed examples of calculations are available (Appendix A7: Pricing Alternative Networks).

7. The results of the case studies are a snapshot at a point in time. The general characteristics of these markets are similar in 2017, although premiums and some of the carriers have changed. Sustained ongoing performance will depend on many important questions starting with:
    a. How does the federal government situation change?
    b. Do the insurance challenges, such as the selection problem, overwhelm the capabilities of the carriers and providers?
    c. Do the key stakeholders (carriers, hospitals and physicians) continue to be committed to low-income members, and can performance improvements overcome any insurance challenges?

As a final observation, this report offers insights into networks in general, not just the ones in Exchanges. As discussed in item 2 above, "Some, but not all, alternative networks help to lower premiums." This is not just about Exchanges; some networks demonstrate higher performance outside of Exchanges. In fact, some of the networks with high market share in Individual Exchanges also work on other lines of business. This includes commercial insurance programs, self-funded employers, Medicare Advantage or Medicare managed care, or new approaches such as the higher performing ACOs.

Some sections of this report are broadly applicable. Content can be used to develop and review networks outside of Exchanges (with some customization to the specific situation). This includes the analyses presented in the Pricing Alternative Networks appendix, the sections about High Performance and Higher Performing Networks and the Impact on Physicians section. Other sections are more applicable for Exchanges, including the sections on the Impact on Carrier and the Impact on Hospitals.

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Appendices

List of Appendices

A1: Key Terms Used in the Report 69
A2: Data Sources 72
A3: Lessons from Higher Performing Networks 75
A4: Major Provider-Based Initiatives 76
A5: Reduction of Wasted Services: Example 77
A6: Quality Metrics 78
A7: Pricing Alternative Networks 84
Evaluating Alternative Network Cost Savings 84
A Savings Model for "Alternative" Hospital Networks 86

A1 Key Terms Used in the Report

This report is written primarily for people with moderate to high expertise in health care and insurance. It does not offer a full glossary, but this section identifies key common words used in this report. The report does not use specific legal wording (often unique multiword definitions) from the Affordable Care Act (ACA), which created the Individual Exchanges. As two examples:

- A "Premium Tax Credit" is calculated in PPACA to subsidize Exchange products. The report just calls this *the subsidy*. The word subsidy is widely used in the industry from Exchanges and other similar payments such as payments by employers to support their employees.
- The federal Exchange website refers to insurance carriers as "issuers." We use the more common word *carriers.*

Key Terms: Exchanges or Individual Exchanges

This report deals exclusively with Individual Exchanges under the Patient Protection and Affordable Care Act (PPACA). Other types of exchanges, such as PPACA exchanges for small employers or private sector exchanges for large employers, are not covered in this report although networks are common in these programs. Although not used in this report, some people also use the word "Marketplace" for the government Exchange program.

The report uses one of two phrases for the overall program:

- Exchange
- or Individual Exchange

Insurance Industry Terms: Carrier, Product, Type of Product (PPO, HMO, EPO and POS)

The report uses various terms from the insurance industry:

- Insurance carriers offer insured health *products*.
- This report talks primarily about payments to hospitals and physicians. However, an Exchange product pays many additional organizations and individuals for their services. The report uses the word *providers* as the overall term to include all organizations and individuals that offer health services within an Exchange product.
- Providers can join carrier networks (*in-network).* If they do not contract with the carrier, they are *out-of-network*.
- Various types of products related to networks are available: *PPO* (Preferred Provider Organizations), *HMO* (Health Maintenance Organizations), *EPO* (Exclusive Provider Organizations) and *Point of Service* plans (POS). Each type of product defines how to pay providers that are *in-network* and *out-of-network*. These words are widespread in the industry, although important legal variations are found in the definitions of each product for each state.

Key Terms: Sponsor and Line-of-Business

Health care programs are *sponsored* by buyers that are the major funding source for the program. This includes Medicare, Medicaid, regular commercial insurance and self-funded large employers. Each *sponsor* has very different rules and payment systems. Exchanges generally fall under the rules of commercial insurance programs with added requirements created by the ACA legislation. Carriers often work for multiple sponsors and have created operations around each line-of-business.

- *Sponsor* means the buyer that provides most of the funding for the program (like an employer who buys group insurance).
- *Line-of-business* means the carrier operation related to a specific program and the associated products.
- *Commercial insurance* means the regular insurance products that carriers offer *to* individuals or *sponsors*.[43]

[43]The words "commercial insurance" are often used within the insurance industry and by some providers. These words are less common outside the industry. Members just think of it as health insurance. This can cause confusion among some audiences.

Key Financial Terms:
Payments and Provider Expenses
(Fees, Billed Charges, Contractual Fees, Unit Costs and Internal Expenses, Waste Reduction)

The payment systems for health care are very complex. Payments vary by sponsor; payments by uninsured members are different from payments if there is a sponsor. There are also various alternative payment systems underway and being developed.

As a result, many different words are used for the payments made by carriers and members to the providers working on the programs. This creates multiple perspectives often for the same word. For carriers, a payment is a claim and expense to the system. A provider has the reverse perspective and sees the carrier payment as their revenue and one part of their income (which may be supplemented by additional payments from members). A member sees only their own payment.

The report uses a handful of words to discuss provider payment. The first two, *payment* and *fees*, are widely used in the report. The other words are used in specific sections.

- The word *payment* is the most general term.

- The word fees is widely used to discuss the specific payments that are made to providers for their services. For example, the fee is paid for an office visit or hospital admission. We use some additional words to clarify the specific context of the fees:
    - *Billed charge* is the list price or retail price for the service.
    - *Contractual fee* is the overall member payment to the provider. Part comes from the payment made by the carrier, and part may come from the member (the patient). This is based on the contract between the provider and the carrier.

- *Unit cost* is often a synonym for *contractual* fees when detailed financial analysis is done. The report uses this word only in the Pricing Alternative Networks section of the report.

The report primarily focuses on the combined payment from carriers and members to providers; these contractual fees are revenue to the provider. However, this gives an incomplete picture of the financial position of the providers. Providers understand their net income (after expenses) as well as the overall revenue (i.e., gross income).

- The report uses the word *internal expense* when discussing the expenses for the provider.

Carriers tend to use the word efficiency in discussing financial performance. This is not widely used among providers or policymakers. Some leading providers consistently use the phrase “Reduce Waste” in their internal and external discussions to mean improved efficiency and better financial performance. These words resonate with physicians and staff. Some policymakers are beginning to use the words “Smart Spending” to reflect the same topics. There words are not quite the same but are similar enough that we use them as synonyms to mean the same thing in this report.

- Since this phrase is used by some leading providers, we use the words *waste reduction* when discussing networks in this report.

Key Terms: Size and Coverage of Alternative Hospital Networks (See Terms Below)

There is widespread discussion of alternative narrow networks in articles about Exchanges. A provider network can include almost all providers (a broad network) or develop alternative networks using subsets of providers. Some Exchange programs are built around existing narrow networks. The adjectives below are used extensively in the six case studies.

Adjectives like "narrow" simply describe the size of the hospital network; the adjective is not a statement about value. It does not reflect the depth, integration or level of performance. Size offers a visible starting place to view networks, but size is only one criteria to evaluate the value and performance of networks.

The case studies analyze hospital admissions and coverage and service areas. The following adjectives are used in the case studies.

Hospital Coverage Definitions

Hospital network has hospitals with more than 80% of the hospital admissions.

"Alternative networks" means various smaller networks within the report, any network that is not broad. We use an even finer breakdown within the case studies:

- "*Narrow*" hospital networks have hospitals with 20% to 80% of the hospital admissions.
- A "*Semi-narrow*" hospital network is like the "broad" network. It still excludes a major hospital or excludes several small hospitals, but it covers enough services and geography to have many characteristics of a broad network.
- "*Very narrow*" hospital networks have hospitals with less than 20% of the hospital admissions. This is often used in limited service areas or by provider-owned carriers.
- A "*Local*" hospital network is available only in a small number of counties that is aimed at a small subset of the market. A local hospital network often parallels the service area definition (and often does not contract with hospitals outside of the local community).

Service Area Definitions

In many locations and most of our case studies, the carrier offers products in most counties and ZIP codes. However, in a few case studies, the product is not offered throughout the entire rating region. Our case studies use three adjectives:

- "*Broad*" service areas cover most counties/ZIP codes.
- "*Limited*" is smaller and covers a limited number of counties/ZIP codes.
- "*Local*" covers only a very small service area. Note that the word local is used for both hospital coverage and service area since the service area includes only the comparable local hospital(s). A local service area is directly tied to the definition of "local hospital coverage."

Higher Performance Network (HPN)

Exchanges require sustained strong performance. Some alternative networks have much better performance (efficiency, quality etc.). Other networks do not perform distinctly better than typical broad networks. As a working definition that is refined in the report,

- "*Higher performance network*" (*HPN*) means "A critical mass of responsible providers … which performs significantly better than the typical health program"[44] that offers a broad network.
- Given the importance of performance, two sections of this report have a deeper discussion of HPNs.

[44] http://www.pbgh.org/storage/documents/commentary/HiPerfNetworkBrief_Final3.pdf.

A2 Data Sources

The research relied on multiple publicly available data sources, as well as insights from the researchers' personal experiences including work on Individual Exchanges.

Premium and net contribution data were pulled from sites such as HealthCare.gov, the HHS PUF files and information available from state Exchange web sites. Premium subsidies (Advanced Premium Tax Credits) in the case studies are based on the available information and the applicable regulatory guidelines. We used similar sources for definitions of the ACA rating areas and evaluating the carriers and the products that they offered, including service area exceptions. This data and information were included in the product and rate filings that were submitted to the applicable state and federal regulatory entities. Various data sources were collected for different periods of time and different formats. National data varied from state-level data. The magnitudes were generally consistent but required some minor adjustments to get comparable tables across the six case studies.

The provider network data was compiled from each carrier's online provider network directories. Carriers filed the network directory website links with their product filings for state and federal regulators. Our researchers followed these links and matched the carrier networks in the provider network directories that most closely aligned with the product names and descriptions that were included in the product and rate filings. We performed this research throughout 2016 and 2017, so the lists of hospitals, physicians and other health service providers were collected "as is" and as a "snapshot" for the time when our researchers collected the information. Provider network data changes from time to time, as organizations make updates for providers that are leaving or joining their networks or correcting general data errors.

The demographic and enrollment data that we collected came from multiple sources in addition to the information that was available from the federal and state Exchange websites. The source data were collected for different periods of time and had different formats. National data varied from state level data. In some states, data such as membership by carrier and rating area were readily available; however, in other states those data were difficult to acquire. Our researchers identified and relied on other sources such as news articles where carrier or public representatives cited statistics about membership levels or market share percentages to supplement the data. We focused on 2016 but occasionally supplement this with data from other years. Our demographic and enrollment figures that are included in the report and in our case studies represent our researchers' "best estimate" approximations based on all available data and supplemental information. We believe the data and information derived for and represented in our case studies are good, reasonable representations of the actual membership patterns and levels in each of the case study markets for 2016.

The report includes a hospital financial model that provides an illustration of how to measure hospitals aggregate contracts. This shows market share, hospital *billed charges,* hospitals' operating costs (*internal expenses*) and discounts. This comes from Medicare cost reports and the Medicare prospective system claim file summaries for inpatient and outpatient services. It can also be supplemented by local charge-master data. Some of these data were acquired and compiled for the researchers by AHD.com.

The researchers evaluated many data sources, research reports, articles and other publications to check against the primary data sources. This was used for data validation and as a magnitude review. Materials were at statewide or national levels or were developed for specific markets. Examples of the types of sources for the reports that we reviewed and referenced relative to our results were from organizations such as the CMS Innovation Center, McKinsey Center for U.S. Health Reform, the Henry J. Kaiser Family Foundation, the Robert Woods Johnson Foundation and the Commonwealth Fund.

Data Sources for Details

This document provides descriptions and links to the major data sources that the researchers relied upon for the case study analysis and/or other examples that are utilized throughout the report.

The premium comparisons used *premium rate* data from the referenced federal PUF/Rate sheets. *Subsidy* calculations were calculated for each plan. This calculation was written based on the links under "Calculation of Premium Subsidies" below along with the link to the FPL, which is needed in the calculation and the premium comparison. The last item needed was the *distribution of enrollment;* those sources are below by state.

Premium Rates and Other Data from Public Use Files

https://www.cms.gov/CCIIO/Resources/Data-Resources/ratereview.html

https://www.cms.gov/CCIIO/Resources/Data-Resources/Downloads/2016_PUF_20161103.zip

Calculation of Premium Subsidies

This link provides calculation steps, example calculations and numerous links to the necessary tables.

<https://www.healthinsurance.org/obamacare/will-you-receive-an-obamacare-premium-subsidy/>

Some of the more useful data are found in the links below. They also contain other links with information to help the researcher fill in the gaps in their understanding of how the subsidies work, even the state-specific aspects.

http://www.kff.org/health-reform/fact-sheet/analysis-of-2016-premium-changes-in-the-affordable-care-acts-health-insurance-marketplaces/

https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-06-30.html?DLPage=1&DLEntries=10&DLSort=0&DLSortDir=descending

https://aspe.hhs.gov/system/files/pdf/198636/MarketplaceRate.pdf

Verifying the Calculations: Links to Verify the Calculations

Federal Exchange Calculator

https://www.healthinsurance.org/affordable-care-act/will-you-receive-an-obamacare-premium-subsidy/

Covered California Calculator

https://apply.coveredca.com/apspahbx/ahbxanonym.portal?_nfpb=true&_st=&_nfls=false&_pageLabel=previewPlanPage#

Federal Poverty Guidelines

https://www.federalregister.gov/documents/2015/01/22/2015-01120/annual-update-of-the-hhs-poverty-guidelines

Distribution of Enrollment by FPL, Age, Gender and Metal Band

Case Studies 1, 3 and 4

http://kff.org/other/state-indicator/population-up-to-400-fpl/

Note: other sources such as published research or articles with local or national level statistics were referenced for reasonability.

Case Study 2

http://hbex.coveredca.com/data-research/library/CC_Open_Enrollment_Profile_2016_Mar.xlsx

Case Studies 5 and 6

https://www.medicaid.gov/medicaid-chip-program-information/by-state/

Carrier Market Share

Enrollment information for carrier-specific market share by rating area was not readily available in each case study market. Multiple sources from slightly different timeframes were used. There tended to be more carrier- and area-specific enrollment information available for state-based Exchanges. Much of this information was estimated based on enrollment data from rate filings (although sometimes enrollment data in filings were aggregated across multiple products or rating areas for a carrier) and published articles that cited carrier enrollment numbers or market share estimates.

Hospital Network Composition, Hospital Market Share Data and Hospital *Billed Charge* Index, POC and *Unit Cost* Index Calculation (e.g., Medicare, Medicaid and Operating Expenses)

Provider Network Directories

Each case study market relied upon the rate filing data and information that is available from HealthCare.gov or from the state's Exchange web site to identify the online provider network directory links that each carrier provided.

HealthCare.gov

https://www.HealthCare.gov/health-and-dental-plan-datasets-for-researchers-and-issuers/

https://www.HealthCare.gov/health-plan-information-2016/

https://data.HealthCare.gov/download/k2hw-8vcp/application/zip

Covered California

http://hbex.coveredca.com/data-research/

http://hbex.coveredca.com/data-research/library/CC_Open_Enrollment_Profile_2016_Mar.xlsx

Note that the provider online provider network directory data was collected based on the data available in the directory at the point in time when our researchers could view the carrier websites. This step was performed during 2016, several months after the initial rate filings with the network directory links. Because of the dynamic nature of provider networks and provider data, it is possible that the "current state" of the hospital networks could have been different from when the rates were filed or when the Exchange members enrolled.

Hospital Discharges, Cases, *Billed Charges*, Payer Revenues, Operating Expenses etc.

For statistics in the case study exhibits related to a hospital's share of admissions, *billed charges* and estimated allowed charges, the researchers relied upon customized hospital cost report data files and the Medicare prospective payment claims file data from the 2014 to 2015 timeframe for inpatient facility (by MS-DRG) and outpatient facility (by CPT/HCPCS) services. These files were created for the researchers by a data vendor called AHD.com (American Hospital Directory). One can learn more about AHD's data sources, methodologies and processes at their website,

http://www.AHD.com.

A3 Lessons from Higher Performing Networks[45]

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ISSUE BRIEF

Lessons from Higher Performing Networks

KEY ELEMENTS FOR FINANCIAL PERFORMANCE

GREGER VIGEN, FSA MBA AND EMMA HOO

Many essential elements of provider-based care are already well known in the industry. Executive leadership, quality improvement, as well as actions to reduce readmissions and support for members with chronic diseases are widespread. However, financial performance for employers requires additional actions that often work behind-the-scenes. As we examined what Higher Performing Networks did differently, the following twelve elements stood out:

Pilots and Initiatives

1. Implement multiple initiatives aimed at financial results (supported by new payment systems). Initiatives extend beyond quality improvement and are targeted to the line of business (such as Medicare, Medicaid, employer, or individual).

Care Coordination & Quality Measurement

2. Improve care coordination and member engagement.
3. Manage future high-risk members - not past illnesses.
4. Use outcomes-focused and value-differentiating measures.

Alternative Payment Models

5. Develop strong ongoing financial agreements on overall costs (with purchasers).
6. Implement selective "aligned incentives" over time (with individual providers).

Management, Roles and Responsibilities

7. Use the full resources and unique capabilities of responsible, informed providers – from the executives to individual providers.
8. Reduce waste and related internal operating expenses across the system – demonstrated by multiple initiatives and a responsible executive.
9. Communicate with allies in deep blunt discussions (cost drivers, responsibilities, duplicate tasks, etc.).

Infrastructure

10. Use multiple data sources to create useful reports to prioritize, create initiatives, and support the individual taking action.
11. Develop infrastructure to support informed action at the right time by the right individual.
12. Monitor economies of scale - particularly for smaller organizations (as they buy, rent, collaborate with other providers, or use allies).

Each of these elements is very important and reinforce each other. Initiatives (1) must be done by responsible providers (7). Misaligned incentives (6) inhibit efforts to reduce waste (8). And, so on.

[45] http://www.pbgh.org/storage/documents/commentary/HiPerfNetworkBrief_ExecSummary.pdf.

A4 Major Provider-Based Initiatives

EXAMPLES OF MAJOR INITIATIVES AND PILOTS UNDERTAKEN BY MANY HPNs

- Real member engagement on health (beyond just the top chronic illnesses)
- Reduction in practice variation and wasted services across the system
- Effective referrals (inpatient, outpatient, other physicians, etc.)
- Condition-specific initiatives
- Patient channeling (for all services, not just inpatient)
- Advanced pharmacy management imbedded in physicians
- Reduce wasted services within the provider system
- Deep physician/hospital working relationships to reduce in-hospital expenses
- Health Information Technology usable by providers and staff (such as disease registries)
- Reduce fraud
- Reduce complication rates
- Reduce re-work and duplicative administrative expenses across the system

[46]

[46]Page 6 of "Lessons from Higher Performing Networks," http://www.pbgh.org/storage/documents/commentary/HiPerfNetworkBrief_Final3.pdf.

A5 Reduction of Wasted Services: Example

Sustainable financial performance and lower Exchange premiums require an ongoing commitment to the reduction of wasted services. The following real, but simplified, example helps understand how reducing waste and expenses can work. This example comes from an alliance of a hospital and unaffiliated physician organization that do not own a carrier. This work began before the advent of Exchanges.

For various business reasons, executives at a hospital and an affiliated physician group wanted to reduce waste and control their expenses for certain Medicare admissions. As a side effect, this reduced the length of stay. Since the new approach for controlling expenses applied for all patients, it had a different impact on different lines-of-business. The lower length of stay reduced revenue from insurance programs that paid on a percentage of charge or per-diem fee basis. It had no impact on Medicare given payments per admission. It had a mixed impact on Medicaid. Lost revenue meant lost margin (income less expenses). So they reviewed results across all lines of business:

- Total revenue was down. Expenses were down. The net impact on overall margin was breakeven: the loss from regular insured business was just below the gain from Medicare and Medicaid.
- Margins continued to improve over time (since commercial insurance contracts could be renegotiated, and capitation in Medicare Advantage and commercial programs was possible).
- The hospital and physician organization appeared likely to pick up enrollment from commercial business.

The net impact was a gain on margin although a loss of revenue. As a result, they implemented the initial program and continued to add new illnesses to the program every year. They also modified their commercial contracts over time to capitation.

Several major financial lessons can be seen from this example. A reduction in wasted resources (and related expenses) was clearly the right thing to do. Losses almost blocked the implementation (revenue was clearly lower in the early years). However, the analysis focused on margin, instead of revenue, and a useful solution was discovered. This higher financial performance had enabled substantial growth in enrollment over the last decade.

A6 Quality Metrics

Defining quality health care and measuring it are a substantial challenge for health care in the U.S. When developing provider networks and/or health care programs, it is important to understand and incorporate the contemporary requirements for quality and measuring it. Because it is such a broad and evolving topic that affects many aspects of care delivery and financing, this appendix merely tries to describe the recent state of common quality metrics that are utilized in the health insurance industry, and it includes a discussion about their implications within networks. There is a significant amount of industry and governmental activity as well as research materials on this topic. This appendix will introduce a few relevant aspects about quality metrics and provides references that readers can investigate further to learn more about this important topic.

Many of the quality metrics attempt to measure activities that are typically performed by providers in a network whether the network is in an Exchange or not. This is not a discussion about the appropriateness or effectiveness of such measures. It is simply intended to make the reader aware of the metrics that are currently considered to be measurable and that can indicate:

- Are providers in a network and/or is a health plan performing specifically defined services that may prevent, identify and/or monitor specific types of health conditions?
- Are providers in a network and/or is a health plan practicing according to specific standards of care for certain limited activities (e.g., frequency of imaging services for certain diagnoses)?
- Do members have access to care and health care information?
- What is member perception/customer satisfaction with the general administration of a health plan and how health services are provided?

Although some of this is specific to Exchanges, most of this section focuses on quality measurement and approaches to quality improvement outside of Exchanges for various practical reasons:

- Exchange programs are new, and there is not much Exchange-specific information available. This is critical as the unique populations within the Exchange have no historical comparators for the quality metrics required to be captured by participating health plans.
- The perspective and approach to networks vary widely across the country.
- The population continues to change as members purchase Exchange products. This happens each year, and member turnover also occurs during the year. Turnover in ACA membership further weakens the efforts to have a stable baseline of results from quality metrics.
- Carriers have quality requirements such as NCQA's HEDIS metrics and CMS Stars. However, there are multiple operational, credibility and privacy challenges measuring a smaller group of Exchange members. In addition, quality information may be collected at the carrier level, but it is not given for specific providers, provider organizations, networks or specific locations.

Fortunately, approaches, quality metrics and reporting systems already are used to evaluate networks outside of Exchanges. For example, Exchanges work through carriers and HEDIS quality metrics are widespread among carriers. Also, many networks that support Exchange members are already used for members in other lines of business (commercial insurance, state employees, large private sector employees, Medicare Advantage and Managed Medicaid). Thus, the approaches are often applied to both Exchange and non-Exchange members.

Many techniques are used to measure quality in the industry. For a background on these techniques and products, the third edition of the Society of Actuaries study research report *Measurement of Health Care Quality and Efficiency: Resources for*

Health Care Professionals offers a summary of quality reporting. It also includes an inventory of programs that were available at that time; many are still being used.[47]

Quality of Care for Exchanges?

A goal of the Affordable Care Act was to bring affordable and high-quality care to those individuals purchasing coverage through the Exchanges. The broad laudable concepts of affordable, high-quality care require that these concepts become actualized in measurement. Section 1311(c) (3) of the ACA directs the Secretary of DHHS to develop a system that publicly rates Qualified Health Plans (QHPs) on both price and quality. The ratings are to assist consumers in their selection of the QHPs in their market. The metrics were drawn from the measure endorsement process of the National Quality Forum (NQF) and the multistakeholder organization Measurement Application Partnership (MAP). Near the time that Exchanges were being developed for implementation, measures were judged based upon the following factors described in the Federal Register:[48]

- *Importance*: the extent to which the measure is important to making significant gains in health care quality, improving health outcomes, has a high impact (high priority) and is relevant to the Exchange population and benefits covered by QHPs.
- *Performance gap:* the extent to which the measure demonstrates opportunities for performance improvement based on variation in current health plan performance.
- *Reliability and validity:* the extent to which the measure produces consistent (reliable) and credible (valid) results.
- *Feasibility:* the extent to which the data related to the measure are readily available or could be captured without undue burden and can be implemented by QHPs.
- *Alignment:* the extent to which the measure is included in one or more existing federal, state or private sector health plan quality reporting programs. The original metrics (described in the Federal Register)[49] continue to be refined over the years.

There are many components of the current quality reporting system, including:[50]

- A *Quality Rating System (QRS)* is currently being piloted in two states (Vermont and Wisconsin) for the 2017 enrollment period. This tests how information is displayed for consumers.
- *Enrollee experience surveys* are conducted to get the perspective of patients.
- Many carriers must implement at least one *Quality Improvement Strategy (QIS)* for the 2018 Plan Year.
- There are also *extensive guidelines and technical specifications* about data collection, surveys, quality improvement and patient safety.

[47]Report: https://www.soa.org/resources/research-reports/2013/research-quality-report/; inventory: https://www.soa.org/Files/Research/Projects/research-quality-efficiency-inventory-2010-update.pdf (this was updated in 2013).

[48]From the Federal Register, "Patient Protection and Affordable Care Act; Exchanges and Qualified Health Plans, Quality Rating System (QRS), Framework Measures and Methodology," A Notice by the Centers for Medicare and Medicaid Services on 11/19/2013, https://www.federalregister.gov/documents/2013/11/19/2013-27649/patient-protection-and-affordable-care-act-exchanges-and-qualified-health-plans-quality-rating#citation-4-p69421.

[49]From the Federal Register, "Patient Protection and Affordable Care Act; Exchanges and Qualified Health Plans, Quality Rating System (QRS), Framework Measures and Methodology," A Notice by the Centers for Medicare and Medicaid Services on 11/19/2013, https://www.federalregister.gov/documents/2013/11/19/2013-27649/patient-protection-and-affordable-care-act-exchanges-and-qualified-health-plans-quality-rating#citation-4-p69421.

[50]https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Health-Insurance-Marketplace-Quality-Initiatives.html.

The metrics used for the QRS consisted of personal experiences of members drawn from the Consumer Assessment of Health care Performance Survey (CAHPS) and clinical measures encompassing outcomes, prevention, access and efficiency. Many in this latter group were culled from the industry standards captured in the Health Care Effectiveness Data and Information Set (HEDIS). HEDIS has been used with commercial health plans for more than 25 years. Of the 42 measures in the QRS measure set, 34 are NQF/MAP endorsed and 32 are drawn from the NQF measures.

Does Measurement and Public Reporting Lead to Improved Quality?

Measurement of some aspects of quality continues to improve as academic studies, providers and carriers continue to improve their approaches. Hundreds of public measures of quality are used across the industry by the experts. However, public reporting of results is more complicated.

Some quality is measurable. Some quality is not. The industry has been focusing on measurable quality and attempted to use financial incentives to improve "measurable quality." The complex expert position on quality is difficult to explain to low-income individuals who consider Exchange products, since they focus on their specific illness rather than the full set of illnesses handled by the carrier and network. And since they do not have access to deep data sources and expert approaches to measure quality such as process measures and outcome measures, the impact of patient preferences may not match the patient experience at the time of service.

Additional consideration is that quality outcomes may have no correlation with efficiency of care. There may be several pathways to get to a defined clinical outcome, and each opportunity would have a different cost. Surgical costs, as an example, are dependent upon place of service, use of ancillary professionals, choice of anesthesia etc. The patient outcomes from a given surgery may be independent of the cost of the various technical and professional components of the procedure.

Given the importance of quality, but multiple perspectives on it, public reporting of quality measures needs to be handled professionally. Currently, public reporting is being piloted in two states. This will refine the metrics and communications process to determine how to make quality measures used by the QRS as relevant to individuals.

Measurement of quality also requires formal reporting and a system and commitment of resources so that reporting is consistent. The federal website outlines the technical specifications for reporting.

In summary, a series of fixed metrics is collected using consistent specific attempts to make the scoring of health plans, hospitals or doctors that will be useful to members. It also enables more sophisticated buyers to monitor "measurable quality" and determine how this changes over time. However, it is important to understand that measurable quality is only one aspect of clinical and administrative performance that may be more important.

Measurement and Reward Tools for Providers

Health plans have used *pay-for-performance* over the last 15 years or more. These programs use an "upside" only incentive—the individual provider or organization has a financial incentive for "good performance." Poor performance does not see a direct financial penalty. Health plan studies have demonstrated that an effective upside-only program has impact if the physicians or other professional initiating an order is engaged. CMS has taken a lead role in the development of shared risk whereby there are upside and downside results based upon a CMS audit. The last few years moved beyond pay-for-performance; many new programs to pay providers for performance and value have been created. Given the wide range of programs, the impact varies substantially. Some early studies of the results from both hospital and physicians in a value-based purchasing environment found that patient satisfaction generally improved, although aggregate cost and quality of care did not. Others showed some improvements in quality and cost. Some hospitals and physicians make changes to their practice patterns to achieve positive scores and share in the incentives.

Value-based programs and the quality metrics in these new programs typically use upside potential only. In that respect, they are like the pay-for-performance programs of the past decade that provided bonus payments for improved scores in a few specific metrics. Current upside-only value based programs base their rewards on a larger number of measures, which may have different weights. The future direction employed by some managed care plans and the basis for the current CMS strategy in MACRA is complex. It is partly competitive as providers seek limited financial resources. But some leading programs also focus on infrastructure improvements, management, alternative approaches to base pay and other items discussed in the Higher Performing Networks section.

Carriers are beginning to actively engage their network providers using incentives and disincentives to improve performance and compete with other carriers. No longer are health plans competing just for membership with others plans in their geography; they also will be competing for incentive dollars against all participating health plans nationally.

Quality measurement that now includes clinical quality, patient safety and patient satisfaction will have a significant impact on the viability of health plans. The table below provides a list of these QRS measures and their governance:

2017 Quality Rating System Measures[51]		
Measure Title	**Measure Steward**	**National Quality Forum (NQF) ID**
QRS Clinical Measures		
Adult BMI Assessment	NCQA	Not Endorsed
Annual Dental Visit	NCQA	Not endorsed
Annual Monitoring for Patients on Persistent Medications	NCQA	2371
Antidepressant Medication Management	NCQA	0105
Appropriate Testing for Children with Pharyngitis	NCQA	0002
Appropriate Treatment for Children with Upper Respiratory Infection	NCQA	0069
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	NCQA	A 0058
Breast Cancer Screening	NCQA	2372
Cervical Cancer Screening	NCQA	0032
Childhood Immunization Status (Combination 3)	NCQA	0038
Chlamydia Screening in Women	NCQA	0033
Colorectal Cancer Screening	NCQA	0034
Comprehensive Diabetes Care: Eye Exam (Retinal) Performed	NCQA	0055
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)	NCQA	0575
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	NCQA	0057
Comprehensive Diabetes Care: Medical Attention for Nephropathy	NCQA	0062
Controlling High Blood Pressure	NCQA	0018
Follow-up after Hospitalization for Mental Illness (7-Day Follow-up)	NCQA	0576

[51] https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/2017_QRS-Measure_Technical_Specifications.pdf.

Follow-up Care for Children Prescribed ADHD Medication	NCQA	0108
Immunizations for Adolescents (Combination 2)	NCQA	1407
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	NCQA	0004
Medication Management for People with Asthma (75% of Treatment Period)	NCQA	1799
Prenatal and Postpartum Care	NCQA	1517
Proportion of Days Covered	PQA	0541
Relative Resource Use for People with Diabetes (Inpatient Facility Index)	NCQA	1557
Use of Imaging Studies for Low Back Pain	NCQA	0052
Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents	NCQA	0024
Well-Child Visits in the First 15 Months of Life (6 or More Visits)	NCQA	1392
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	NCQA	176

QRS Survey Measures		
Access to Care	CMS	Not endorsed
Access to Information	CMS	Not endorsed
Aspirin Use and Discussion	NCQA	Not endorsed
Care Coordination	CMS	Not endorsed
Cultural Competence AHRQ	AHRQ, CMS	Not endorsed
Flu Vaccinations for Adults Ages 18–64	NCQA	0039
Medical Assistance with Smoking and Tobacco Use Cessation	NCQA	0027
Plan Administration	AHRQ, CMS	Not endorsed
Rating of All Health Care	AHRQ	00067
Rating of Health Plan	AHRQ	00067

Sources for Quality Measurement and Reward Tools On: Exchanges

A few articles on quality of Exchange networks have been published. One "Health Affairs" article reviewed the quality of hospital networks in one specific state: "depending on the measure of hospital quality employed, the (Exchange) Marketplace plans have networks with comparable or even higher average quality than the networks of their commercial counterparts." [52] This may not reflect the results in other states and may change over time.

There is wide variation in the quality requirements for each state and carrier that are not on the federal Exchange. Some states and carriers have worked on quality measurement for years. Others are just starting. As mentioned in earlier sections of the report, higher performing networks all have some measurement of quality, often with incentive payments to physicians or hospitals. These efforts build on a foundation of pay-for-performance programs, but newer programs are far different than the historical programs.

The Society of Actuaries inventory mentioned earlier in this appendix offers the names of many of the leading programs that measure and/or pay for quality improvement. One of the more detailed sources of information that shows the physician perspective on quality networks comes from the Integrated Health Care Association (IHA).[53] This multistakeholder collaborative has an extensive website and archives that document the development of the quality metrics applied to physicians in California. This is based on input from carriers, large physician groups and staff model HMOs over multiple years. IHA also has studies showing variation in quality for HMO and PPO across various parts of California.

[52] http://content.healthaffairs.org/content/34/5/741.abstract, "California Hospital Networks Are Narrower in Marketplace than in Commercial Plans, but Access and Quality Are Similar."

[53] http://www.iha.org/our-expertise/quality-measurement and http://www.iha.org/our-expertise/public-reportings.

A7 Pricing Alternative Networks

One of the main purposes of alternative networks is to deliver health care services in a more cost-effective way than a traditional, broad network. This may be because of lower fees, higher performance or a combination of both. During the many development steps, carriers apply analytical and actuarial models to gauge potential savings for various scenarios. This is measured relative to a baseline network.

As described in "High-Performance Networks: Actions Prior to Start of the Plan," a key step when designing an alternative network is to develop benchmarks for competitor premiums and network fees. The full process of capturing competitor network cost information is complex; however, we do describe key steps and the types of data below.

Because many possibilities and items are found to measure, and to avoid repeating material from previous sections, we will focus our attention on several general principles for measuring alternative network savings and will present an illustrative model based on claims data and contract terms. This also presents a modified version of the model that uses a combination of public and private data to be used when credible historical claims data are not available. Our primary source when historical claims data are not available is publicly available data, such as Medicare claims or CMS Hospital Cost Reports.

Note that the concepts for our model apply to all health services; however, we are limiting it to inpatient hospital services to simplify the discussion.

The model evaluates the relative cost differences between competing hospitals in a market. The model estimates hospital *unit costs*—either through metrics such as service/case mix adjusted payment per admission or through the development of a *unit cost index* (UCI), which normalizes for the types and intensity of services across the carrier. The model also adjusts for the impact of out-of-network costs and carrier benefit design to calculate the expected premium impact. The examples focus on the premise that unit cost is usually different by hospital and those differences need to be measured. The examples do not focus on other higher performance network topics. An analysis that can separate the effect of efficient care versus differences in fees is beyond the scope of the examples presented here.

Evaluating Alternative Network Cost Savings

Potential network savings often starts with "before and after" scenarios. Sometimes these measurements are relatively simple and straightforward; for example, measuring the impact of a new inpatient DRG contract can be performed by measuring the change in the DRG base rate and applying it to the historical mix of DRG weights. Other times the evaluations require significant data modeling and assumption testing; for example:

- Measure the impact of using only the "higher performing" physicians based on episodes-of-care by provider.
- Risk adjust patient populations across markets and programs.
- Reprice historical claims to standardized reimbursement rates.
- Develop patient migration models to assess the impact of patients' provider selections under different network scenarios.
- Calculate the difference between in-network and out-of-network providers (i.e., the net impact of provider reimbursement and benefit design).
- Determine the criteria and target fee structure to include providers in the network, which could include *unit cost* targets (e.g., cost-per-admit) and payment terms for stop-loss, case rates, capitations, gain sharing or various new value-based arrangements. Consider the kind of data available to calculate the value of the various payment terms with the providers. Also, evaluate if the payment terms can be accurately measured.
- Estimate how many providers will accept the fees and consider whether there are enough types of providers (e.g., primary-care, specialties, hospitals) to offer the necessary services and if they have the capacity to sufficiently serve the expected patient population.
- Determine existing usage of alternative network providers.
- Project the value of the payment terms from the data period to the contract period. Special treatment must be taken for

large claims subject to stop-loss provisions.

- Adjust for the impact of selection and the high rate of illnesses in the Exchange populations. For example, more large claims may be subject to stop-loss provisions.
- Estimate the differences in hospital charge-masters and project their increases. This is important for accurately measuring fee differences that result from percentage-of-billed charge payment terms.

Data can also be a challenge. Tests must be performed to determine if the data are accurate and complete. For example, compare the distribution of summarized fees by type of service and average fees per unit of service to other data sources or available benchmarks (e.g., statistics from actuarial rating manuals or data from providers in other markets). As mentioned earlier, various other data sources may be available that are specific to the providers being measured (e.g., Medicare fee-for-service data). Or, if provider specific data are not available, utilize reasonable "substitutes" such as historical claims for similar types of providers from other markets with service mix adjustments and tests for sensitivity to variables like charge-master differences.

The more relevant the available data and information are to the types of populations, providers and services that are being measured, the easier it is to develop applicable pricing assumptions and to accurately model results. Thoughtful application of basic principles or relationships learned from other similar situations can lead to successful assumption setting as well.

The hospital component of Exchange networks is particularly important. The illustrative model in the pages below demonstrates some of the key concepts and steps to take when measuring savings for various alternative network scenarios. The model has two paths to follow depending on the available data. The most common path uses internal data sources. The other path discusses the adjustments and external data needed when internal data are not available.

The savings model outlined in this section uses three main abbreviations:

- A *unit cost index* (UCI) is developed to normalize results for case mix and to represent an average that can be compared across providers to gauge relative fee levels. For example, a UCI for inpatient hospital services is the average allowed payment per admission for a defined set of admission types (medical, surgical, maternity etc.). This type of UCI is used in the illustration below.
    - This analysis can also be performed for physician or other services. The analysis could compare the physician fee schedule to what Medicare pays for physician services, as an example. This is called a Medicare allowable comparison.
- A *percentage-of-billed charges* (POC) is the ratio of allowed contractual charges to the billed amount. As discussed later, calculations that are based on billed charges must be used cautiously since billed charges vary widely for the same services at different hospitals.
- A *billed charge index* (BCI) is a metric used to demonstrate the average difference between providers' billed charges for similar sets of services. There are multiple methods for calculating a BCI: an example of one method is included in the material further below. One modeling approach is to calculate a UCI by multiplying the POC by a BCI.

Hospital Network Analysis, Path 1, with Internal Data

Overview

1. The ***internal data path*** uses historical claims data from an existing product line in the market (e.g., commercial PPO).
    a. When evaluating network scenarios, various proposals and combinations of hospital proposals are analyzed and combined using various utilization assumptions and modeled payments (i.e., fees).
    b. Historical network claim costs are analyzed and used to establish the baseline hospital fee levels for in-network and out-of-network services.
    c. The UCI discussed above is developed to create an average that can be compared across providers.
    d. The allowed payment and utilization data are used to develop assumptions for the expected utilization with each hospital and to model the financial impact of proposed hospital payment terms and the UCI.
    e. Historical data are also used to develop utilization and fee levels to model the impact of payments to out-of-network hospitals. The impact of changes in out-of-network utilization due to the change in the network scope should also be considered, including any effect of "letters of agreement" with out-of-network providers for services that the alternative network structure cannot provide (e.g., transplants or severe burns).
    f. The impact of utilization changes by and across hospitals in the alternative network structure is studied to understand the sensitivity of the payments to shifts in the mix of services or providers as well as to identify riskier assumptions.
    g. The impact of benefit designs on utilization and net paid claims for in-network and out-of-network hospitals are applied.
    h. In-network and out-of-network results are combined and compared to benchmarks/targets.
    i. Different network structure scenarios and hospital payment proposals are analyzed, renegotiated etc. until the carrier and the hospitals agree on the network structure and the payment terms that meet their objectives.

The example below and the examples on the pages that follow give an illustrative walk-through of the process and model pathway that was described above.

Example 1: Contract Evaluation: Internal Data Model

The analysis path with internal data usually starts by measuring the current contractual terms and fee levels; common steps are outlined in the example below. These steps measure a typical inpatient per diem contract. Similar steps could be taken with other commonly used reimbursement terms, such as case rates by DRG or percentage-of-billed charges.

- Aggregate the historical data to the structure of types of payment
- Medical per diem
- Surgical per diem
- Maternity per case (i.e., per admission or other)
- Stop-loss terms for large inpatient claims and
- Other variations (which are less common).
- Combine all the fees proposed by the hospitals in the baseline network (effective during the ACA rating period) for each fee category and calculate the market average proposal for each fee category. Also, include expected out-of-network fees.
- Calculate the average fee per admission and other relevant statistics, such as total allowed fees, billed charge per admission etc.
- Calculate the ratio of allowed contractual charges to the billed amount, which we call the percentage-of-billed charges (POC).
- Note: Billed charges (retail fees) are quite high in most markets, and hospitals accept contracts at much lower fees. Even after these discounts, these fees are still usually higher than Medicare or Medicaid payments.
- The table below shows the average POC for the fees relative to the billed charges **at** 41%, but the POC by itself does not indicate paid cost.
- The **contractual fee** per admission represents **actual unit cost** (i.e., the allowed fee per admission would be the unit cost index [UCI]).

  The proposed total non-Exchange Network UCI is $16,771.

  This is calculated by multiplying the utilization units (days in the hospital or admissions) by their respective contractual fees, multiplying the billed charges by the POC for admissions with total billed charges that exceed the stop-loss threshold, summarizing the resulting contractual fees in total, and then dividing by the total number of admissions. The key contractual terms in the bold boxes of the table are also summarized as follows:

  - Medical fee per diem = $2,248
  - Surgical fee per diem = $5,316
  - Maternity fee per admission = $7,050 and
  - Stop-loss fee = POC of 55% × the total billed charges for admissions with total billed charges above $115,000.
- The impact of the above fee structure on the average contractual fee per admission is demonstrated in the table below. The “per diem” and “per admission” fees are multiplied by the historical hospital days and/or admissions, while the stop-loss fees are calculated using the historical billed charges for those claims identified as having charges over $115,000.

Plan Year - Non-Exchange Network Average Hospital Contract Proposal

Type of Admission	Days	Admissions	ALOS	Billed Charge (per day)	Contractual Fee (per day)	Billed Charge (per admission)	Contractual Fee (per admission)	Billed Charges	Contractual Fees	POC
Medical	2304	526	4.4	$5,588	$2,248	$24,478	$9,848	$12,875,657	$5,179,910	40%
Surgical	875	217	4.0	$14,893	$5,316	$60,051	$21,436	$13,031,067	$4,651,680	36%
Maternity*	866	234	3.7	$6,620	$1,905	$24,501	$7,050	$5,733,125	$1,649,729	29%
Stop Loss**	657	53	12.4	$16,032	$8,818	$198,737	$109,305	$10,533,066	$5,793,186	55%
Total	4702	1030	4.6	$8,969	$3,674	$40,945	$16,771	$42,172,915	$17,274,505	41%

ALOS - average length of stay (i.e., days divided by admissions)

POC - contractual fees as a percentage of billed charges

**The maternity contractual fees are based on "per admit" case rates*

*** Stop Loss fees are paid as a percentage of billed charges (POC) if the total billed charges for the admission exceed an amount known as a "stop loss trigger".*

For this example:

Stop Loss Trigger $115,000

POC: 55%

First Dollar Stop Loss: If billed charges exceed the Stop Loss Trigger, then Contractual Payment = POC x Total Billed Charges for the admission

Ideally, insurers target stop loss triggers to result in payments for 3% to 5% of admissions.

When stop loss is triggered for 3% to 5% of admissions, the POC is typically applied to 20% to 30% of billed charges.

The model and supporting table below demonstrate how to apply the internal data model to evaluate proposed contracts that will achieve a targeted average fee.

Set the Contractual Rates to Achieve the Total Contractual Fee Target

When the existing fees are understood, then contract rate proposals are developed to achieve an average contractual fee target, as demonstrated in the table below.

In this table, we are evaluating a proposal that is calibrated to achieve the carrier's target UCI for the Exchange network. It is an average contractual fee per admission of $15,091, which is 10% below the proposed UCI for the non-Exchange network of $16,771 in the table above. The carrier would present the target UCI along with other important metrics to hospitals during the network development process or during their hospital negotiations.

Current Year - ACA Exchange Network Proposal - *Without an Adjustment to the Inpatient Stop Loss Trigger, but with Inpatient SL POC from 55% to 52%*

Type of Admission	Days	Admissions	ALOS	Billed Charge (per day)	Contractual Fee (per day)	Billed Charge (per admission)	Contractual Fee (per admission)	Billed Charges	Contractual Fees	POC	Contractual Fee Increase or Decrease
Medical	2304	526	4.4	$5,588	$2,000	$24,478	$8,760	$12,875,657	$4,608,000	36%	-11%
Surgical	875	217	4.0	$14,893	$4,500	$60,051	$18,145	$13,031,067	$3,937,500	30%	-15%
Maternity*	866	234	3.7	$6,620	$1,756	$24,501	$6,500	$5,733,125	$1,521,000	27%	-8%
Stop Loss**	657	53	12.4	$16,032	$8,337	$198,737	$103,343	$10,533,066	$5,477,194	52%	-5%
Total	4702	1030	4.6	$8,969	$3,306	$40,945	$15,091	$42,172,915	$15,543,694	37%	-10%
							-10%	<-- per Admission Increase or Decrease			

ALOS - average length of stay (i.e., days divided by admissions)

POC - contractual fees as a percentage of billed charges

**The maternity contractual fees are based on "per admit" case rates*

*** Stop Loss payments are paid as a percentage of billed charges (POC) if the total billed charges for the admission exceed an amount known as a "stop loss trigger".*

For this example:

Stop Loss Trigger $115,000

POC: 52%

First Dollar Stop Loss: If billed charges exceed the Stop Loss Trigger, then Contractual Payment = POC x Total Billed Charges for the admission

Ideally, insurers target stop loss triggers to result in payments for 3% to 5% of admissions.

When stop loss is triggered for 3% to 5% of admissions, the POC is typically applied to 20% to 30% of billed charges.

After the UCI Target is determined and the respective contractual rate terms are proposed to the potential hospital partners, the carrier would evaluate hospitals' counterproposals as is demonstrated by the tables below.

Evaluate Potential Hospital Allies

After establishing the target, proceed with evaluating Exchange proposals from potential hospital allies. See the current contract's UCI (Current) and the target UCI (Target) in the table below.

Plan Year Current In-Network Average Fees vs. Hospital In-Network Target Average Fees per Admission

Type of Admission	Admissions	Billed Charge	Current Average Contractual Fee	Target Average Contractual Fee	Current POC	Target POC
Medical	526	$24,478	$9,848	$8,760	40%	36%
Surgical	217	$60,051	$21,436	$18,145	36%	30%
Maternity*	234	$24,501	$7,050	$6,500	29%	27%
Stop Loss**	53	$198,737	$109,305	$103,343	55%	52%
Total	1030	$40,945	$16,771	$15,091	41%	37%
				-10%	<-- per Admission Decrease	

The contract evaluations for two hospitals are in the table below; the proposals are from Hospital A and Hospital B.

Hospital A's proposed UCI is only 6% below the non-Exchange network at $15,695 and fails the test criteria.

Hospital B's proposed UCI meets the test criteria of 10% below the non-Exchange network and is $15,091.

Plan Year Current In-Network Average Fees vs. In-Network Target Average Fees per Admission
Comparison of Proposed Exchange Fees - Hospital A and Hospital B

Type of Admission	Admissions	Hospital A Billed Charge	Current (Market) Average Contractual Fee	Hospital A Average Contractual Fee	Current POC - Adjusted to Hospital A Billed Charges	Hospital A POC
Medical	526	$26,926	$9,848	$9,111	37%	34%
Surgical	217	$66,056	$21,436	$18,871	32%	29%
Maternity*	234	$26,951	$7,050	$6,760	26%	25%
Stop Loss**	53	$218,611	$109,305	$107,477	50%	49%
Total	1030	$45,039	$16,771	$15,695	37%	35%
				-6%	<-- per Admission Decrease	

Hospital A's proposal is higher than the target - fails test

Type of Admission	Admissions	Hospital B Billed Charge	Current (Market) Average Contractual Fee	Hospital B Average Contractual Fee	Current POC - Adjusted to Hospital B Billed Charges	Hospital B POC
Medical	526	$22,031	$9,848	$8,760	45%	40%
Surgical	217	$54,046	$21,436	$18,145	40%	34%
Maternity*	234	$22,050	$7,050	$6,500	32%	29%
Stop Loss**	53	$178,863	$109,305	$103,343	61%	58%
Total	1030	$36,850	$16,771	$15,091	46%	41%
				-10%	<-- per Admission Decrease	

Hospital B's proposal meets the target - passes test

Special technical challenge:
An important observation about the proposal evaluations (in the table above) for Hospital A and Hospital B is that the hospital with the lowest POC (i.e., the one offering the biggest discount from billed charges) is ***not*** *the lowest cost hospital. Hospital A's proposed UCI yields a POC of 35% (a 65% discount from billed charges) compared to Hospital B's POC of 41% (a 59% discount from billed charges).*

However, because Hospital B's billed charge index (BCI) is 18% lower than Hospital A's (only $36,850 compared to Hospital A's $45,039), Hospital B's higher POC still yields a lower UCI. See the UCI math below:

Hospital A: BCI = $45,039, POC = 35%, UCI = BCI × POC = $15,695
Hospital B: BCI = $36,850, POC = 41%, UCI = BCI × POS = $15,091.

This clearly demonstrates that selecting the contract proposal from the hospital that offers the lower POC (i.e., the higher discount) does not necessarily yield the lowest unit cost. The impact of the billed charges, the BCI, must be calculated.

The contract evaluations calculate the unit cost impact of in-network providers. The impact from out-of-network providers can be significant and is discussed below.

Evaluate Out-of-Network Impact

Hospital billed charges are far higher than contract rates in many locations. This creates many problems. One of the most important problems happens when the hospital and carrier do not reach agreement. The out-of-network hospital often reverts to the high billed charges for payment, depending on the contract language and local laws. The carrier usually receives only a slight discount off the billed charges, if any. Thus, out-of-network hospitals are paid more than in-network hospitals making it important to understand the impact of out-of-network utilization and insurance benefits on the final net paid amounts, and subsequently on the carrier's premium.

The tables below compare three Exchange network scenarios:

- Current. Use the non-Exchange network for the Exchange.
    - A broad network with Hospital A and Hospital B with their non-Exchange fees.
    - This assumes each hospital has 50% of the admissions.
    - See the footnotes below for Scenarios A and B for more information.
- Scenario A. A narrow network with Hospital A as in-network with their proposed Exchange fees and with Hospital B and all other hospitals out-of-network.
- Scenario B. A narrow network with Hospital B as in-network with their proposed Exchange fees and with Hospital A and all other hospitals out-of-network.

In each scenario in the tables below, the net paid per admission amounts are calculated for the current and the proposed narrow network scenarios. The net paid is the product of the average fee and the actuarial value of the insurance benefits.

In the examples that follow, and as shown in the tables, the in-network and out-of-network inpatient benefit actuarial values are assumed to be 91% and 71%, respectively. These realistic assumptions demonstrate how payments move from allowed charges to net paid claims.

For Scenario A (per the fee analysis on page 91), Hospital A's in-network fee proposal is 6% lower than the current non-Exchange in-network fees. After accounting for out-of-network utilization at much higher fees, the Scenario A fee savings erodes to 3%. This illustration assumes no shifting of utilization (but any actual analysis assumes that utilization will shift between hospitals). After insurance benefits, the net paid per admission savings is 4% (see below).

Scenario A - Narrow Network with Hospital A only

Compare Networks	Current*	Out-of-Network**	Total Current with Out-of-Network	Hospital A	Hospital B^ (Out-of-Network)	Other Out-of-Network**	Total Scenario A	Increase / Decrease Scenario A vs. Current
Billed Charge per Admission	$40,945	$40,945	$40,945	$45,039	$36,850	$40,945	$44,589	9%
Fee Per Admission	$16,771	$36,850	$17,775	$15,695	$33,165	$36,850	$17,276	-3%
POC	41%	90%	43%	35%	90%	90%	39%	-11%
Admissions	978.5	51.5	1030	947.6	30.9	51.5	1030	
% of Admissions	95%	5%		92%	3%	5%		
Fees	$16,410,779	$1,897,781	$18,308,561	$14,872,207	$1,024,802	$1,897,781	$17,794,790	($513,771)
% of Fees	90%	10%		84%	6%	11%		
Price Networks								
Insurance Actuarial Value	91%	71%	89%	91%	71%	71%	88%	-1%
Net Paid Per Admission	$15,262	$26,164	$15,807	$14,282	$23,547	$26,164	$15,154	-4%
Net Paid Dollars	$14,933,809	$1,347,425	$16,281,234	$13,533,708	$727,609	$1,347,425	$15,608,742	($672,492)
% of Net Paid Dollars	92%	8%		87%	5%	9%		

*Please see notes for *, **, and ^ below.*

In the table below for Scenario B, we show again that Hospital B's in-network fee proposal is 10% lower than the current non-Exchange in-network fees (per the fee analysis on page 91). After accounting for out-of-network utilization, we see that the Scenario B fee savings erodes from 10% to 5%. Again, this example assumes no shifting of utilization for simplicity.

After applying insurance benefits, Hospital B's net paid per admission savings is 6%, which is still better than Hospital A's proposal, which saved 4%.

Scenario B - Narrow Network with Hospital B only

Compare Networks	Current*	Out-of-Network**	Total Current with Out-of-Network	Hospital A^^ (Out-of-Network)	Hospital B	Other Out-of-Network**	Total Scenario B	Increase / Decrease Scenario B vs. Current
Billed Charge per Admission	$40,945	$40,945	$40,945	$45,039	$36,850	$40,945	$37,301	-9%
Fee Per Admission	$16,771	$36,850	$17,775	$40,535	$15,091	$36,850	$16,942	-5%
POC	41%	90%	43%	90%	41%	90%	45%	5%
Admissions	978.5	51.5	1030	30.9	947.6	51.5	1030	
% of Admissions	95%	5%		3%	92%	5%		
Fees	$16,410,779	$1,897,781	$18,308,561	$1,252,536	$14,300,199	$1,897,781	$17,450,515	($858,045)
% of Fees	90%	10%		7%	82%	11%		
Price Networks								
Insurance Actuarial Value	91%	71%	89%	71%	91%	71%	87%	-2%
Net Paid Per Admission	$15,262	$26,164	$15,807	$28,780	$13,733	$26,164	$14,806	-6%
Net Paid Dollars	$14,933,809	$1,347,425	$16,281,234	$889,300	$13,013,181	$1,347,425	$15,249,906	($1,031,328)
% of Net Paid Dollars	92%	8%		6%	85%	9%		

*Please see notes for *, **, ^, and ^^ in italics below.*

** The Current Network (i.e., Scenario C) is comprised of Hospital A and Hospital B and it assumes that the historical data indicated that 95% of the historical admissions were in-network and that Hospital A and Hospital B each had 50% of the in-network admissions.*

*** For simplicity, we are assuming that the billed charges for out-of-network providers are equal to the Current average. In reality, the billed charges for the out-of-network hospitals that are typically used would need to be analyzed and assumptions for the expected billed charge per admission set. Also, note that most insurers work with vendors or apply their own out-of-network fee methodologies. For this example, we assume that the average out-of-network POC negotiated by the carrier or their "out-of-network vendor" is 90% (i.e., an average discount of 10%).*

Other - Out-of-Network Admissions as a Percentage of Total Admissions: 5%

Other Hospital Out-of-Network Billed Charge per Admission Assumption: $40,945 <-- Current Average

Other Hospital Out-of-Network Average POC: 90%

^ In this network scenario, Hospital B would be out-of-network, but some portion of utilization would still go to Hospital B on an out-of-network basis.

Hospital B - Out-of-Network Admissions as a Percentage of Total Admissions: 3%

Hospital B - Out-of-Network Average POC: 90%

^^ In this network scenario, Hospital A would be out-of-network, but some portion of utilization would still go to Hospital A on an out-of-network basis.

Hospital A - Out-of-Network Admissions as a Percentage of Total Admissions: 3%

Hospital A - Out-of-Network Average POC: 90%

The comparisons of the different results for the contractual fee savings and the net paid savings for Scenarios A and B above show the importance of measuring the impact of out-of-network utilization and the in- and out-of-network insurance benefits.

For example:

- Hospital B's proposed fee savings is 10% savings compared to the current network's average fees
- Hospital A's proposed fee savings is only 6%, which is 4% less than Hospital B's and
- With the impact of out-of-network utilization and insurance benefits, the net paid savings to current for Hospital B is only 6% and Hospital A's is 4%, which is a difference of only 2% between the two proposals.

Key Observations

High billed charges at some hospitals can lead to very challenging business decisions. Under normal conditions, the hospital with the lowest fees (after case mix and other adjustments) is the preferred hospital. However, sometimes the out-of-network hospital has billed charges that are so high that their out-of-network payments can overwhelm the contractual savings from the in-network hospitals. This can be a significant problem if members cannot access in-network providers for most services or in a timely way. Our example above shows that what appears to be an obvious decision to choose Hospital B for the Exchange network is not as certain after the final impact on premium is considered. Therefore, for these scenarios, other factors, such as each hospital's willingness to operate efficiently, focus on quality improvements or the physicians that they work with could become more important to the carrier as they make their network decisions.

It is also essential to measure the savings percentages using dollars or the calculated unit cost index differences rather the relationship between the POCs or the provider discount percentages. Conclusions that rely only on POCs and/or discounts from billed charges can be highly distorted given large differences in billed charges, different case mix and other issues. As often happens, one must move beyond percentage discounts. This importance is demonstrated with Scenario B:

- Hospital B's in-network fee proposal is 10% lower than the current non-Exchange in-network fees
- However, it yields fee savings of only 5% after out-of-network utilization and fee levels are considered
- The savings is eroded by the very high out-of-network fees, which are greater in Scenario B because the main out-of-network hospital, Hospital A, has a BCI that is much higher than Hospital B's, although
- The out-of-network insurance benefit levels slightly off-set the higher out-of-network fees to yield a net paid per admission savings of 6% for Scenario B.

Last, calculations should reflect exceptions that may occur. Some out-of-network utilization will be paid as if it was in-network. This may be occasional; for example, a specific treatment may not be available at a network hospital. But, in some situations, broader exceptions are made by the claims service or management team. This is often a problem in the early years of an alternative network program. Another problem is when in-network physicians refer to out-of-network hospitals, resulting in in-network treatment. These should be identified separately.

Hospital Network Analysis—Path 2—without Internal Data and External Data Are Used

Overview—Adjustments if No Internal Data Are Available

2. The *external data path* is an approach to target and measure the impact of proposed network payment terms when there are not enough historical claims data available to credibly measure the UCI for hospitals. In this situation, a combination of publicly available data and private data (if available) are utilized with modifications to the internal data path.
    a. Develop a benchmark allowed UCI using available public and/or private data sources that can be acquired through research or purchased from various vendors. This step is also sometimes taken as a reliability check and comparison to the carrier's historical results when they have internal data.
    b. The second step is to develop utilization assumptions for each hospital. Public data sources such as Medicare Inpatient Prospective Payment System data, Medicare claims or Hospital Medicare Cost Reports can be used to estimate the average proportion of admissions and/or charges that a hospital would typically encounter from patients living in the area. The utilization assumptions are used for calculating weighted average total BCIs, POCs and UCIs for different scenarios. Be cautious when using Medicare data to project for a commercial population, such as the Exchange population.
    c. Next, calculate BCIs for each hospital in the area. BCIs can be calculated using a few different approaches. The approach described here is a common approach. The billed charges from the most recent available 12 months of Medicare IPPS data (or Medicare claims) are adjusted for the mix of DRGs and outliers to reflect the expected case mix of the population to be covered. Hospitals are required by law to use the same charge-master for all payers, so studies of charge-masters with Medicare data can be applied to other payers.
    d. Out-of-network utilization and fees are assumed (or calculated if data is available) based on typical industry "norms" and would consider the size of the network, existing known programs for out-of-network fee negotiations and other factors. A carrier will often reference their out-of-network experiences or data in other markets to assist with developing the out-of-network UCI for the benchmark network.
    e. The in-network and out-of-network UCIs are combined to calculate the total benchmark.
    f. After that point, this flows into the earlier process.
    g. Often internal and external data are used in combination. The provider fee analysis can be performed with proxy claims data from other hospitals that provide similar services (adjusted for charge-master differences) or with adjusted Medicare claims data for the hospital (or with both approaches). Many approaches can be considered for this step; that discussion is outside the scope of this report.

Sources of External Data

When a carrier (existing or start-up) is building a network in a new location, it does not have access to claims data. Therefore, building a competitive network and setting accurate premiums is extremely difficult. Multiple sources of information are available within the health care industry. None is a replacement for actual claims data, but these sources offer a way to estimate magnitudes even if more precise analysis is not possible. A brief list of potential sources of information include the following:

- Hospital Cost Report Data or Financial Reports. Hospitals report their billed charges (known as *gross revenue*) and their collected fees (known as *net revenue*) to CMS for Medicare, Medicaid and Other combined lines of business (i.e., commercial, Tri-care etc.) in their Medicare cost reports. Also, similar data are often available in the financial statements for publicly traded hospitals. This data can be analyzed and modeled by hospital and/or in total for an area to develop POC estimates. These reports also have hospital expense and other revenue data that can be benchmarked to assess a hospital's cost structure. There are vendors that organize, summarize and sell the data or derivatives of the data, and much of it can be purchased directly from CMS.

- Medicare Claims Data. Similarly CMS makes Medicare claims data and other derived reports available for free or for sale. Vendors also "package" these data and make the data available for sale. Medicare claims data can be purchased for almost all medical services with files ranging in sample size (the 5% files or 100% files). Also, CMS summarizes the data into other useful databases and reports, such as the Medicare IPPS and Medicare OPPS files for hospital inpatient and outpatient services. The reader could visit the CMS website for more information about the available data or do web searches for available vendor products.

- Commercial Claims Data. If an organization has historical claims data in other markets or for other providers, that claims data can be utilized for provider contract analysis models with adjustments. Additionally, All Payer Claims database initiatives are underway in many states, and several vendors aggregate commercial claims into large databases and reports that are made available for sale. These data sources "de-identify" the payers and providers, but they do make detailed claim data available by geography, which can be used as proxy data in fee analysis or as benchmarks for provider billed charges and fees.

- Industry Benchmark Studies. Some carriers participate in provider network data RFI projects with large health and welfare and brokerage firms. A by-product of the RFIs are blinded provider discount studies that can be available to RFI participants.

- Public Records Requests. Information about carriers' provider network discounts can be acquired from public records in many states where carriers have sent information about their average discounts by geography to local or state governments during their procurement process for their employee or retiree health plans.

The data can now be used to complete the tables shown in our previous internal data examples, but using estimated average contract positions rather than carrier-specific results. We show several example calculations below that utilize external sources. Various adjustments are made to reflect the weaker source material. For example:

- Detailed claims data are not available to compare to carrier proposals from Hospital A or Hospital B. So the contract fee analysis is performed with external sources as a reality check.

- Previously the target was to reach a 10% reduction in normal fees. Because of the uncertainty when using an external data approach, the carrier in the examples below sets their UCI target more aggressively to yield savings for an alternative network product premium. They target a 15% reduction from the in-network benchmark UCI to ensure they beat the benchmark network by more than 5% (and both scenarios end up yielding more than a 10% hospital claims savings in total).

- Analysis starts with Medicare "per admission" data and "adjusts the data" to reflect a commercial "per admission" case mix. Multiple sources (such as data from other markets or actuarial pricing models) could be utilized to make this adjustment. This introduces additional risk. Results are often used as an index for measuring and comparing the relativity between proposed provider fees. The negotiations start with a target POC that is calibrated to the UCI for each hospital during the "external data modeling" process.

Using Medicare Data (External Data) to Calculate a BCI

The table below shows a shortened example of a methodology to calculate the BCI for two hospitals using Medicare IPPS data. For each hospital and for the "market average," the average billed charge per admission for each MS-DRG is calculated:

- For each hospital, we remove the admissions that do not meet the minimum outlier criteria of at least five admissions.
- Next, we recalculate each hospital's total weighted average billed charge per admission using the admission mix at each hospital.
- Additionally, using each hospital's mix of admissions, we recalculate the market average total weighted average billed charge per admission.
- Each hospital's BCI is the ratio of their weighted average billed charge per admission to the market average.
- We evaluate this calculation using each hospital's admission mix and use the average of the BCI calculations to calculate a hospital-specific "average BCI," which is used for each hospital in our remaining calculations (see the examples that follow this one).
- This is one approach of many possible ways to estimate the hospital BCIs.

Calculation for Evaluating the Inpatient Hospital Billed Charge Index ("BCI") for Hospitals in a Market

	Medicare Admissions**			Avg. Billed Charge per Admission by MS-DRG		
MS-DRG	Hospital A	Hospital B	Total	Hospital A	Hospital B	Market Average
872	108	72	180	$31,149	$22,654	$27,751
392	102	68	170	$31,009	$23,962	$28,190
812	72	48	120	$28,478	$23,732	$26,579
203	66	44	110	$19,160	$14,806	$17,418
603	66	44	110	$34,748	$28,430	$32,220
470	232	348	580	$71,621	$57,979	$63,436
743	72	108	180	$50,474	$39,920	$44,142
460	4	48	52	$111,917	$111,917	$111,917
247	28	4	32	$121,542	$121,542	$121,542
Total	750	784	1534	$48,315	$46,745	$47,513

Below Min Threshold of 5

Adjusting for the Min Threshold and with the Hospital Specific Service Mix

Admission Mix	Description of Calculation	Hospital A	Hospital B	Market Average
			(w Hospital A Admissions)	*(w Hospital A Admissions)*
Hospital A	Outlier Minium Threshold & Mix Adjusted Weighted Avg per Admission	$47,974	$39,117	$43,379
	BCI = Hospital Weighted Average / Market Average	1.11	0.90	
		(w Hospital B Admissions)		*(w Hospital B Admissions)*
Hospital B	Outlier Minium Threshold & Mix Adjusted Weighted Avg per Admission	$56,202	$46,362	$50,756
	BCI = Hospital Weighted Average / Market Average	1.11	0.91	
	Average BCI for A & B	1.11	0.91	

Note: For purposes of the example, we are only showing a few MS-DRG's. In a real-life situation, there would be more; Also, a similar process could be followed for Outpatient Hospital using average billed charges per CPT/HCPCS code.

Example 2: Contract Evaluation—External Data Model

The tables below, for Example 2, use the previous internal data examples, but substitute new values using the external sources. In this case, it uses Medicare IPPS data with estimated commercial benchmark network POC targets from a hypothetical carrier competitive analysis. This offers revised Scenario A and B calculations (see Example 1 above), where the "Current" scenario is replaced by the market "Benchmark."

"External Data" Model: Estimate the Target Fees for Hospital Negotiation s Using Competitive Analysis and Medicare IPPS Data when Insurer Historical Data is Not Available

Benchmark UCI = Benchmark BCI x Benchmark POC x Adj. Billed Charge per Admission

Target UCI = Benchmark UCI x (100% - Target In-Network Savings Percentage)

Benchmark In-Network BCI	*1.00*
*Benchmark In-Network POC**	*37%*

Target In-Network Savings Percentage	*15%*

Scenario A - Narrow Network with Hospital A only

Compare Networks	In-Network Benchmark*	Out-of-Network**	Total Benchmark	Hospital A Target (In-Network)	Hospital B^ (Out-of-Network)	Other Out-of-Network**	Total Scenario A	Increase / Decrease Total Scenario A vs. Total Benchmark
Billed Charge per Admission	$47,513	$47,513	$47,513	$52,578	$43,122	$47,513	$52,041	10%
BCI	1.00	1.00	1.00	1.11	0.91	1.00	1.10	10%
Medicare to Commercial Adjustment***	0.86	0.86	0.86	0.86	0.86	0.86	0.86	
Adj. Billed Charge per Admission	$40,861	$40,861	$40,861	$45,217	$37,085	$40,861	$44,755	10%
Fee Per Admission (i.e., the UCI)	$15,119	$36,775	$16,201	$12,851	$33,376	$36,775	$14,663	-9%
Benchmark/Target POC	37%	90%	34%	28%	90%	90%	28%	-17%
Medicare Admissions	1457.3	76.7	1534	1411.3	46.0	76.7	1534	
% of Admissions	95%	5%		92%	3%	5%		
Price Networks								
Insurance Actuarial Value	91%	71%	89%	91%	71%	71%	87%	-2%
Net Paid Per Admission	$13,758	$26,110	$14,376	$11,694	$23,697	$26,110	$12,775	-11%

^ In this network scenario, Hospital B would be out-of-network, but some portion of utilization would still go to Hospital B on an out-of-network basis. We use the same assumptions as for the "Internal Data" model for the percentage of out-of-network utilization and the average out-of-network POC.

If the Insurer negotiates Hospital A payment terms that would result in average fees that are 28% of Hospital A's average billed charges they could achieve a hospital claims cost that is 11% below the benchmark network's.

Please see the special notes for *, **, and *** below.

The table for Scenario B follows below.

Scenario B - Narrow Network with Hospital B only

Compare Networks	In-Network Benchmark*	Out-of-Network**	Total Benchmark	Hospital A^^ (Out-of-Network)	Hospital B Target (In-Network)	Other Out-of-Network**	Total Scenario B	Increase / Decrease Total Scenario B vs. Total Benchmark
Billed Charge per Admission	$47,513	$47,513	$47,513	$52,578	$43,122	$47,513	$43,625	-8%
BCI	1.00	1.00	1.00	1.11	0.91	1.00	0.92	-8%
Medicare to Commercial Adjustment	0.86	0.86	0.86	0.86	0.86	0.86	0.86	
Adj. Billed Charge per Admission	$40,861	$40,861	$40,861	$45,217	$37,085	$40,861	$37,518	-8%
Fee Per Admission (i.e., the UCI)	$15,119	$36,775	$16,201	$40,695	$12,851	$36,775	$14,882	-8%
Benchmark/Target POC	37%	90%	34%	90%	35%	90%	34%	0%
Medicare Admissions	1457.3	76.7	1534	46.02	1411.28	76.7	1534	
% of Admissions	95%	5%		3%	92%	5%		
Price Networks								
Insurance Actuarial Value	91%	71%	89%	71%	91%	71%	87%	-2%
Net Paid Per Admission	$13,758	$26,110	$14,376	$28,894	$11,694	$26,110	$12,931	-10%

^^ In this network scenario, Hospital A would be out-of-network, but some portion of utilization would still go to Hospital A on an out-of-network basis. We use the same assumptions as for the "Internal Data" model for the percentage of out-of-network utilization and the average out-of-network POC.

If the Insurer negotiates Hospital B payment terms that would result in average fees that are 35% of Hospital B's average billed charges they could achieve a hospital claims cost that is 10% below the benchmark network's.

*Please see the special notes for *, **, and *** below.*

Special Notes for the above Scenario A and Scenario B tables:

** The Benchmark Network is comprised of Hospital A and Hospital B, it assumesthe same in-network utilization assumption as for the "Internal Data" model. The Insurer's competitive analysis process determined the Benchmark POC and the BCI analysis with Medicare data was used to calculate the UCIs with the Benchmark being calibrated to the Market Average at 1.00.*

*** For simplicity, the billed charges for out-of-network providers are set at the Benchmark average and the Insurer's out-of-network POC reimbursement are the same as for the "Internal Data" model.*

**** Because Medicare admissions tend to be more severe (higher intensity of services) than Commercial and the mix of services is different; the average Billed Charge per Admission should be adjusted from Medicare to Commercial. We use a factor of 0.86 in this example (this is from an old study done on this relationship that used MedPar Commercial and Medicare hospital discharge data). In actual application, this relationship should be studied and a factor developed using current relationships (derived from public data sources or actuarial guidelines).*

A Narrow Network Hospital Comparison Using a Case Study Market's Data

The next table below shows another example model that was derived with actual data from Medicare cost reports, as well as Medicare IPPS and Medicare OPPS historical claims. It uses actual data from the top five hospitals that were analyzed in Case Study 1.

In this example, we demonstrate how an insurer could set their own parameters with respect to the metrics they would use to target their provider fees. The results of the following steps are demonstrated in the table below:

- The hypothetical insurer studies the historical data from the Medicare cost reports for the hospitals in the market.
- The insurer calculates the BCI for each hospital in the market.
- Next, the insurer calculates the average POC by payer for Medicare and Medicaid, as well as derives estimates from the Medicare cost reports for the average POC for all commercial payers.
- After calculating the BCI and the POCs, the insurer calculates the UCI for each of the above categories, which is found in the columns labeled "Estimated Facility Allowed Unit Cost Relativity"; this is the UCI for this example.
- Last, the insurer evaluates the hospitals reported operating expense data as a POC.

We note a few things about the table.[54] [55] A comparison of the UCIs to Medicare from the table below shows the following:

- Medicare (CMS) UCI = 0.279
- Medicaid (MCD) UCI = 0.272 = CMS × 0.98, Medicaid fees are 2% less than Medicare fees
- Commercial (Est. COM Avg.) = 0.483 = CMS × 173%, commercial fees are 73% more than Medicare fees
- Operating Expenses (Oper. Exp.) = 0.344 = CMS × 123%, which is above Medicare fees and below the commercial fees[56].

For illustrative purposes in the section of the table, we assume that the insurer set their target UCI to be at least CMS × 150%, which would yield average fees that are 13.3% lower than the Est. COM Avg. fees. The math for which is 150% divided by 173% less one. The target UCI is also 22% higher than the reported operating expense levels. The math for this is 150% divided by 123% less one. Therefore, presumably the hospitals would have positive net income with negotiated fees that are actuarially equivalent to the target UCI.

The second section of the table calculates the UCI for a proposed alternative narrow network that keeps Hospital 1 and Hospital 3 in-network and leaves all other hospitals out-of-network. It shows the expected utilization that would go to each hospital, each hospital's BCI, the proposed or expected hospital POCs, and the calculated UCI for in-network and out-of-network hospitals and in total for the proposed narrow network.

The proposed narrow network UCI is then calculated relative to the CMS UCI. In this case, the narrow network's UCI of 0.411 equals 148% of Medicare (CMS × 148%). Because CMS × 148% is less than CMS × 150% (the Target UCI), the proposed narrow network would meet the insurer's criteria (i.e., it passes the financial test). The POCs highlighted in yellow would be utilized as the starting point for the insurer's negotiations with Hospital 1 and Hospital 3. These results can then be used in the other models with claims data or proxy claims data to construct service-specific terms for fees that would yield the targeted contracts at each hospital.

[54]The data in this illustrative example are from Market 1 (Case Study 1) and models the network structure for Carrier 2's Network B.

[55]The Billed Charge Index is calculated using multiple methods to compare each hospital's charge-master to other hospitals in the market. The calculations were done independently for inpatient and outpatient services using Medicare IPPS and OPPS data. The results are combined in total for each facility based on the expected mix for inpatient and outpatient services.

[56]A deeper study of hospital expenses would be necessary to evaluate if a hospital is truly efficient; however, this does exhibit a common situation, which is that a hospital must collect more from commercial payers than for Medicare or Medicaid to cover their overall expenses.

Example of External Data Model - Case Study 1 - Market 1 - Carrier 2 - Provider Owned 1 - Network B

This exhibit shows a model for narrow hospital network provider contracting targets for the Carrier 2 Narrow Network - Network B from Case Study 2

Broad Network Unit Cost Index Calculations - Estimates for All Sub-Acute Care Hospitals with Benchmarks for Medicare (CMS), Medicaid (MCD), Commercial Average (COM Avg.), and Hospital Operating Expenses (Oper. Exp.)

Total		In-Network	Facility % Share of Commercial Charges			Claim Type % of Facility Total		Facility Billed Charge Index*			Estimated Total Facility POC				Estimated Facility Allowed Unit Cost Relativity			
Hospital	System	(y/n)	IP	OP	Total Facility	IP	OP	IP	OP	Total Facility	CMS	MCD	Est. COM Avg.	Oper. Exp.	CMS	MCD	Est. COM Avg.	Oper. Exp.
Hospital 1	System 1	y	43%	59%	52%	33%	67%	0.727	0.888	0.828	31%	26%	58%	41%	0.256	0.217	0.479	0.336
Hospital 2	System 2	y	29%	20%	24%	50%	50%	1.618	1.767	1.690	16%	15%	33%	20%	0.276	0.248	0.564	0.331
Hospital 3	System 3	y	18%	11%	14%	53%	47%	0.880	0.627	0.740	48%	66%	61%	54%	0.354	0.488	0.448	0.400
Hospital 4	System 2	y	6%	5%	5%	48%	52%	1.250	1.560	1.393	24%	20%	35%	19%	0.332	0.272	0.484	0.270
Hospital 5	System 2	y	3%	5%	5%	30%	70%	1.183	1.508	1.392	17%	14%	30%	23%	0.242	0.198	0.414	0.316
Total	Total		100%	100%	100%	40%	60%	0.946	0.982	0.967	29%	28%	50%	36%	0.279	0.272	0.483	0.344
								Average Total Facility Billed Relativity Factors (wtd. with "normalized charges")			*Weighted Average Total Facility POC (wtd. facility billed charges)*				**100%**	**98%**	**173%**	**123%**
															% of CMS Reimbursement (i.e., Avg. % of Medicare)			

Narrow Network Unit Cost Index Calculations - Input POC by Claim Type to Compare to Provider Network Target

Target Below % of CMS of: **150%**

Total		In-Network	Facility % Share of Commercial Charges			Claim Type % of Facility Total		Facility Billed Charge Index*			Carrier 2 - Provider Owned 1 Network B Input POC to Measure to Target				Estimated Facility Allowed Unit Cost Relativity			
Hospital	System	(y/n)	IP	OP	Total Facility	IP	OP	IP	OP	Total Facility	IP	OP	Total Facility	CMS Ratio	IP	OP	Total Facility	CMS Ratio
Hospital 1	System 1	y	61%	76%	70%	33%	67%	0.727	0.888	0.828	39%	37%	38%	122%	0.284	0.329	0.312	122%
Hospital 2	System 2	n	10%	6%	8%	50%	50%	1.618	1.767	1.690	90%	90%	90%	551%	1.456	1.590	1.521	551%
Hospital 3	System 3	y	26%	14%	19%	53%	47%	0.880	0.627	0.740	60%	65%	62%	130%	0.528	0.407	0.461	130%
Hospital 4	System 2	n	2%	2%	2%	48%	52%	1.250	1.560	1.393	90%	90%	90%	378%	1.125	1.404	1.254	378%
Hospital 5	System 2	n	1%	2%	2%	30%	70%	1.183	1.508	1.392	90%	90%	90%	518%	1.065	1.357	1.253	518%
Total	Total		100%	100%	100%	38%	62%	0.822	0.876	0.854	49%	48%	48%	Passes	0.400	0.422	0.411	**148%**
								Average Total Facility Billed Relativity Factors (wtd. with "normalized charges")			*Weighted Average POC by Carrier Network (wtd. facility billed charges)*				*Weighted Average Total Facility Allowed Unit Cost Relativity (wtd. "normalized charges")*			

Out-of-Network % Utilization Factor: *25% of original broad network utilization*

Out-of-Network POC: *90% multiply by Billed Charge Index for out-of-network unit cost index*

Case Studies

List of Case Studies

Case Study 1: Western State: Metropolitan Area 103
Case Study 2: California: Metropolitan Area 113
Case Study 3: Eastern State: Metropolitan Area 125
Case Study 4: Eastern State: Rural Area 135
Case Study 5: Southern State: Metropolitan Area 145
Case Study 6: Southern State: Rural Area 158

Case Study 1

Western State: Metropolitan Area

Case Study no. 1: Market 1, Western State: Metropolitan Area

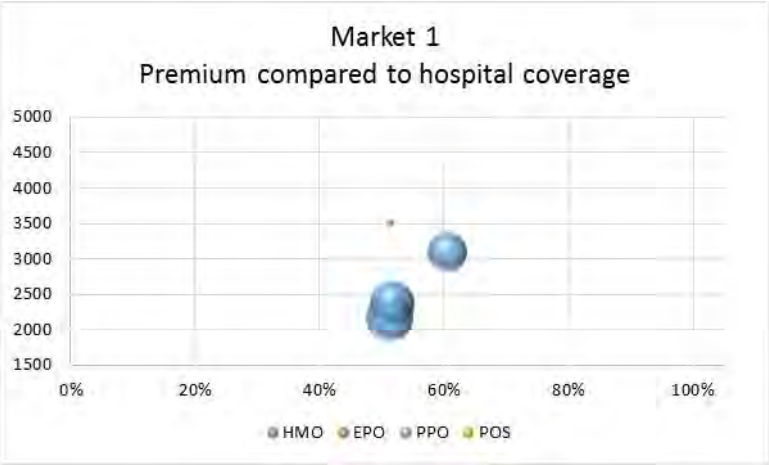
Summary

National perspective: 12.7 million members enrolled in Exchanges at the beginning of 2016. A premium tax credit was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average. The average premium was $396 per month before the credit with a $106 net member contribution after the credit. For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in this case study.[57]

Market 1 is a metropolitan area located in a Western state. The three large hospital systems in this market provide almost all the local hospital services. These hospitals have historically competed for commercial and Medicare market share through participation in narrow networks with other carriers or by selling through their own health insurance carrier.

The health insurance competition is composed of four health insurance carriers—a Medicaid carrier, a local provider-owned health insurance carrier, a health insurance carrier owned by a provider from an adjacent market and an ACA health care cooperative. Each of these carriers participated on the Market 1 Exchange in 2015. Market 1 did not have a Blue Cross and Blue Shield carrier competing on the Exchange; the local Blue Cross and Blue Shield plan had competed in previous years but exited the Market 1 Exchange in 2016.

The following chart shows the key results for this market. The annual premium is on the left; hospital network coverage is shown on the bottom. The hospital network coverage is the percentage of total admissions that the network covered historically for Medicare fee-for-service members. This is one metric used to assess the network size. The size of the bubble shows relative market share for each network. The color of the bubbles shows the product design.



The Medicaid carrier and the health care cooperative had the lowest premiums in the market by a significant percentage. These two carriers utilized an alternative (narrow) network composed of one of the large local health systems (the second largest) and the local university health system. Each of these carriers had over one-third of the 2016 Individual Exchange membership market share. Since their premiums and hospital network were similar, their bubbles overlap in the middle of the chart.

The local provider-owned health insurance carrier had much higher premiums but still managed most of the remaining one-third of the membership market share. This provider-owned health insurance carrier's network was composed of the largest hospital system in the market and the local university health system.

[57]Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.

The health insurance carrier owned by a provider from a different market had the highest premiums and had less than 1% of the membership market share.

All carriers used narrow networks on the Individual Exchange. There was no broad network.

Market Information and Findings

Market 1 is a metropolitan market from a Western state, with a population of approximately one million people in urban, suburban and rural geographical areas. The ACA rating area for this market includes four counties that span across a geographical area roughly 100 miles long and 50 miles wide. Most people live within about a 50-mile radius from the "downtown" area. There are not significant geographic barriers for accessing care other than drive time for people who live far from the largest hospitals.

We selected Market 1 because the three hospital systems that dominate the market compete against each other and are aligned with health insurance carriers that offered narrow networks. It is an example of hospital system competition. The main hospitals are located centrally near the downtown area of the market. Each system also owns one or two small hospitals in suburban areas.

The three hospital systems provide most the hospital-based services in the market. Two of the hospital systems have historically competed through exclusive contracts with health insurance carriers (i.e., narrow networks) or by offering their own health insurance plan(s). The third hospital system (a university hospital) has participated in products with multiple health insurance carriers. They participated on multiple Exchange networks—each network included one or the other competing hospital systems.

Market Profile

Market 1: A medium-sized metropolitan area in a Western state

Rating Area: Large, covering an area approximately 100 miles long and 50 miles wide across four counties

Geography: Urban, suburban and rural

Population: Approximately one million people

Total Approximate Covered Lives on the Individual Exchange: 30,000

Exchange Competition: Four carriers—a health care cooperative, two provider-owned and one Medicaid

Products Offered: All HMO—27 product offerings—Bronze, Silver, Gold, Platinum and Catastrophic

Service Area(s): Every health plan offers services and products across the entire four county rating area

Network Scope: All networks are narrow: each network excludes at least one of the three major hospital systems

Hospital Competition: Three major hospital systems provide more than 95% of the hospital services in the market

Balance Billing Regulations: Currently none; Department of Insurance is holding public forums and is reviewing NAIC-proposed rules

Premiums and Net Contribution to Member

Table 1 summarizes the key market statistics for evaluating the key information of this case study: the types of carriers and products offered; the size of each service area and hospital network; the premium and net contribution for the member (annual and monthly); and the estimated enrollee market share for each carrier's network.

Premiums and the net contribution from the member were compared based on a Silver Plan, Age 40 and Single Rate and an income at 100% to 150% of the federal poverty level. The carriers in this case study competed on the Exchange in 2015. The local Blue Cross and Blue Shield plan was on the Exchange in 2015; however, they exited it for 2016 after their 2016 filed premium increase was disapproved by state regulators.

Table 1 - Key Market Statistics

Market 1 - West U.S. - Metro Area					
Comparison: premium and net member contribution by carrier, network, and product type.	*Carrier:*	1 Medicaid Carrier	2 Provider Owned 1	3 Provider Owned 2	4 Healthcare Coop
	Network:	*A*	*B*	*C*	*D*
	Product Type:	*HMO*	*HMO*	*HMO*	*HMO*
	Count of Hospitals in the Network:	*7*	*2*	*3*	*8*
	% of Market Admissions in the Network:	*51%*	*61%*	*51%*	*52%*
	Service Area:	*Large*	*Large*	*Large*	*Large*
	Network Size:	*Narrow*	*Narrow*	*Narrow*	*Narrow*
	Silver Plan Age 40- Single - Average Monthly Premium:	*$181*	*$258*	*$292*	*$197*
	Silver Plan Age 40- Single - Average Annual Premium:	*$2,170*	*$3,099*	*$3,502*	*$2,363*
	Relative to Market Average w/o ACA Subsidy as a %:	*-22%*	*11%*	*26%*	*-15%*
	Relative to Market Average w/o ACA Subsidy in Monthly $$'s:	*($51)*	*$26*	*$60*	*($35)*
	Silver Plan Age 40- Single - Average Annual Premium Less ACA Subsidy at FPL 100% to 150%:	*$412*	*$1,342*	*$1,745*	*$605*
	Relative to Market Average with ACA Subsidy as a %:	*-60%*	*31%*	*70%*	*-41%*
	Relative to Market Average with ACA Subsidy in Annual $$'s :	*($614)*	*$316*	*$719*	*($421)*
	Estimated Carrier/Network Marketshare (% of Enrollees):	*38%*	*27%*	*1%*	*34%*
		(note: Carrier 2 left the Exchange market in 2017)			

The results of the premium and net contribution (i.e., premium less ACA subsidy) comparison to the straight average of all the carriers are described below, along with brief comments about carrier premium increases from 2015 to 2016.

Four carriers competed on the Exchange. Each carrier offered a narrow network HMO product (see Hospital Networks by Carrier below).

- Carrier 1 (Medicaid Carrier) is a managed Medicaid carrier that operates in multiple markets throughout the U.S. This carrier had participated on the Exchange since 2014.
    - The monthly HMO premium for the member was $181, which was 22% and $51 below the market average. On an *annual basis,* the premium less the ACA premium subsidy yielded a net contribution of $412, which was *$614* below the market average.
    - Their HMO premium and net contribution were the lowest in the market. This carrier proposed a 0% premium increase from 2015 to 2016, and the state regulators approved a 2% decrease.
    - This carrier had 38% of the membership. This product was available for sale in every Market 3 county.
- Carrier 2 (Provider Owned 1) is owned by the largest hospital system in the market and operates as a commercial and Medicare Advantage health plan. This carrier competed on the Market 1 Exchange since its inception; however, it announced that it would exit the Exchange for the 2017 plan year.

  - The monthly HMO premium for the member was $258, which was 11% and $26 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $1,342, which was *$316* above the market average.
  - Their HMO premium and net contribution were the second highest in the market. This carrier filed for a 6% premium increase from 2015 to 2016, and the state regulators approved increases between 3% and 6%.
  - This carrier had 27% of the membership. This product was available for sale in every county.

- Carrier 3 (Provider Owned 2) is owned by a national hospital chain that owns hospitals in adjacent rating areas. This carrier started participating on the Exchange in 2015.
  - The monthly HMO premium for the member was $292, which was 26% and $60 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,745, which was *$719* above the market average.
  - Their HMO premium and net contribution were the highest in the market. This carrier filed for a 0% premium increase from 2015 to 2016, and the state regulators approved it.
  - This carrier had 1% of the membership. This product was available for sale in every county.
- Carrier 4 (Health Care Cooperative) is an ACA health cooperative started because of the ACA. It has been on the Exchange since its inception and was still in business in 2016.
  - The monthly HMO premium for the member was $197, which was 15% and $35 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $605, which was *$421* below the market average.
  - Their HMO premium and net contribution were the second lowest in the market. This carrier increased premiums between 4% and 17% from 2015 to 2016. Average increases were difficult to measure as the health care cooperative historically offered HMO and PPO products. For 2016, the PPO products ended, so members had to either select an HMO plan, choose another carrier or leave the Exchange.
  - This carrier had 34% of the membership. This product was available for sale in every county.

Hospital Networks by Carrier

Table 2 shows the number and types of hospitals that were included, or in-network, for each of the carrier's networks.

Table 2 - Hospital Networks by Carrier

Market 1 - West U.S. - Metro Area

Market Hospitals and Carrier Network Hospital Participation - counts & percentage of Admissions (using Medicare fee-for-service data)

				Carrier			
				1	2	3	4
				Network			
Hospital	System	Type_Hosp	% of Market Admissions	A	B	C	D
Hospital 1	System X	Hospital	47.7%		X	X	
Hospital 2	System Y	Hospital	21.5%	X			X
Hospital 3	System Z	Educational	12.7%	X	X		X
Hospital 4	System Y	Women's	5.0%	X			X
Hospital 5	System Y	Hospital	4.2%	X			X
Hospital 6	System Y	Rehab	2.3%	X			X
Hospital 7	Independent	Hospital	0.4%				
Hospital 8	Independent	Rehab	3.1%	X		X	X
Hospital 9	System Z	Educational	2.7%	X			X
Hospital 10	Independent	LTAC	0.4%			X	X
Total			100.0%				
			Count of Hospitals in the Network:	*7*	*2*	*3*	*8*
			% of Market Admissions in the Network:	*51%*	*61%*	*51%*	*52%*
			Product Type:	*HMO*	*HMO*	*HMO*	*HMO*
			Network Size:	*Narrow*	*Narrow*	*Narrow*	*Narrow*
			Carrier Type:	*Medicaid*	*Provider Owned*	*Provider Owned*	*Healthcare Coop*

As seen in Table 2, there were 10 hospitals located or utilized by members living within the market (i.e., the ACA rating area). Each carrier offered only one network. We evaluated the proportion of market health care services provided by each hospital in the market, using historical Medicare fee-for-service inpatient admissions as the proxy for what could be expected for an Exchange population. Each hospital's percentage of Medicare admissions to the total market Medicare admissions gives an estimate for the hospital's share of services.

A summary of our findings for each network is below.

- Carrier 1 (Medicaid Carrier) offered one network. Network A included the hospitals from System Y and System Z as well as the few independent hospitals in the market. System Y was the second largest hospital system in the market, and System Z was the local university hospital. Network A excluded System X, the system with the largest hospital in the market (Hospital 1).

  Their network included seven of the hospitals, which provided 51% of the hospital services.

- Carrier 2 (Provider Owned 1) offered one network. Network B was aligned with System X and System Z. It excluded System Y, the largest hospital system in the market. The network included only two hospitals, but they are major hospitals with 61% of the hospital admissions covered.

- Carrier 3 (Provider Owned 2) offered one network. Network C was aligned with System X and included a couple of the independent hospitals. Network C is the smallest network offered in the market because it excluded the first and third largest hospitals systems, System Y and System Z.

- Carrier 4 (Health Care Cooperative) offered Network D. It is like Network A, except that it also included a long-term care hospital.

From the hospital perspective, the second largest hospital system, System Y, aligned with a Medicaid carrier and an ACA health cooperative. The local university hospital partnered with both the Medicaid carrier and the health care cooperative. The largest

hospital system, System X, offered products through its own carrier. It also allied with Carrier 4 (the carrier owned by a hospital system from another market).

System Y secured the largest market share through Carrier 1 and Carrier 4, with 38% and 34% of the members, respectively. System X only secured 28% of the market share through Carrier 2 and Carrier 3, with market shares of 27% and 1%, respectively. Note that Carrier 2 exited the Exchange in 2017.

Carrier Characteristics, Plans Offered and Member Plan Selections

Tables 3 and 4 summarize the distribution of membership by metal tier selected by the Individual Exchange members.

Table 3 - Carrier/Network Marketshare Percentage

Market 3 - East U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

				Approx. Historical Market Share %'s by Carrier and Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	HMO	Medicaid Carrier	8.4%	23.8%	5.8%	0.0%	0.0%	38.3%
Carrier 2	Network B	HMO	Provider Owned	5.9%	16.5%	4.0%	0.5%	0.2%	26.7%
Carrier 3	Network C	HMO	Provider Owned^	0.2%	0.5%	0.1%	0.0%	0.0%	0.8%
Carrier 4	Network D	HMO	Healthcare Coop	7.5%	21.2%	5.1%	0.0%	0.3%	34.2%
Total				22.0%	62.0%	15.0%	0.5%	0.5%	100.0%

** Estimated from multiple sources, including articles from healthinsurance.org about the health* Exchange

^ This carrier*'s provider owner does not own hospitals in the Market 3 rating area; however, it owns hospitals in adjacent rating areas (which are not included in the case study).*

Table 4 - Carrier/Network Membership and Product Counts

Market 1 - West U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

				Estimated Historical Market Share - Member Counts					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	HMO	Medicaid Carrier	2,530	7,130	1,725	-	-	11,500
Carrier 2	Network B	HMO	Provider Owned	1,760	4,960	1,200	150	65	8,000
Carrier 3	Network C	HMO	Provider Owned^	55	155	38	-	2	250
Carrier 4	Network D	HMO	Healthcare Coop	2,255	6,355	1,538	-	83	10,250
Total				6,600	18,600	4,500	150	150	30,000

				Number of Plans Offered by Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total**
Carrier 1	Network A	HMO	Medicaid Carrier	1	1	1	0	0	3
Carrier 2	Network B	HMO	Provider Owned	2	5	4	1	1	13
Carrier 3	Network C	HMO	Provider Owned^	1	1	1	0	1	4
Carrier 4	Network D	HMO	Healthcare Coop	2	2	2	0	1	7
Total				6	9	8	1	3	27

** Estimated from multiple sources, including articles from healthinsurance.org about the health* Exchange.
*** Estimated from multiple sources, including rates filed and available from HHS Public Use Files.*
^ This carrier*'s provider owner does not own hospitals in the Market 3 rating area; however, it owns hospitals in adjacent rating areas (which are not included in the case study).*

Conclusions

Case Study 1 provides an example of a market where competing hospital systems aligned with different carriers or sold their own health insurance plans to compete for market share.

The two largest hospital systems in Market 1 actively competed for the Individual Exchange membership. The second largest system, System Y, obtained the largest share because the two carriers that included System Y in their narrow networks secured more than 65% of the membership.

The largest hospital system attempted to gain market share by selling its own products and had nearly 30% of the market share, despite having premiums and net contributions significantly higher than the leading carriers. However, this carrier announced that it is exiting the Individual Exchange market in 2017. This offers a series of complicated choices to the hospital. Their carrier was more expensive and had a solid market share, but their premiums were higher than two other major competitors. Their own carrier may face financial pressures even as the hospital gets more funding for uninsured patients. And, if they do not offer their own product, the members would still have access to insurance from other carriers. The other carriers would still pay for Exchange members.

So the Medicaid Carrier and the health care cooperative (along with System Y) have lower premiums and net member contributions. Given that over 85% of the membership covered on Market 1's Individual Exchange had income below 400% of the federal poverty level, it appears System Y had a successful strategy to attract members and bring additional revenue and marginal income.

The health care cooperative was still actively competing on this Individual Exchange—unlike many of other cooperatives have closed.

Other Supporting Data: Case Study 1

ACA Covered Population Characteristics

Estimated Covered Population by Gender, Age, Metal Tier and Federal Poverty Level (FPL%)

Table 5 - Member Mix by Gender and Metal Type

Distribution by Gender and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Female	51.8%	56.1%	51.0%	54.1%	54.1%	54.1%
Male	48.2%	43.9%	49.0%	45.9%	45.9%	45.9%

- More females participated on the Individual Exchange.
- The highest female-to-male proportion was in the Silver plan.

Table 6 - Member Mix by Age and Metal Type

Distribution by Age and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Age < 18	8.0%	7.0%	14.1%	19.0%	8.0%	8.4%
Age 18-25	6.0%	7.0%	7.1%	6.0%	39.0%	7.0%
Age 26-34	14.0%	14.0%	15.2%	17.0%	52.0%	14.5%
Age 35-44	14.0%	14.0%	16.2%	20.0%	1.0%	14.3%
Age 45-54	21.0%	22.0%	20.2%	18.0%	0.0%	21.3%
Age 55-64	36.0%	35.0%	27.3%	19.0%	0.0%	33.7%
Age ≥ 65	1.0%	1.0%	0.0%	1.0%	0.0%	0.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

- Over 55% of the members on the Individual Exchange were over the age of 45.
- Almost 30% of the member were below the age of 35.

Table 7 - Member Mix by Metal Type within FPL Range

Metal Split by FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total Metal
FPL	22.8%	62.1%	14.3%	0.3%	0.5%	100.0%
100-200%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
200 - 250%	45.6%	29.6%	24.8%	0.0%	0.0%	100.0%
250%-400	41.5%	29.3%	28.3%	0.9%	0.0%	100.0%
400% +	39.1%	27.7%	26.7%	0.9%	5.6%	100.0%

- Over 60% of the members on the Individual Exchange selected the Silver plan, and we estimated that the lowest income bracket was almost exclusively on the Silver plan.
- For the higher income brackets, the Bronze plans were selected the most, with similar proportions selecting Silver and Gold.
- Very few members selected Platinum plans or Catastrophic plans.

Table 8 - Member Mix by FPL Range within Metal Type

FPL Split by Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL
FPL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
100-200%	0.0%	74.8%	0.0%	0.0%	0.0%	46.4%
200 - 250%	39.6%	9.4%	34.3%	0.0%	0.0%	19.8%
250%-400	45.1%	11.7%	49.0%	74.6%	0.0%	24.8%
400% +	15.3%	4.0%	16.7%	25.4%	100.0%	8.9%

- Per the previous exhibits, the Silver plan enrollment is dominated by the lowest income bracket.
- Less than 10% of the membership had income above 400% of the federal poverty level.

Table 9 - Member Mix by FPL Range and Metal Type

Distribution by Metal and FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL & Metal
FPL	22.8%	62.1%	14.3%	0.3%	0.5%	100.0%
100-200%	0.0%	46.4%	0.0%	0.0%	0.0%	46.4%
200 - 250%	9.0%	5.9%	4.9%	0.0%	0.0%	19.8%
250%-400	10.3%	7.3%	7.0%	0.2%	0.0%	24.8%
400% +	3.5%	2.5%	2.4%	0.1%	0.5%	8.9%

- Platinum and Catastrophic membership was less than 1% of the total.
- Silver and Bronze combined made up almost 85% of the membership selections.

Carrier Service Area by County

Table 10 - Carrier/Network Service Area Size

Market 1 - West U.S. - Metro Area *Carrier Coverage/Service Area - By County within the Rating Area*				
	Carrier 1	Carrier 2	Carrier 3	Carrier 4
	Network A	Network B	Network C	Network D
County	HMO	HMO	HMO	HMO
County 1	1	1	1	1
County 2	1	1	1	1
County 3	1	1	1	1
County 4	1	1	1	1

- All carriers and networks had service areas in every county of the rating area.
- All the networks were HMOs, so there was no difference in product/network type offered in the rating area.

Case Study 2

California: Metropolitan Area

Case Study 2: Market 2, California: Metropolitan Area

Summary

National perspective: 12.7 million members enrolled in Exchanges at the beginning of 2016. A premium tax credit was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average. The average premium was $396 per month before the credit with a $106 net member contribution after the credit. For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in this case study.[58]

Market 2 is a large county in California. Six carriers offer products on the Exchange: one is national, two are regional carriers, one is Medicaid and the other two are provider-owned. These six carriers offered nine different provider networks. These are all built on long-standing alternative networks that have been available to commercial and Medicare members over the years. Some carriers offered their typical network for Exchange members; other carriers used a subset of their typical network. Seven of the nine networks work within an HMO environment. One of the other carriers used a PPO; the other had both an HMO and a PPO.

The following chart shows the key results for this market. The annual premium is on the left; hospital network coverage is shown on the bottom. The hospital network coverage is the percentage of total admissions that the network covered historically for Medicare fee-for-service members. This is one metric used to assess the network size. The size of the bubble shows relative market share for each carrier. The color of the bubbles shows the product design.

Note: This shows the six carriers and not the nine networks. Enrollment was available only by carrier and was not separated by network. So this figure is different from the other five case studies.

Narrow HMOs are a long-standing presence in this market. One PPO product with comparable enrollment to the HMOs also has a small network.

The network structure for Exchanges generally aligns hospitals to carriers. There are multiple hospitals, including four major hospitals. Each of the 18 hospitals that we reviewed is aligned with at least two carriers (except for the provider-owned carriers). Two of the carriers offer broad networks at hospitals with more than 90% of admissions. These had higher premiums. The rest of the carriers and hospitals used smaller hospital networks (40% to 60% of admissions and the provider-owned staff-model HMO is much smaller). The two provider-owned carriers worked primarily with the hospitals and physicians they own. Other carriers have aligned with other hospitals for their Exchange products.

[58]Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.

Physician groups are the foundation for the HMO products that have significant enrollment. This includes the two provider-owned carriers which own hospitals, physician groups and their own health plan.

Premiums for various HMO carriers are close to each other, so enrollment is split among the various carriers. One of the more expensive PPO programs has a comparable market share to the HMOs. The other PPO program from the national carrier has a much smaller enrollment.

This region has long-standing provider-based management, alternative payment systems and competition between hospital systems that started before Exchanges. The state runs its own Exchange with extensive marketing and carrier negotiations. Some hospitals had lower contracts than typical commercial contacts for Exchange products to get more attractive premiums for members with low subsidies. HMO products have strong roles for primary care physicians (reinforced by recent state regulations).

Market Information and Findings

Market 2 is a large county in California. It has a population of approximately 3.2 million people in urban, suburban and rural geographical areas. The ACA rating area for this market is a single county. The county is 70 miles by 65 miles with most of the population along the 70-mile coast or along various inland highways. There are 18 hospitals with four major hospitals and/or hospital systems. There are some geographic barriers for accessing care other such as hills and canyons plus the typical drive-time challenges for outlying areas.

Many carriers and networks continue to be offered through the Exchanges. Enrollment is split between them. The county has a large uninsured population. The HMO programs are based on long-standing relationships with physician groups. Two carriers own their carrier and physician groups, which creates long-standing working relationships. Even outside of these carriers, networks are extensive and coordinated; for example, the website for one carrier describes not just hospitals and physicians, but also lists covered labs, urgent care centers and other major vendors.

There are four major hospital systems within the major population centers on the West Coast:

- One hospital system is part of a staff model HMO, which owns an integrated physician group and their own carrier. They offer a product and two alternative networks on the Exchange.
- Another hospital system also owns an extensive health system of hospitals, two physician groups and their own carrier. They offer a product on the Exchange and participate in some products offered by other carriers.
- A third hospital system also has significant volume and presence in the community.
- The fourth major hospital is an educational hospital in the major city.

Market Data and Carrier Information

Market Profile

Market 2: A medium-sized metropolitan area in California

Rating Area: Large county in California

Geography: Urban, suburban and rural

Population: Approximately 3.2 million people

Total Approximate Covered Lives on the Individual Exchange: 124,000

Exchange Competition: Six carriers—nine different networks

Products Offered: Mostly HMO, some PPO and EPO. One standard product design in the state for each metal category.

Service Area(s): One county (some service areas exclude certain zip codes)

Network Scope: All options from broad coverage to very small but extensive provider-owned networks

Hospital Competition: Four major hospitals (and related systems) plus other hospitals along the coast and inland.

Balance Billing Regulations: A mix of rules depending on contract language, HMO/PPO/EPO product design, with some legal restrictions and ongoing court cases.

Premiums and Net Contribution to Member

The chart above summarizes major public information on these Exchange programs (premiums, type of network and type of program). Table 1 summarizes the key market statistics for evaluating the key information of this case study: the types of carriers and products offered; the size of each service area and hospital network; the premium and net contribution for the member (annual and monthly); and the estimated enrollee market share for each carrier's network.

Premiums and the net member contributions were compared based on a Silver Plan, Age 40 and Single Rate and for an income at 100% to 150% of the federal poverty level.

Table 1 reflects only the public information. Member choices depend on many factors—physicians, marketing and so on—which are not shown on this table. Also, this case study is based on a state-run Exchange, which did not provide enrollment splits by network, so they are not available.

Six carriers participate on the Exchanges in Market 1 using eight networks. Most are narrow HMO networks. This state-run Exchange showed market share for carriers, but not split enrollment by network if different networks were offered by the same carrier. Carrier 4 also offers a ninth network, but it is available only in Bronze products, so the premiums are not comparable to the Silver plans (it is offered as information only).

Over 70% of enrollment was split across various HMO products. This included an HMO product offered by a Medicaid carrier with 12% of enrollment.

Table 1 - Key Market Statistics

Market 3 - East U.S. - Metro Area	*Carrier:*	1		2	3	4		5	6	
Comparison: premium and net member contribution by carrier, network, and product type.		Provider Owned 1		Medicaid Carrier	Provider Owned 2	Regional 1 Bronze Only		Regional 2	National	
	Network:	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	
	Product Type:	*HMO*	*HMO*	*HMO*	*HMO*	*HMO**	*HMO^*	*PPO*	*PPO*	*HMO*
	Count of Hospitals in the Network:	*7*	*10*	*12*	*3*	*11*	*5*	*11*	*17*	*17*
	% of Market Admissions in the Network:	*44%*	*58%*	*77%*	*17%*	*62%*	*40%*	*51%*	*92%*	*92%*
	Service Area:	*Limited*	*Limited*	*Large*	*Limited*	*Large*	*Large*	*Large*	*Large*	*Large*
	Network Size:	*Narrow*	*Narrow*	*Semi-Narrow*	*Very Narrow*	*Narrow*	*Narrow*	*Narrow*	*Broad*	*Broad*
Silver Plan Age 40- Single - Average Monthly Premium:		$328	$344	$286	$329	-	$296	$342	$361	$389
Silver Plan Age 40- Single - Average Annual Premium:		*$3,937*	*$4,129*	*$3,427*	*$3,953*	-	*$3,551*	*$4,104*	*$4,336*	*$4,670*
Relative to Market Average w/o ACA Subsidy as a %:		*-2%*	*3%*	*-15%*	*-2%*	-	*-12%*	*2%*	*8%*	*16%*
Relative to Market Average w/o ACA Subsidy in Monthly $$'s:		*($6)*	*$10*	*($49)*	*($5)*	-	*($39)*	*$8*	*$27*	*$55*
Silver Plan Age 40- Single - Average Annual Premium Less ACA Subsidy at FPL 100% to 150%:		*$1,015*	*$1,206*	*$505*	*$1,031*	-	*$629*	*$1,181*	*$1,414*	*$1,747*
Relative to Market Average with ACA Subsidy as a %:		*-7%*	*11%*	*-54%*	*-6%*	-	*-42%*	*8%*	*30%*	*60%*
Relative to Market Average with ACA Subsidy in Annual $$'s:		*($76)*	*$115*	*($586)*	*($60)*	-	*($462)*	*$90*	*$323*	*$656*
Estimated Carrier/Network Marketshare (% of Enrollees):		*18%*		*12%*	*23%*	*18%*		*21%*	*9%*	

Bronze Only: This network is only available for Bronze plan designs; therefore, a premium comparison is not provided.
**Design is like an Open Access HMO network, so we refer to it as an HMO, although it could be an "insurance" product (like an EPO) rather than an "HMO."*
^ Requires a PCP that must refer care.

The results of the premium and net contribution (i.e., premium less ACA subsidy) comparison to the straight average of all the carriers are described below, along with brief comments about enrollment in each network.

- Carrier 1 (local provider-owned) is a hospital-owned carrier with two physician groups, a carrier and other services.

  They offer two narrow HMO networks.

  With two networks, an HMO design and low contributions, this carrier had 18% of the membership spread across the two networks. This was offered in a large service area but did not include some outlying areas.

  Lower price HMO (smaller hospital network)

  - The first HMO monthly premium was $328, which was 2% and $6 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,015, which was $76 below the market average.
  - This is Network A. It included seven of the 17 hospitals and 44% of the overall hospital admissions. This product uses only hospitals affiliated within their health system.

  Higher premium HMO (bigger hospital network)

  - The second monthly HMO premium was $344, which was 3% and $10 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,206, which was $115 above the market average.
  - This is Network B. It included 10 of the 17 hospitals and 58% of the overall hospital admissions. These additional hospitals added hospitals outside of their health system to create coverage in some outlying locations.

- Carrier 2 is a managed Medicaid carrier that operates in multiple California markets using an HMO
  - The monthly HMO premium was $286, which was 15% and $49 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $505 which was $586 below the market average.
  - This is Network C. It included 12 of the 17 hospitals and 77% of the overall hospital admissions.
  - With a narrow HMO, and lower contribution, this carrier had 12% of the membership.
- Carrier 3 is a part of a staff model HMO that owns its own hospital, physician group, carrier and other services. It operates in California and selected other states using an HMO product.
  - The monthly HMO premium was $329, which was 2% and $5 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,031, which was $60 below the market average.
  - This is Network D. It included three of the 17 hospitals and 17% of the overall hospital admissions.
  - With a narrow HMO and low contribution, this carrier had 23% of the membership.
- Carrier 4 is a regional carrier that has multiple lines of business including a large Medicaid presence. They offer two networks.

With two networks, an HMO design and low contributions, this carrier had 18% of the membership spread across the two networks.

Bronze-only network

- Networks E has less hospital coverage and unlike other networks was available only to members who purchased a Bronze plan.
- This is Network E. It included 11 of the 17 hospitals and 62% of the overall hospital admissions.

All metal tiers

- The monthly HMO premium was $296, which was 12% and $39 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $629, which was $462 below the market.
- This is Network F. It included 5 of the 17 hospitals and 40% of the overall hospital admissions.

- Carrier 5 is a regional carrier offering a PPO product with a broad hospital network.
  - The PPO premium was $342, which was 2% and $8 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,181, which was $90 above the market.
  - This is Network G. It included 11 of the 17 hospitals and 51% of the overall hospital admissions.
  - With a PPO product at a high contribution, this carrier had 21% of the membership.
- Carrier 6 is a national carrier that offers both PPO and HMO product.

  With a broad hospital networks, but the highest premiums in the market, this carrier had 9% of the membership spread across the two networks.
  - Both products offered hospital Network H. It included 17 of the 17 hospitals and 92% of the overall hospital admissions.
  - The PPO premium was $361, which was 8% and $27 above the market. On an *annual* basis, the premium less the ACA premium subsidy yielded a net member contribution of $1,414, which was $323 above the market.
  - The HMO premium was $389, which was 16% and $55 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net member contribution of $1,747, which was $656 above the market.

Hospital Networks by Carrier

This market includes long-standing HMO programs and two hospital-owned carriers. The two hospital-owned carriers have deep connections, so other hospitals and carriers have come together to create alliances for Exchange products. The network alliances were like those used for non-Exchange products, although hospital networks are somewhat smaller.

Table 2 summarizes the key findings about the carriers and the hospitals in their networks. It shows the number and types of hospitals that were included in-network for each of the carrier's networks.

Each carrier utilized alternative networks. There were wide variations in the size of hospital coverage.

Table 2 - Hospital Networks by Carrier

Market 2 - West Coast U.S. - Metro Area

Market Hospitals and Carrier Network Hospital Participation - Counts and Medicare Admissions

				Carrier								
				1		2	3	4		5	6	
				Network								
Hospital	System	Type_Hosp	% of Market Admissions	A	B	C	D	E	F	G	H	
Hospital 1	System Y	Educational	9.8%	X	X	X		X	X		X	X
Hospital 2	System X	Hospital	10.2%			X				X	X	X
Hospital 3	System Y	Hospital	7.4%	X	X	X		X			X	X
Hospital 4	System Y	Hospital	4.5%							X	X	X
Hospital 5	System Z	Hospital	7.5%		X	X	X	X	X	X	X	X
Hospital 6	Independent	Hospital	5.0%	X	X	X		X			X	X
Hospital 7	System X	Hospital	4.1%			X				X	X	X
Hospital 8	System X	Hospital	5.7%			X				X	X	X
Hospital 9	System W	Hospital	4.8%		X	X		X		X	X	X
Hospital 10	System Y	Hospital	4.1%						X	X	X	X
Hospital 11	Independent	Hospital	8.5%				X					
Hospital 12	System Y	Hospital	2.5%			X		X	X	X	X	X
Hospital 13	Independent	Hospital	2.6%			X		X		X	X	X
Hospital 14	System Z	Hospital	1.4%		X	X	X	X		X	X	X
Hospital 15	System Y	Women's	0.8%	X	X			X			X	X
Hospital 16	System X	Hospital	4.1%	X	X			X		X	X	X
Hospital 17	Independent	Hospital	16.2%	X	X	X		X	X		X	X
Hospital 18	Independent	Hospital	1.0%	X	X						X	X
Total			100.0%									
		Count of Hospitals in the Network:		*7*	*10*	*12*	*3*	*11*	*5*	*11*	*17*	*17*
		% of Market Admissions in the Network:		*44%*	*58%*	*77%*	*17%*	*62%*	*40%*	*51%*	*92%*	*92%*
		Product Type:		*HMO*	*HMO*	*HMO*	*HMO*	*HMO*	*HMO*	*PPO*	*PPO*	*HMO*
		Network Size:		*Narrow*	*Narrow*	*Semi-Narrow*	*Very Narrow*	*Narrow*	*Narrow*	*Narrow*	*Broad*	*Broad*
		Carrier Type:		*Provider Owned*		*Medicaid*	*Provider Owned*	*Regional*		*Regional*	*National*	

Carriers 1 and 3 own extensive networks. Each has hospitals, physician groups, carriers and many other services. Carrier 1 is connected to System 2, and Carrier 3 connects with a few hospitals. These carriers and providers are closely aligned. Although not shown in this table, these organizations do contract for a few services with hospitals outside of their system. For example, certain unusual and complex admissions are done at outside hospitals but not listed as in-network.

Carrier 1 works with System 2. They offered two alternative networks at slightly different premiums. The lower premium product is offered in most, but not all, of the county (it excludes some outlying zip codes). This uses the hospitals and physician groups within their system. A slightly expanded service area is offered at a higher premium. This includes a few additional hospitals to cover the outlying areas.

System 2 does not contract with the other staff model HMO. However, they typically contract with all the other carriers for non-Exchange products. However, within the Exchange, Network B does not participate in the networks of Carriers 3 and 5.

Network 4, the staff model, does not contract with other carriers.

Given the alignments of two networks, the other HMO carriers and hospitals then made decisions about their allies for the Exchange product.

In summary,

- Carrier 1 works primarily with System 2.
- Carrier 2, the Medicaid carrier, reached agreement many hospitals (77% of Medicare admissions).
- Carrier 3 works with a few hospitals.
- Carrier 4 reached agreement with multiple hospitals, primarily System 1.
- Carriers 5 and 6 have contracts with most hospitals.

It is hard to determine the impact on hospital market share given multiple products and no differentiation in enrollment by network. However, Systems 2 and 4 did have aligned narrow networks with low premiums and distinct enrollment. This may imply a potential shift in market share from other hospitals.

The two provider-owned carriers use their own hospitals and have 44% and 15% of the admissions. These are officially "narrow" networks although both organizations offer extensive services in an integrated manner.

There are also extensive and ongoing physician groups working within various HMO products.

Carrier Characteristics, Plans Offered and Member Plan Selections

Tables 3 and 4 summarize the distribution of membership by metal tier selected by the Individual Exchange members.

Table 3 - Carrier/Network Marketshare Percentage

Market 2 - West Coast U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

				Approx. Historical Market Share %'s by Carrier and Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Networks A & B	HMO & HMO	Provider Owned	7.3%	7.5%	1.2%	1.3%	0.4%	17.7%
Carrier 2	Network C	HMO	Medicaid Carrier	4.7%	6.8%	0.2%	0.0%	0.0%	11.7%
Carrier 3	Network D	HMO	Provider Owned	9.4%	11.0%	0.8%	1.3%	0.2%	22.7%
Carrier 4	Networks E & F	HMO & HMO	Regional MCO	1.5%	14.4%	1.0%	0.6%	0.3%	17.7%
Carrier 5	Network G	PPO	Regional MCO	2.7%	15.6%	1.9%	1.0%	0.0%	21.1%
Carrier 6	Network H	PPO & HMO	National MCO	4.4%	4.0%	0.3%	0.2%	0.1%	9.0%
Total				29.9%	59.4%	5.4%	4.4%	1.0%	100.0%

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org and Covered California.

Table 4 - Carrier/Network Membership and Product Counts

Market 3 - East U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

Estimated Historical Market Share - Member Counts

Members - Total Rounded to nearest 100

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Networks A & B	HMO & HMO	Provider Owned	9,100	9,300	1,500	1,600	500	22,000
Carrier 2	Network C	HMO	Medicaid Carrier	5,800	8,400	300	-	-	14,500
Carrier 3	Network D	HMO	Provider Owned	11,600	13,700	1,000	1,600	200	28,100
Carrier 4	Networks E & F	HMO & HMO	Regional MCO	1,800	17,900	1,200	700	400	22,000
Carrier 5	Network G	PPO	Regional MCO	3,400	19,300	2,300	1,200	-	26,200
Carrier 6	Network H	PPO & HMO	National MCO	5,400	5,000	400	300	100	11,200
Total				37,100	73,600	6,700	5,400	1,200	124,000

Number of Plans Offered by Metal Type

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total**
Carrier 1	Networks A & B	HMO & HMO	Provider Owned	2	2	2	2	1	9
Carrier 2	Network C	HMO	Medicaid Carrier	1	1	1	1	1	5
Carrier 3	Network D	HMO	Provider Owned	2	1	1	1	1	6
Carrier 4	Networks E & F	HMO & HMO	Regional MCO	1	1	1	1	1	5
Carrier 5	Network G	PPO	Regional MCO	2	1	1	1	1	6
Carrier 6	Network H	PPO & HMO	National MCO	2	2	2	2	1	9
Total				10	8	8	8	6	40

*Estimated from multiple sources, news articles, reports, and websites, such as healthinsurance.org and Covered California.

**From data including rates filed and available from HHS Public Use Files and Covered California.

Conclusions

Multiple carriers have historically offered narrow HMO products in this county prior to Exchanges. Six of them continued this approach and offered HMOs on the health Exchange. The narrow HMO networks had lower premiums for the Exchange and had most of the membership. The broad hospital network had high contributions and less than 10% of the enrollment. So, the carriers (and their hospital allies) with narrow networks split the membership. Enrollment generally went to the products with lower premiums, although the staff model HMO had 23% of the members even with premiums that were near the average.

Carriers, hospitals and physician groups have experience with alternative networks and the major hospital systems all have existing alliances. In Market 2 the three major hospital systems have engaged in the Exchange. Each major hospital system was aligned with at least one carrier in a narrow network.

The network situation in this market is complex since carriers in this market offer multiple networks to different types of buyers. Even before the Exchange, some carriers offer many networks (broad network, medium-sized network and a smaller network for more price-sensitive buyers). The multiple choices of networks continued in the Exchange; three carriers offer multiple networks within the Exchange.

- The provider-owned carrier needed more hospitals in outlying areas, so they expanded their network to use outlying hospitals. Their own hospitals are offered at a lower premium in the major locations. The expanded network is available in a larger service area at a slightly higher premium.
- Carrier 4 offers a large and medium network for many employers but further tightened this network (a subset of providers with better performance) for the Exchange and other price-sensitive buyers.

- Carrier 5 built a deeper connection to Hospital System 1 for their Exchange products.
- Carrier 6 offers both a PPO and HMO. This has both different providers and different management systems.
- The staff model HMO offers the same network (almost entirely their own hospitals).
- Two hospital-owned carriers continue to be part of this program. Since Exchange participation is voluntary, the Exchange appears to be offer business opportunities for the all parts of their organization (carrier, hospitals and physician groups).

Other Supporting Data: Case Study 2

ACA Covered Population Characteristics

Estimated Covered Population by Gender, Age, Metal Tier and Federal Poverty Level (FPL%)

Table 5 - Member Mix by Gender and Metal Type

Distribution by Gender and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Female	n/a	n/a	n/a	n/a	n/a	51.7%
Male	n/a	n/a	n/a	n/a	n/a	48.3%

- More females participated on the Individual Exchange.
- This case study shows a higher proportion of males participating on the Exchange than in the other case studies.

Table 6 - Member Mix by Age and Metal Type

Distribution by Age and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Age < 18	n/a	n/a	n/a	n/a	n/a	6.2%
Age 18-25	n/a	n/a	n/a	n/a	n/a	11.1%
Age 26-34	n/a	n/a	n/a	n/a	n/a	16.4%
Age 35-44	n/a	n/a	n/a	n/a	n/a	15.6%
Age 45-54	n/a	n/a	n/a	n/a	n/a	23.4%
Age 55-64	n/a	n/a	n/a	n/a	n/a	26.5%
Age ≥ 65	n/a	n/a	n/a	n/a	n/a	0.8%
Total	n/a	n/a	n/a	n/a	n/a	100.0%

- 51% of the members on the Individual Exchange were over the age of 45.
- 34% of the members were below the age of 35.

Table 7 - Member Mix by Metal Type within FPL Range

Metal Split by FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total Metal
FPL	29.9%	59.4%	5.4%	4.4%	1.0%	100.0%
100-200%	20.2%	78.3%	1.2%	0.0%	0.3%	100.0%
200 - 250%	28.8%	61.1%	5.4%	4.8%	0.0%	100.0%
250%-400	38.3%	46.8%	8.1%	6.8%	0.0%	100.0%
400% +	35.9%	30.1%	7.9%	3.9%	22.3%	100.0%

- More than 59% of the members on the Individual Exchange selected the Silver plan.
- Bronze plans were selected the second-most, with Bronze being the most popular in the highest income bracket.
- Platinum plans were selected far more in this case study than in the other case studies. In this market, more than 4% of the members selected Platinum, compared to less than 1% in the other case study markets.

Table 8 - Member Mix by FPL Range within Metal Type

FPL Split by Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL
FPL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
100-200%	12.5%	24.5%	4.0%	0.0%	6.2%	18.6%
200 - 250%	50.1%	53.5%	52.0%	56.8%	0.0%	52.0%
250%-400	32.4%	19.9%	38.0%	39.5%	0.0%	25.3%
400% +	4.9%	2.1%	6.0%	3.7%	93.8%	4.1%

- Metal plan member proportions were similar for the 200%–250% FPL bracket, all within 50% to 57%.
- Member proportions across FPL brackets for the other metals had greater variation.

Table 9 - Member Mix by FPL Range and Metal Type

Distribution by Metal and FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL & Metal
FPL	29.9%	59.4%	5.4%	4.4%	1.0%	100.0%
100-200%	3.7%	14.5%	0.2%	0.0%	0.1%	18.6%
200 - 250%	15.0%	31.8%	2.8%	2.5%	0.0%	52.0%
250%-400	9.7%	11.8%	2.0%	1.7%	0.0%	25.3%
400% +	1.5%	1.2%	0.3%	0.2%	0.9%	4.1%

- The membership distribution by FPL bracket was unique in that 52% of the members were in the 200%–250% bracket and fewer than 19% were in the 100%–200% bracket.
- In other case studies, no more than 20% of the members were in the 200%—250% bracket, and no less than 46% were in the 100%–200% bracket.
- Interestingly, this case study also had the second lowest percentage of members in the 400%+ FPL bracket.

Carrier Service Area by County

This is a single-county area, thus no table is needed.

Case Study 3

Eastern State: Metropolitan Area

Case Study 3: Market 3, Eastern State: Metropolitan Area

Summary

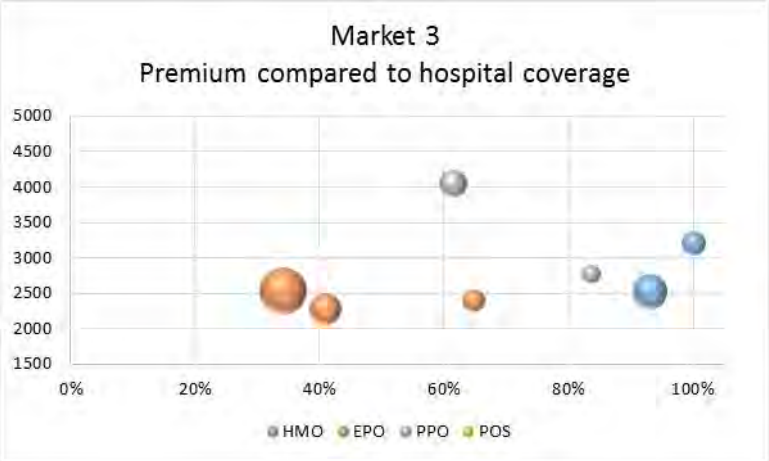
National perspective: 12.7 million members enrolled in Exchanges at the beginning of 2016. A premium tax credit was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average. The average premium was $396 per month before the credit with a $106 net member contribution after the credit. For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in this case study.[59]

State perspective: Markets 3 and 4 are in the same state. This study, Market 3, is a large metropolitan area. Note that this uses consistent labels for both markets. If a hospital, hospital system, carrier and/or network was in both markets, the labels for new organizations are extended.

Market 3 is a large metropolitan area in an Eastern state. The two largest hospital systems in this market provide more than 60% of the hospital services. Additionally, there are several smaller, independent hospitals/hospital systems.

The health insurance competition in Market 3 is composed of four health insurance carriers: a regionally based provider-owned health insurance carrier, a Blue Cross and Blue Shield plan and two national organizations. These carriers collectively provided coverage for an average of about 78,400 members.

The following chart shows the key results for this market. The annual premium is on the left; hospital network coverage is shown on the bottom. The hospital network coverage is the percentage of total admissions that the network covered historically for Medicare fee-for-service members. This is one metric used to assess the network size. The size of the bubble shows relative market share for each network. The color of the bubbles shows the product design.



EPOs had narrow hospital networks with lower premiums and higher enrollments. This is different from other states that were studied. The HMOs and PPOs had broad hospital networks and higher premiums in this market.

The provider-owned carrier and the Blue Cross and Blue Shield plan offered EPO products that used narrow networks and PPO products that used broad networks. Their EPO products had the lowest premiums and net member contributions. These EPO products had the most members in Market 4. The Blue Cross and Blue Shield EPO and the two provider-owned carrier EPOs covered 33%, 15% and 8% of the 78,400 members, respectively.

Despite the membership success of the smaller EPO networks, the products offered with bigger networks in the market also picked up some market share despite higher premiums than the EPOs. The bigger networks were sold with HMO and PPO product designs.

[59]Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.

The broad network with the lowest premiums and net member contribution was an HMO offered by Carrier 3, a national carrier, which picked up 18% of the membership, the second highest market share in the market. This national carrier's broad network was the second largest in the market, but had the third lowest premium/net member contributions.

We have also included another case study in this same state since several carriers and hospitals work on Exchanges in Market 3 and Market 4. The provider-owned health insurance carrier is owned by System B (the same system as in Market 3). The same Blue Cross and Blue Shield plan and the same two national carriers competed in Market 3 and 4). However, one of the carriers chose a limited service area in Market 4 (this service area was not close to the most populated areas of Market 4). This limited their enrollment.

This was a competitive market for carriers and hospitals. The narrow networks cumulatively had over 55% of the membership, and each of these networks excluded one of the large hospital systems, which creates competition between the hospitals.

Market Information and Findings

Market 3 is a metropolitan market from an Eastern state with a population of over two million people in mostly urban and suburban areas. The ACA rating area for this market includes 10 counties that span across a geographical area with a 40-mile radius around the central "downtown" of the main city. Most of the population is within a 25-mile radius.

The two largest hospital systems have their main hospitals located centrally near the downtown area of the market. Each system also owns multiple hospitals throughout the suburban areas. In some cases, these systems own competing hospitals in suburban areas. In some of the suburban areas hospital does not have competition (i.e., they are the sole hospital).

No significant geographic barriers for accessing care are found other than drive-time for people who live far from the centralized part of the market where the largest hospitals are located. Because of where the competing hospital systems are located relative to each other and/or other independent hospitals, the patients covered by narrow networks could visit out-of-network hospitals in emergency situations.

We selected Market 3 because of its characteristics below:

- In addition to having two large hospital systems with significant market share, several smaller systems and independent hospitals had some presence.
- This market has traditional carrier competition. There was a regional provider-owned carrier, a Blue Cross and Blue Shield organization and two national carriers—all well-known brands. There was not a "Medicare or Medicaid" carrier in this market, nor was there an ACA health care cooperative.
- The networks offered by the health insurance carriers ranged in size from broad with every hospital to very limited at one-third the size of the broadest network. Also, two carriers offered multiple networks.

Market 3 provides another example of hospital system competition as different hospital systems aligned with different health insurance carriers in both broad and narrow networks.

The characteristics about the market, the population of covered lives on the 2016 Individual Exchange and the competing carriers and their networks as well as the hospital competition are summarized below.

Market Profile

Market 3: A large metropolitan area in an Eastern state

Rating Area: Large, covering an area approximately 80 miles long and 80 miles wide across 10 counties

Geography: Urban and suburban

Population: Over two million people

Total Approximate Covered Lives on the Individual Exchange: 78,000

Exchange Competition: Four health plans: a provider-owned health plan, a regional carrier and two national carriers

Products Offered: HMO, EPO and PPO and 46 product offerings: Bronze, Silver, Gold, Platinum and Catastrophic

Service Area(s): All four carriers sold products in all 10 counties. Two carriers sold networks with limited service areas.

Network Scope: Two carriers offered broad networks, while the other two carriers offered narrow and semi-narrow networks.

Hospital Competition: The two major hospital systems provide more than 60% of the hospital services in the market. The other 40% is spread across several smaller systems and independent hospitals.

Balance Billing Regulations: None during the time of this study; the Department of Insurance submitted proposed rules for comment. The proposed rules would require providers to communicate to patients any situations where out-of-network providers might be engaged to provided services to the member. Additionally, the rules propose a forum where provider and insurer reach agreement on a "balanced bill" amount without patient involvement.

Premiums and Net Contribution to Member

Table 1 summarizes the key market statistics for evaluating the key information of this case study: the types of carriers and products offered; the size of each service area and hospital network; the premium and net contribution for the member (annual and monthly); and the estimated enrollee market share for each carrier's network.

Premium and the net contribution from the member were compared based on a Silver Plan, Age 40 and Single Rate and an income at 100% to 150% of the federal poverty level. Four carriers competed on the Exchanges in Market 3. Two carriers offered narrow network EPO products and broad network PPOs, while the other two carriers offered broad network HMOs.

Table 1 - Key Market Statistics

Market 3 - East U.S. - Metro Area — *Carrier:*	1	2		3	4		
Comparison: premium and net member contribution by carrier, network, and product type.	National 1	Regional		National 2	Provider Owned		
Network:	A	B	C	D	E	F	G
Product Type:	HMO	EPO	PPO	HMO	EPO	EPO	PPO
Count of Hospitals in the Network:	27	9	19	24	15	8	22
% of Market Admissions in the Network:	100%	34%	61%	93%	65%	41%	84%
Service Area:	Large	Limited	Large	Large	Limited	Local	Large
Network Size:	Broad	Narrow	Semi-Narrow	Broad	Narrow	Local	Broad
Silver Plan Age 40- Single - Average Monthly Premium:	$267	$211	$337	$210	$200	$190	$230
Silver Plan Age 40- Single - Average Annual Premium:	$3,202	$2,530	$4,046	$2,525	$2,399	$2,279	$2,759
Relative to Market Average w/o ACA Subsidy as a %:	14%	-10%	43%	-10%	-15%	-19%	-2%
Relative to Market Average w/o ACA Subsidy in Monthly $$'s:	$32	($24)	$102	($25)	($35)	($45)	($5)
Silver Plan Age 40- Single - Average Annual Premium Less ACA Subsidy at FPL 100% to 150%:	$1,394	$723	$2,239	$717	$591	$471	$951
Relative to Market Average with ACA Subsidy as a %:	38%	-29%	121%	-29%	-42%	-53%	-6%
Relative to Market Average with ACA Subsidy in Annual $$'s:	$382	($290)	$1,226	($295)	($421)	($541)	($61)
Estimated Carrier/Network Marketshare (% of Enrollees):	9%	33%	11%	18%	8%	15%	5%

The results of the premium and net contribution (i.e., premium less ACA subsidy) comparison to the straight average of all the carriers are described below, along with brief comments about enrollment in each network.

- Carrier 1 (National 1) is a health insurance carrier that operates nationally. They offered a broad network with an HMO product design.
    - The monthly HMO premium for the member was $267, which was 14% and $32 above the market average. On an *annual* basis, premium less the ACA premium subsidy yielded a net contribution of

$1,394, which was *$382* above the market average.

- The broad and high member contribution, resulted in 9% of the membership. This product was available for sale in every Market 3 county.

- Carrier 2 (Regional) is a Blue Cross and Blue Shield plan that operates in this market. They offered two networks and products: a broad network PPO and a narrow network EPO.

  - The monthly PPO premium for the member was $337, which was 43% and $102 above the market average. On an *annual* basis, premium less the ACA premium subsidy yielded a net contribution of $2,239, which was *$1,226* above the market average per year. It was the highest net contribution in the market.

  - The monthly EPO premium for the member was $211, which was 10% and $24 below the market average. On an *annual* basis, premium less the ACA premium subsidy yielded an annualized net contribution of $723, which was *$290* below the market average.

  - The PPO's network was somewhat smaller than the other broad networks in the market, and it had the highest net contribution; this product had 11% of the membership. This PPO product was available in all 10 counties. The narrow network EPO, with the fourth lowest net member contribution, achieved the highest market share at 33%. The narrow network EPO was available in the five counties surrounding the large, metropolitan city in Market 3.

- Carrier 3 (National 2) is a health insurance carrier that operates nationally throughout the U.S. They offered a broad network with an HMO product design, which was available in all 10 counties.

  - The monthly HMO premium for the member was $210, which was 10% and $25 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $717, which was *$295* below the market average per year. It was the third lowest net contribution in the market.

  - With the second largest network in the market, an HMO and low net contribution, this carrier had 18% of membership.

- Carrier 4 (Provider-Owned) is a provider-owned health insurance carrier, which operates in Market 3 and is owned by System Y. They offered three networks and products: a broad network PPO and two narrow network EPOs.

  - The monthly PPO premium for the member was $230, which was 2% and $5 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $951, which was $61 below the market average.

  - The smallest narrow network monthly EPO premium for the member was $190, which was 19% and $45 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $471, which was $541 below the market average.

  - The "midsized" narrow network monthly EPO premium for the member was $200, which was 15% and $35 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $591, which was $421 below the market average.

  - In combination, the three networks had a 28% market share. Their two EPOs had the lowest and second lowest net contributions, and they covered 15% and 8% of the membership, respectively. Although this carrier's broad network PPO product had a net contribution of $61 below the market average, it picked up only 5% of the membership.

To summarize, enrollment in this market was widely spread. The narrow network products had the lowest premiums

and high market share. In total, the narrow network products had just over half the market share at 56%. The two national carriers offered broad networks, while the regional carriers each offered broad and narrow networks. Although the bigger networks had higher premiums and higher net contributions, Carrier 3's broad HMO product had a premium near the average and picked up 18% of the market share.

Hospital Networks by Carrier

Table 2 shows the number and types of hospitals that were included, or in-network, for each of the carrier's networks. Twenty-seven hospitals were in Market 3. Some carriers offered only one network, while others offered multiple.

Table 2 - Hospital Networks by Carrier

Market 3 - East U.S. - Metro Area

Market Hospitals and Carrier Network Hospital Participation - Counts and Medicare Admissions

				Carrier						
				1	2		3	4		
				Network						
Hospital	System	Type_Hosp	% of Market Admissions	A	B	C	D	E	F	G
Hospital 1	System Y	Educational	14.7%	X			X	X	X	X
Hospital 2	System X	Hospital	5.7%	X	X	X	X			
Hospital 3	System Y	Hospital	5.9%	X			X	X	X	X
Hospital 4	System Y	Hospital	5.3%	X			X	X	X	X
Hospital 5	System Y	Hospital	5.2%	X			X	X	X	X
Hospital 6	Independent	Hospital	5.6%	X	X	X	X			X
Hospital 7	System X	Hospital	5.1%	X	X	X	X			X
Hospital 8	System X	Hospital	4.4%	X	X	X				
Hospital 9	System AA	Hospital	5.0%	X		X	X	X		X
Hospital 10	System Y	Hospital	2.7%	X			X	X	X	X
Hospital 11	Independent	Hospital	2.8%	X	X	X	X	X		X
Hospital 12	System Y	Hospital	2.6%	X			X	X	X	X
Hospital 13	Independent	Hospital	3.9%	X	X	X	X	X		X
Hospital 14	System Z	Hospital	4.6%	X		X	X	X		X
Hospital 15	System Y	Women's	1.7%	X			X	X	X	X
Hospital 16	System X	Hospital	1.5%	X	X	X	X			
Hospital 17	Independent	Hospital	3.0%	X		X	X	X		X
Hospital 18	Independent	Hospital	0.5%	X						X
Hospital 19	System X	Hospital	2.0%	X	X	X				
Hospital 20	System AA	Hospital	2.3%	X		X	X	X		X
Hospital 21	System Y	Hospital	2.7%	X		X	X			
Hospital 22	Independent	Hospital	2.4%	X		X	X			X
Hospital 23	System Z	Hospital	2.1%	X		X	X	X		X
Hospital 24	Independent	Hospital	2.7%	X		X	X			X
Hospital 25	Independent	Hospital	1.2%	X		X	X			X
Hospital 26	Independent	Hospital	1.4%	X		X	X			X
Hospital 27	System Y	Children's	2.9%	X	X	X	X	X	X	X
Total			100.0%							
		Count of Hospitals in the Network:		*27*	*9*	*19*	*24*	*15*	*8*	*22*
		% of Market Admissions in the Network:		*100%*	*34%*	*61%*	*93%*	*65%*	*41%*	*84%*
		Product Type:		*HMO*	*EPO*	*PPO*	*HMO*	*EPO*	*EPO*	*PPO*
		Network Size:		*Broad*	*Narrow*	*Semi-Narrow*	*Broad*	*Narrow*	*Local*	*Broad*
		Carrier Type:		*National*	*Regional*		*National*	*Provider Owned*		

A summary of our findings for each hospital system and network is below:

- Carrier 1 (National 1) offered *Network A,* the biggest network in Market 3, with all the area hospitals included.
- Carrier 2 (Regional 1) offered two networks:

- *Network B* was aligned with System X; every System X hospital was in the network. Network B also included several independent hospitals including an educational facility. In total, Network B covered 34% of the hospital admissions. Network B excluded all but one of the System Y hospitals.

- *Network C* was larger than Network B but was still smaller than Network A. Network C covered 61% of the hospital admissions. Network C was composed of hospitals from System X and almost every independent hospital or small system. It excluded all but one of the System Y hospitals.

- Carrier 3 (National 2) offered *Network D,* the second largest network, with 93% of the hospital admissions covered.

- Carrier 4 (Provider-Owned) offered two networks:

  - *Network E* was aligned with the System Y hospitals and several of the other hospitals. Also, note that System Y owns Carrier 4. This narrow network did not include any of the System X hospitals. Network E covered 65% of the hospital admissions.

  - *Network F* was aligned exclusively with System Y hospitals. As noted above, System Y owns Carrier 4, and this narrow network did not have any non-System Y hospitals in the network. Network F covered 41% of the hospital admissions.

  - *Network G* was the largest hospital network. It included almost every System Y hospital and every small hospital system and independent hospital, although it also excluded every System X hospital. Network G covered 84% of the hospital admissions.

Carrier Characteristics, Plans Offered and Member Plan Selections

Tables 3 and 4 summarize the distribution of membership by metal tier selected by the Exchange members.

Table 3 - Carrier/Network Marketshare Percentage

Market 3 - East U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

				Approx. Historical Market Share %'s by Carrier and Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	HMO	National	1.0%	6.5%	1.3%	0.0%	0.0%	8.8%
Carrier 2	Network B	EPO	Regional	3.8%	24.5%	4.8%	0.0%	0.0%	33.2%
Carrier 2	Network C	PPO	Regional	1.3%	8.2%	1.7%	0.1%	0.0%	11.2%
Carrier 3	Network D	HMO	National	2.2%	13.5%	2.7%	0.0%	0.0%	18.4%
Carrier 4	Network E	EPO	Provider Owned	0.9%	5.5%	1.1%	0.3%	0.1%	7.8%
Carrier 4	Network F	EPO	Provider Owned	1.8%	10.8%	2.2%	0.3%	0.2%	15.2%
Carrier 4	Network G	PPO	Provider Owned	0.6%	3.6%	0.8%	0.1%	0.0%	5.1%
Total				11.5%	72.5%	14.5%	0.9%	0.5%	100.0%

* Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org.

Table 4 - Carrier/Network Membership and Product Counts

Market 3 - East U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

Estimated Historical Market Share - Member Counts

Members - Total Rounded to nearest 100

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	HMO	National	800	5,100	1,000	-	-	6,900
Carrier 2	Network B	EPO	Regional	3,000	19,200	3,800	-	-	26,000
Carrier 2	Network C	PPO	Regional	1,000	6,400	1,300	100	-	8,800
Carrier 3	Network D	HMO	National	1,700	10,600	2,100	-	-	14,400
Carrier 4	Network E	EPO	Provider Owned	700	4,300	900	200	50	6,150
Carrier 4	Network F	EPO	Provider Owned	1,400	8,500	1,700	200	125	11,925
Carrier 4	Network G	PPO	Provider Owned	500	2,800	600	100	25	4,025
Total				9,000	56,900	11,400	700	400	78,400

Number of Plans Offered by Metal Type

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total**
Carrier 1	Network A	HMO	National	2	1	1	0	0	4
Carrier 2	Network B	EPO	Regional	1	2	1	0	0	4
Carrier 2	Network C	PPO	Regional	2	3	2	1	0	8
Carrier 3	Network D	HMO	National	2	2	2	0	0	6
Carrier 4	Network E	EPO	Provider Owned	1	4	1	1	1	8
Carrier 4	Network F	EPO	Provider Owned	1	4	1	1	1	8
Carrier 4	Network G	PPO	Provider Owned	1	4	1	1	1	8
Total				10	20	9	4	3	46

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org.

**From data including rates filed and available from HHS Public Use Files.

Conclusions

Case Study 3 provides an example of a market where competing hospital systems align with different carriers or sell their provider-owned carrier's products to compete for market share. This can also be compared to Market 4 to see how the same carriers and hospitals approached a different market and business situation.

The premium differences across the three networks for Carrier 4 follow a pattern found in some Exchange markets: The enrollment increased with lower premiums. Premiums decreased as the size of the network decreased. Carrier 2 premiums also exhibited a premium difference between their smaller, narrow network and their larger network; however, the magnitude of the difference (a $1,516 difference) indicates many factors than just the size of the network.

One unexpected result is that the two broad networks offered by the national carriers—Carrier 1 (National Carrier 1) and Carrier 3 (National Carrier 2) were not the most expensive networks in Market 3. Carrier 3's premiums seem to reflect factors other than just network size, as they were the third lowest premiums (and net contributions) in the market, and they had a 9% share of the market membership (which is not insignificant).

It appeared that System X (the second largest hospital system) might have benefited from Carrier 2's (the Blue Cross and Blue Shield plan) low premium rates on the Exchange prior to 2016. Our research materials indicated that Carrier 2 had a substantially higher share of the Exchange membership prior to 2016, but they had adverse financial results and raised their premiums for 2016. Despite the significant premium increases and the loss of many members to Carrier 4 (the provider-owned carrier), Carrier 2 still maintained a combined product membership market share of over 40%. It would be interesting to see how the partnership established between Carrier 2 and System X evolves over time to counteract the competitive pressure of the lower premiums offered by Carrier 4, which is owned by System Y.

Other Supporting Data: Case Study 3

ACA Covered Population Characteristics

Estimated Covered Population by Gender, Age, Metal Tier and Federal Poverty Level (FPL%)

Table 5 - Member Mix by Gender and Metal Type

Distribution by Gender and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Female	49.5%	53.9%	50.7%	50.7%	52.8%	52.8%
Male	50.5%	46.1%	49.3%	49.3%	47.2%	47.2%

- More females participated on the Individual Exchange.
- The highest female-to-male proportion was for Silver plans. Slightly more males selected Bronze plans.

Table 6 - Member Mix by Age and Metal Type

Distribution by Age and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Age < 18	6.2%	6.2%	6.2%	6.1%	13.8%	6.2%
Age 18-25	7.9%	7.9%	7.9%	7.9%	17.5%	7.9%
Age 26-34	17.3%	17.3%	17.3%	17.3%	38.3%	17.4%
Age 35-44	13.8%	13.8%	13.8%	13.7%	30.5%	13.9%
Age 45-54	20.0%	20.0%	20.0%	20.0%	0.0%	19.9%
Age 55-64	34.9%	34.9%	34.9%	34.9%	0.0%	34.7%
Age ≥ 65	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

- Just under 55% of the members on the Individual Exchange were over the age of 45.
- Almost 32% of the members were below the age of 35.

Table 7 - Member Mix by Metal Type within FPL Range

Metal Split by FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total Metal
FPL	11.5%	72.6%	14.5%	0.9%	0.5%	100.0%
100-200%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
200 - 250%	26.7%	40.7%	32.6%	0.0%	0.0%	100.0%
250%-400	25.5%	39.1%	32.9%	2.5%	0.0%	100.0%
400% +	22.6%	34.5%	29.7%	5.2%	8.0%	100.0%

- Over 70% of the members on the Individual Exchange selected the Silver plan, and we estimated that the lowest income bracket was almost exclusively on the Silver plan.
- For higher income brackets, the Gold plans were selected the most, Silver was second and Bronze third.
- Very few members selected Platinum plans or Catastrophic plans.

Table 8 - Member Mix by FPL Range within Metal Type

FPL Split by Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL
FPL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
100-200%	0.0%	75.8%	0.0%	0.0%	0.0%	55.0%
200 - 250%	37.3%	9.0%	35.9%	0.0%	0.0%	16.0%
250%-400	50.2%	12.2%	51.1%	62.8%	0.0%	22.6%
400% +	12.5%	3.0%	13.0%	37.2%	100.0%	6.4%

- Per the previous exhibits, the Silver plan enrollment is dominated by the lowest income bracket.
- Less than 10% of the membership had income above 400% of the federal poverty level.

Table 9 - Member Mix by FPL Range and Metal Type

Distribution by Metal and FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL & Metal
FPL	11.5%	72.6%	14.5%	0.9%	0.5%	100.0%
100-200%	0.0%	55.0%	0.0%	0.0%	0.0%	55.0%
200 - 250%	4.3%	6.5%	5.2%	0.0%	0.0%	16.0%
250%-400	5.8%	8.8%	7.4%	0.6%	0.0%	22.6%
400% +	1.4%	2.2%	1.9%	0.3%	0.5%	6.4%

- Platinum and Catastrophic combined membership was less than 2% of the total.
- Silver and Bronze combined made up almost 85% of the membership selections.

Carrier Service Area by County

Table 10 - Carrier/Network Service Area Size

Market 3 - East U.S. - Metro Area *Carrier Coverage/Service Area - By County within the Rating Area*							
	Carrier 1	Carrier 2	Carrier 2	Carrier 3	Carrier 4	Carrier 4	Carrier 4
	Network A	Network B	Network C	Network D	Network E	Network F	Network G
County	HMO	EPO	PPO	HMO	EPO	EPO	PPO
County 1	1	1	1	1	1	1	1
County 2	1	0	1	1	0	0	1
County 3	1	1	1	1	1	0	1
County 4	1	1	1	1	1	0	1
County 5	1	0	1	1	0	0	1
County 6	1	0	1	1	0	0	1
County 7	1	0	1	1	0	0	1
County 8	1	0	1	1	0	0	1
County 9	1	1	1	1	1	0	1
County 10	1	1	1	1	1	0	1
Total	10	5	10	10	5	1	10
Service Area Size	Large	Limited	Large	Large	Limited	Local	Large

- Every carrier offered a network that covered every county in the rating area, but the service areas for the narrow networks were limited to fewer counties. Two carriers offered both narrow networks and broad networks.
- The carriers offered different product types: HMO, EPO and PPO; the EPOs had limited or local service areas.

Case Study 4

Eastern State: Rural Area

Case Study 4: Market 4, Eastern State: Rural Area

Summary

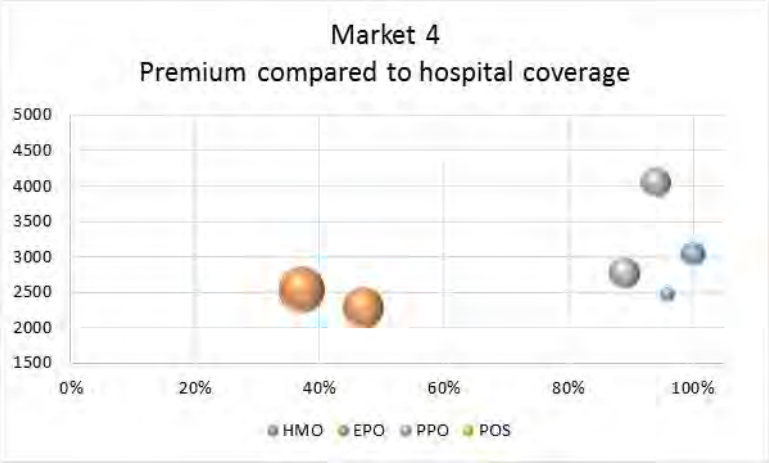
National perspective: 12.7 million members enrolled in Exchanges at the beginning of 2016. A premium tax credit was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average. The average premium was $396 per month before the credit with a $106 net member contribution after the credit. For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in this case study.[60]

State perspective: Markets 3 and 4 are in the same state. This study, Market 4, is the rural area. Note that this uses consistent labels for both markets. If a hospital, hospital system, carrier and/or network was in both Market 3 and Market 4, the labels for new organizations are extended.

Market 4 is in a rural area with a small city and many small to midsized towns in an Eastern state. The two largest hospital systems in this market provide more than 65% of the hospital services. Additionally, one hospital is owned by a national hospital chain, and several smaller, independent hospitals/hospital systems are found as well.

The health insurance competition in Market 4 is composed of four health insurance carriers: a regionally based provider-owned health insurance carrier, a Blue Cross and Blue Shield plan and two national carriers. These carriers collectively provided coverage for an average of 15,450 members in Market 4.

The following chart shows the key results for this market. The annual premium is on the left; hospital network coverage is shown on the bottom. The hospital network coverage is the percentage of total admissions that the network covered historically for Medicare fee-for-service members. This is one metric used to assess the network size. The size of the bubble shows relative market share for each network. The color of the bubbles shows the product design.



In Market 4, EPOs had narrow hospital networks with lower premiums and higher enrollments. HMOs and PPOs had broad hospital networks and higher premiums.

The provider-owned carrier and the Blue Cross and Blue Shield plan each offered two different networks: EPO products that used “narrow” networks and PPO products that used “broad” networks. Their EPO products had the lowest premiums and net contributions. These products also had the most members: the Blue Cross Blue Shield EPO covered 33%, and the provider-owned carrier EPO had 25% of the 15,450 members. Their PPO products each had about 15% of the membership.

The two national carriers also offered broad network-based products, except that they utilized an HMO product design. One of the carriers sold their HMO in a limited service area that was in a rural part of the market; they covered only a small amount of

[60]Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.

the membership. However, the other national carrier's HMO was offered in the entire service area, was priced like the provider-owned carrier's PPO and had 9% of the membership.

Market 4 shows a situation with competition between multiple carriers that followed different provider network and product strategies. Products based on narrow networks had lower premiums than broad networks. The most apparent differentiation between provider networks was whether one or both major hospital systems was included as "in-network"; this indicates competition between the two major hospital systems.

Market Information and Findings

Market 4 has a population of approximately 300,000 people in a small urban/suburban area. The ACA rating area for this market includes eight counties that span across a geographical area roughly 70 miles long and 80 miles wide. Most of the population lives within 50 miles from the "downtown" area, which is in the northernmost part of the rating area. There are not significant geographic barriers for accessing care other than drive-time for people who live far from the centralized part of the market where the largest hospitals are located. Access to local, community-based hospitals was an important factor for network design in this market.

We selected Market 4 so that we could compare both a metropolitan market and a rural market in the same state. These Case Study 4 results can be contrasted with Market 3, a large, metropolitan area in this same Eastern state. The carriers that competed in Market 3 also competed in Market 4. Additionally, the same hospital system owners are in Market 3 and 4. Case Studies 3 and 4 allow the study of how the same carriers and the hospital systems approached a rural market and a metropolitan market.

In Market 4, two hospitals provide about 38% of the hospital-based services and the majority of the hospital services in the largest city. Multiple hospitals provide a significant share of hospital services in the rural areas. Also, 4% of the services are provided by the large educational hospital that is located in Market 3 (Hospital 1 from Case Study 3).

Although no single hospital has a dominant market share, System Y owns eight hospitals located throughout Market 4 and in Market 3. These eight hospitals collectively provide 45% of the services. System X, the second largest system, owns two hospitals with 20% of the services. System X and System Y both had hospitals in at least one of the networks offered by each carrier. The remaining 35% of services are provided by the other hospitals throughout the area, and most of these hospitals participated in multiple networks.

Several carriers and hospitals work on Exchanges in Market 3 and Market 4. The provider-owned health insurance carrier is owned by System Y (the same system as in Market 3). Also, the same Blue Cross and Blue Shield plan and the same two national carriers competed in Markets 3 and 4. However, one of the carriers chose a limited service area in Market 4, which was not close to the most populated areas, so it limited their enrollment.

The characteristics of the market, the population of covered lives on the 2016 Individual Exchange, the competing carriers and their networks, as well as the hospital competition are summarized below.

Market Profile

Market 4: A small city surrounded by many counties with small to midsized towns in a rural area in an Eastern state

Rating Area: Covers a large geographic area, approximately 70 miles long and 80 miles wide, across eight counties

Geography: Mostly rural with a small urban/suburban area in the small city

Population: Approximately 300,000

Total Approximate Covered Lives on the Individual Exchange: 15,450

Exchange Competition: Four carriers: a provider-owned health plan, a regional carrier and two national carriers

Products Offered: HMO, EPO and PPO and 38 product offerings: Bronze, Silver, Gold, Platinum and Catastrophic

Service Area(s): Three carriers sold products in all eight counties. Two of those carriers sold different, local products

in the most populated county. As mentioned above, one national carrier sold local products in two rural counties that bordered Market 3 and that appeared not to be focused on Market 4 membership.

Network Scope: Three of the four carriers offered broad networks. Two carriers offered a narrow network, and one of those also offered a semi-narrow network.

Hospital Competition: The two major hospital systems provide more than 55% of the hospital services across the market. The other 45% is spread across several smaller systems, independent hospitals and one hospital from a national hospital chain.

Balance Billing Regulations: None during the time it was studied; the Department of Insurance submitted proposed rules for comment. The proposed rules would require providers to communicate to patients any situations where out-of-network providers might be engaged to provide services to the member. Additionally, the rules propose a forum where provider and insurer reach agreement on a "balanced bill" amount without patient involvement.

Premiums and Net Contribution to Member

Table 1 summarizes the key market statistics for evaluating the key information of this case study: the types of carriers and products offered; the size of each service area and hospital network; the premium and net contribution for the member (annual and monthly); and the estimated enrollee market share for each carrier's network.

Premium and the net contribution from the member were compared based on a Silver Plan, Age 40 and Single Rate and an income at 100% to 150% of the federal poverty level. Four carriers competed on the Exchanges in Market 4. Two carriers offered narrow network EPO products and broad network PPOs, while the other two carriers offered broad network HMOs.

Table 1 - Key Market Statistics

Market 4 - East U.S. - Rural Area	*Carrier:*	1	2		3	4	
Comparison: premium and net member contribution by carrier, network, and product type.		National 1	Regional		National 2	Provider Owned	
	Network:	*A*	*B*	*C*	*D*	*F*	*G*
	Product Type:	*HMO*	*EPO*	*PPO*	*HMO*	*EPO*	*PPO*
	Count of Hospitals in the Network:	*21*	*7*	*18*	*18*	*9*	*18*
	% of Market Admissions in the Network:	*100%*	*37%*	*94%*	*96%*	*47%*	*89%*
	Service Area:	*Large*	*Local*	*Large*	*Local*	*Local*	*Large*
	Network Size:	*Broad*	*Narrow*	*Broad*	*Broad*	*Narrow*	*Broad*
	Silver Plan Age 40- Single - Average Monthly Premium:	*$253*	*$211*	*$337*	*$206*	*$190*	*$230*
	Silver Plan Age 40- Single - Average Annual Premium:	*$3,035*	*$2,530*	*$4,046*	*$2,468*	*$2,279*	*$2,759*
	Relative to Market Average w/o ACA Subsidy as a %:	*6%*	*-11%*	*42%*	*-13%*	*-20%*	*-3%*
	Relative to Market Average w/o ACA Subsidy in Monthly $$'s:	*$15*	*($27)*	*$99*	*($32)*	*($48)*	*($8)*
	Silver Plan Age 40- Single - Average Annual Premium Less ACA Subsidy at FPL 100% to 150%:	*$1,227*	*$723*	*$2,239*	*$423*	*$471*	*$951*
	Relative to Market Average with ACA Subsidy as a %:	*22%*	*-28%*	*123%*	*-58%*	*-53%*	*-5%*
	Relative to Market Average with ACA Subsidy in Annual $$'s:	*$222*	*($283)*	*$1,233*	*($583)*	*($534)*	*($54)*
	Estimated Carrier/Network Marketshare (% of Enrollees):	*9%*	*33%*	*15%*	*3%*	*25%*	*15%*

The results of the premium and net contribution (i.e., premium less ACA subsidy) comparison to the straight average of all the carriers are described below, along with brief comments about enrollment in each network.

- Carrier 1 (National 1) is a health insurance carrier that operates nationally. They offered a broad network with an HMO product design.
    - The monthly HMO premium for the member is $253, which was 6% and $15 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,227, which was *$222* above the market average.
    - This carrier had 9% of the membership. Note also that this product was available in every Market 4 county.
- Carrier 2 (Regional Carrier 1) is a Blue Cross and Blue Shield plan that operates in this market. They offered two networks and products: a broad network PPO and a narrow network EPO.
    - The monthly PPO premium for the member is $337, which was 42% and $99 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $2,239, which was *$1,233* above the market average. It was the highest net contribution in the market.
    - The monthly EPO premium for the member is $211, which was 11% and $27 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $723, which was *$283* below the market average.
    - The broad network PPO product with the highest net contribution was offered in all counties but only had 15% of the Market 4 membership. Their narrow network EPO had the second lowest net contribution, was only available in County 3 (the population center), and had 33% of the members.
- Carrier 3 (National Carrier 2) is a health insurance carrier that operates nationally. They offered a broad network with an HMO; however, they were focused on counties near Market 3 rather than Market 4. These counties were not near the major population center.
    - The monthly HMO premium for the member is $206, which was 13% and $32 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $423, which was *$583* below the market average.
    - Interestingly, they had the lowest net contribution in Market 4. This may be because of lower fee schedules or other local differences. They also listed a broad network, but their service area was limited to three rural counties. Thus, this product had only 3% of the membership.
- Carrier 4 (Provider-Owned Carrier 1) is a provider-owned health insurance carrier, which operates in Market 3 and Market 4 and is owned by System Y. They offer two networks and products: a broad network PPO and a narrow network EPO.
    - The monthly PPO premium for the member is $230, which was 3% and $8 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $951, which was $54 below the market average.
    - The monthly EPO premium for the member is $190, which was 20% and $48 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $474, which was $534 below the market average.
    - The broad network PPO was offered in all counties but only had 15% of the membership. Their narrow network EPO with the lowest net member contribution was only available in County 3, but had the second highest market share at 25%.

Hospital Networks by Carrier

Table 2 shows the number and types of hospitals that were included in-network for each of the carrier's networks. Twenty-one hospitals were located within or that were located outside of Market 4 and regularly utilized by members who resided in Market 4. In this case study, some carriers offered only one network, while others offered multiple networks.

Table 2 - Hospital Networks by Carrier

Market 4 - East U.S. - Rural Area

Market Hospitals and Carrier Network Hospital Participation - Counts and Medicare Admissions

				Carrier					
				1	2		3	4	
				Network					
Hospital	System	Type_Hosp	% of Market Admissions	A	B	C	D	F	G
Hospital 28	System Y	Hospital	20.3%	X		X	X	X	X
Hospital 29	System X	Hospital	17.9%	X	X	X	X		X
Hospital 1	System Y	Educational	4.5%	X			X	X	X
Hospital 30	System Y	Hospital	7.4%	X		X	X	X	X
Hospital 31	National	Hospital	8.9%	X	X	X	X		
Hospital 32	Independent	Hospital	7.2%	X		X	X		X
Hospital 33	System Y	Hospital	8.9%	X		X	X	X	X
Hospital 2	System X	Hospital	1.7%	X	X	X	X		
Hospital 3	System Y	Hospital	1.2%	X			X	X	X
Hospital 34	Independent	Specialty	1.0%	X	X	X			X
Hospital 35	Independent	Educ/Osteo/Psych	4.7%	X	X	X	X		X
Hospital 36	National	Rehab	2.7%	X		X			X
Hospital 37	Independent	Hospital	3.0%	X		X	X		X
Hospital 38	National	Specialty	0.5%	X		X			
Hospital 39	Independent	Hospital	1.7%	X		X	X	X	X
Hospital 11	Independent	Hospital	0.7%	X	X	X	X		X
Hospital 4	System Y	Hospital	0.5%	X		X	X	X	X
Hospital 40	Independent	Hospital	2.5%	X		X	X		X
Hospital 41	Independent	Hospital	2.2%	X		X	X		X
Hospital 15	System Y	Women's	0.2%	X			X	X	X
Hospital 27	System Y	Children's	2.0%	X	X	X	X	X	X
Total			100.0%						
		Count of Hospitals in the Network:		*21*	*7*	*18*	*18*	*9*	*18*
		% of Market Admissions in the Network:		*100%*	*37%*	*94%*	*96%*	*47%*	*89%*
		Product Type:		*HMO*	*EPO*	*PPO*	*HMO*	*EPO*	*PPO*
		Network Size:		*Broad*	*Narrow*	*Broad*	*Narrow*	*Narrow*	*Broad*
		Carrier Type:		*National*	*Regional*		*National*	*Provider Owned*	

A summary of our findings for each hospital system and network is below:

- Carrier 1 (National 1) offered one network that included all the area hospitals. It has the biggest network.
- Carrier 2 (Regional 1) offered two networks:
    - *Network B* is the smaller network. It was aligned with System X; every System X hospital was in-network.

      Network B also included several independent hospitals. In total, Network B covered 37% of the hospital admissions. Network B excluded all but one of System Y hospitals.

      This carrier's Network B has the same business relationships as from Market 3; in Market 3 it was also aligned with the same major system (System X). In both Case Study 3 and Case Study 4, Network B

includes the Children's hospital owned by System Y that is located in Market 3.

- *Network C* is a bigger network and included almost all hospitals with 94% of the hospital admissions. Network C was composed of hospitals from every system but excluded two of the System Y hospitals that were located outside of Market 4. It did include the System Y Children's hospital located in Market 3. This carrier's Network C in Market 3 had a similar structure; it included most hospitals in the area.

- Carrier 3 (National 2) offered one network: this is the carrier that was available in only two of the eight counties. *Network D* was similar in size to Network C. So, although while their products were only available to a limited population, their members had access to most of hospital in the region. Network D included all the System X and System Y facilities and excluded only a few of the independent hospitals.

- Carrier 4 (Provider-Owned Carrier 1) offered two networks:

  - System Y owns Carrier 4. So *Network F* was aligned almost exclusively with System Y hospitals. This follows the pattern for Carrier 4 Network F in Market 3. This network did not include any System X hospitals. Network F covered about 47% of the hospital admissions.

  - *Network G* was a broad network that was similar in size to Networks C and D, except that it excluded two of the System X hospitals. Network G covered 89% of the hospital admissions.

  - Note: There is not a Network E in Case Study 4. In Market 3, Carrier 4 offered a third network. Their Market 3 Network E was a "midsized" network, being about half-way between the size of their Market 3 Network F and Network G. They did not offer a similar network in Market 4, but we wanted to keep the Network letters consistent between Markets 3 and 4.

To summarize, the two national carriers offered broad networks, while the regional carriers each offered broad and narrow networks. The narrow networks had the lowest premiums and net member contributions, as well as had more membership than the broad networks. The broad networks had higher premiums and higher net member contributions, and their market share was lower than the narrow networks.

Last, the regional carrier and the provider-owned carrier products had the same premiums in Case Studies 3 and 4. Neither carrier priced their products differently for Markets 3 and 4. Although their network cost structures might be similar in each area, it seems more likely that this was driven by the much smaller population in Market 4. This would create credibility problems and require consolidation of the claims experience and network cost for rating purposes.

Carrier Characteristics, Plans Offered and Member Plan Selections

Tables 3 and 4 summarize the distribution of membership by metal tier selected by the Individual Exchange members.

Table 3 - Carrier/Network Marketshare Percentage

Market 4 - East U.S. - Rural Area

Carriers offering coverage - market share by benefit plan metal type

				Approx. Historical Market Share %'s by Carrier and Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	HMO	National MCO	1.0%	7.0%	0.9%	0.0%	0.0%	8.9%
Carrier 2	Network B	EPO	Regional MCO	3.7%	25.9%	3.4%	0.0%	0.0%	33.0%
Carrier 2	Network C	PPO	Regional MCO	1.7%	11.7%	1.6%	0.0%	0.0%	14.9%
Carrier 3	Network D	HMO	National MCO	0.3%	2.3%	0.3%	0.0%	0.0%	2.9%
Carrier 4	Network F	EPO	Provider Owned	2.8%	19.5%	2.6%	0.4%	0.2%	25.4%
Carrier 4	Network G	PPO	Provider Owned	1.7%	11.7%	1.6%	0.0%	0.0%	14.9%
Total				11.0%	78.1%	10.4%	0.4%	0.2%	100.0%

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org.

Table 4 - Carrier/Network Membership and Product Counts

Market 4 - East U.S. - Rural Area

Carriers offering coverage - market share by benefit plan metal type

Estimated Historical Market Share - Member Counts

Members - Total Rounded to nearest 100

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	HMO	National MCO	152	1,075	143			1,369
Carrier 2	Network B	EPO	Regional MCO	564	4,002	531	5		5,102
Carrier 2	Network C	PPO	Regional MCO	255	1,809	240			2,304
Carrier 3	Network D	HMO	National MCO	49	350	46			445
Carrier 4	Network F	EPO	Provider Owned	425	3,015	400	55	25	3,920
Carrier 4	Network G	PPO	Provider Owned	255	1,809	240		5	2,309
Total				1,700	12,060	1,600	60	30	15,450

Number of Plans Offered by Metal Type

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total**
Carrier 1	Network A	HMO	National MCO	2	1	1	0	0	4
Carrier 2	Network B	EPO	Regional MCO	1	2	1	0	0	4
Carrier 2	Network C	PPO	Regional MCO	2	3	2	1	0	8
Carrier 3	Network D	HMO	National MCO	2	2	2	0	0	6
Carrier 4	Network F	EPO	Provider Owned	1	4	1	1	1	8
Carrier 4	Network G	PPO	Provider Owned	1	4	1	1	1	8
Total				9	16	8	3	2	38

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org.

**From data including rates filed and available from HHS Public Use Files.

Conclusions

Like Market 3, Market 4 is another example of a market where competing hospital systems aligned with different carriers or sold their provider-owned carrier's products to compete for market share. The premiums and net member contributions were the lowest for the two regionally based carriers' EPO products with narrow networks, and both picked up the most membership. In this market, low premiums were more important than network size.

Despite a rural market with most members in a small city, there were multiple products and there was competition between the hospital systems and the health insurance carriers. Members had multiple options with respect to carrier, product design and network size. Their product selections demonstrated very different preferences between the 15,000 plus members. The membership market share was spread across all the carrier-network combinations with no carrier's product having more than 35% of the market share. Still, however, the two carriers that had products with the lowest net member contributions (for products that were available in the highly populated counties) had the highest market share.

Other Supporting Data: Case Study 4

ACA Covered Population Characteristics

Estimated Covered Population by Gender, Age, Metal Tier and Federal Poverty Level (FPL%)

Table 5 - Member Mix by Gender and Metal Type

Distribution by Gender and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Female	49.5%	53.9%	50.7%	50.7%	52.8%	52.8%
Male	50.5%	46.1%	49.3%	49.3%	47.2%	47.2%

- More females participated on the Individual Exchange.
- The highest female-to-male proportion was in the Silver plan.

Table 6 - Member Mix by Age and Metal Type

Distribution by Age and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Age < 18	5.1%	5.0%	5.1%	5.0%	13.8%	5.1%
Age 18-25	6.7%	6.7%	6.7%	6.7%	17.2%	6.7%
Age 26-34	13.0%	13.0%	13.0%	13.3%	34.5%	13.0%
Age 35-44	12.9%	12.9%	12.9%	13.3%	34.5%	12.9%
Age 45-54	20.4%	20.4%	20.4%	20.0%	0.0%	20.3%
Age 55-64	42.0%	42.0%	42.0%	41.7%	0.0%	41.9%
Age ≥ 65	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

- 62% of the members on the Individual Exchange were over the age of 45.
- 25% of the members were below the age of 35.

Table 7 - Member Mix by Metal Type within FPL Range

Metal Split by FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total Metal
FPL	11.0%	78.1%	10.4%	0.4%	0.2%	100.0%
100-200%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
200 - 250%	28.9%	43.8%	27.2%	0.0%	0.0%	100.0%
250%-400	28.7%	43.5%	27.0%	0.8%	0.0%	100.0%
400% +	25.1%	39.2%	23.8%	6.6%	5.3%	100.0%

- Over 78% of the members on the Individual Exchange selected the Silver plan and we estimated that the lowest income bracket was almost exclusively on the Silver plan.
- In the higher income brackets, Bronze plans were selected the most, with Gold being selected almost as much as Bronze.
- Very few members selected Platinum plans or Catastrophic plans; those that did were in the highest income brackets.

Table 8 - Member Mix by FPL Range within Metal Type

FPL Split by Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL
FPL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
100-200%	0.0%	78.7%	0.0%	0.0%	0.0%	61.4%
200 - 250%	41.2%	8.8%	41.2%	0.0%	0.0%	15.7%
250%-400	50.7%	10.8%	50.7%	40.0%	0.0%	19.4%
400% +	8.1%	1.8%	8.1%	60.0%	100.0%	3.5%

- Per the previous exhibits, the Silver plan enrollment is dominated by the lowest income bracket.
- Less than 4% of the members had income above 400% of the federal poverty level, while 61% of the members had income between 100% to 200% of the federal poverty level.

Table 9 - Member Mix by FPL Range and Metal Type

Distribution by Metal and FPL	Metal					Total FPL & Metal
	Bronze	Silver	Gold	Platinum	Catastrophic	
FPL	11.0%	78.1%	10.4%	0.4%	0.2%	100.0%
100-200%	0.0%	61.4%	0.0%	0.0%	0.0%	61.4%
200 - 250%	4.5%	6.9%	4.3%	0.0%	0.0%	15.7%
250%-400	5.6%	8.4%	5.2%	0.2%	0.0%	19.4%
400% +	0.9%	1.4%	0.8%	0.2%	0.2%	3.5%

- Platinum and Catastrophic membership was less than 1% of the total.
- Silver and Bronze combined made up 89% of the membership selections.

Carrier Service Area by County

Table 10 - Carrier/Network Service Area Size

Market 4 - East U.S. - Rural Area *Carrier Coverage/Service Area - By County within the Rating Area*						
	Carrier 1 Network A	Carrier 2 Network B	Carrier 2 Network C	Carrier 3 Network D	Carrier 4 Network F	Carrier 4 Network G
County	HMO	EPO	PPO	HMO	EPO	PPO
County 1	1	0	1	0	0	1
County 2	1	0	1	0	0	1
County 3	1	1	1	0	1	1
County 4	1	0	1	0	0	1
County 5	1	0	1	0	0	1
County 6	1	0	1	1	0	1
County 7	1	0	1	1	0	1
County 8	1	0	1	0	0	1
Total	8	1	8	2	1	8
Service Area Size	Large	Local	Large	Local	Local	Large

- Carrier 3 provided services only in Counties 6 and 7, which were rural areas that bordered Market 3. It appeared that Carrier 3 did not actively compete for all of Market 4, because their service area population was near Market 3.
- All the other carriers offered products in County 3, and their smaller service area products were offered only in County 3.

Case Study 5

Southern State: Metropolitan Area

Case Study 5: Market 5, Southern State: Metropolitan Area

Summary

National perspective: 12.7 million members enrolled in Exchanges at the beginning of 2016. A premium tax credit was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average. The average premium was $396 per month before the credit with a $106 net member contribution after the credit. For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in this case study.[61]

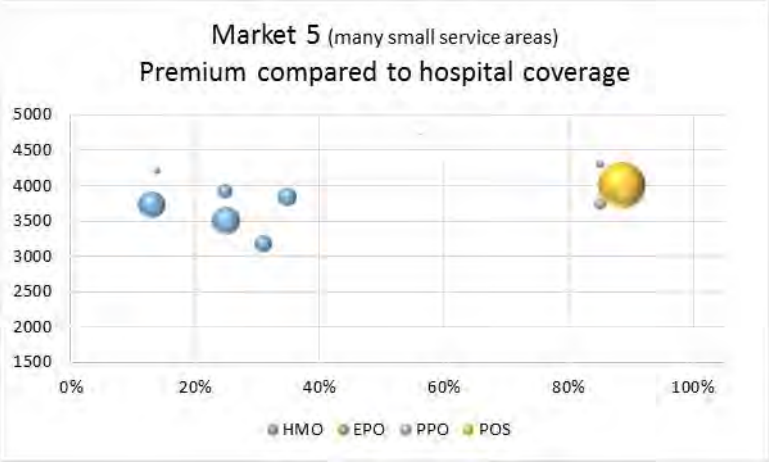
State perspective: Markets 5 and 6 come from the same state. This one is the large metropolitan area. The other, Market 6, is more rural. These markets have many of the same carriers. These case studies can be reviewed in parallel to see the differences between Exchange programs in various locations.

Market 5 is a large metropolitan area in a Southern state. This market has four large hospital systems and many independent hospitals. The largest hospital system provided close to 25% of the hospital services in the market. It is also the dominant presence in the northern part of this market. The second and third largest systems each provided just under 20% each.

There are eight health insurance carriers: two provider-owned carriers (one local and one national), a Medicaid carrier, a Blue Cross and Blue Shield plan and four national carriers. These carriers collectively provided coverage for approximately 350,000 members in Market 5.

The following chart shows the key results for this market. The annual premium is on the left; hospital network coverage is shown on the bottom. The hospital network coverage is the percentage of total admissions that the network covered historically for Medicare fee-for-service members. This is one metric used to assess the network size. The size of the bubble shows relative market share for each network. The color of the bubbles shows the product design.

There are many products with small enrollment, so some bubbles are quite small.



There are 350,000 Exchange members in this market. This large population allows for many network arrangements that are quite diverse. Also, many products and networks were not offered in all counties. Sophisticated decisions were made by the carriers and hospitals about the networks and premiums to offer, but, based on the results, these decisions were perhaps hard for members to understand.

There were many different product designs. Three carriers offered products in most counties; the other five carriers offered products in less than a third of the counties (see Table 10 at the end of this case study). The carriers and hospitals were very

[61] Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.

selective about where to offer products. The two largest hospital systems contracted primarily with broad networks. This summary highlights some key findings in this market; multiple tables are attached for a more extensive review.

In total, 11 networks were offered in the market and 11 different products: seven HMOs, three PPOs and one POS. One carrier offered two broad networks. Two carriers offered a broad network in most counties and a local network in certain counties. The remaining carriers offered narrow networks focused around a service area. The size of the network did not match directly with any one type of product.

Unlike some other case studies, a broad network had the largest share of the membership in this one. A national carrier's broad network POS product had over 45% of the market share. This product's premium was slightly higher than premiums for most of the products with narrow networks, but most premiums were close together. The other broad networks did not have significant members, so the other half of the membership was spread across the local networks offered by the other carriers. At least in this case study, with similar premiums the large networks get half the market (in this case concentrated with one carrier). Local networks split the other half of the population.

The product with the lowest premium was a local HMO with a small hospital network that was offered by a Medicaid carrier. Despite having the lowest premium, the product had only 6% of the membership. The annual net contribution for this product was $606 compared to $1,432 for the broad network POS product that was mentioned above, which was an $826 difference or about $69 per month.

The Medicaid carrier's network did not include the two largest hospitals, and it was offered in only 11 of the 21 counties in Market 5. Although this carrier had only 6% of the overall members, it had a significant presence in the counties it served.

Both the largest hospital systems participated on all the broad networks. These two large hospitals systems did not join most of the local networks. Most local networks were composed of the independent hospitals and the smaller hospital systems. The other carriers typically served far fewer counties, so none had more than 20% of the overall membership in Market 5. However, two of the narrow networks each had approximately 15% of the overall membership, covered more than 50,000 members and had a significant impact on the counties they served.

Market 5 is the most complex of our case studies. It shows how different carriers and hospitals make sophisticated decisions about their alliances. The largest hospitals systems primarily participate on broad network, while the smaller hospital systems and independent hospitals participated on both broad and local networks. Premiums for the broad networks were very close together, and one carrier ended up with almost all the broad network members. Most local narrow networks had premiums lower than the broad networks; therefore, many members had additional local choices at slightly lower premiums. Collectively, these local networks had half the members.

Market Information and Findings

Market 5 is a metropolitan market from a Southern state and has a population of over 2.5 million people in mostly urban and suburban areas; however, Market 5 also extends into a few rural areas. The ACA rating area for this market includes 21 counties that span across a geographical area with approximately a 35-mile radius around the central "downtown" of the main city. Most of the population is within a 25-mile radius.

The largest hospital system had hospitals located mostly in the northern half of the market where there were largely populated suburban areas. It also had one large hospital near the downtown area. The second largest system had hospitals in the northern and southern areas of the market. The third largest system, an educational hospital system, had hospitals near the downtown area and in the suburbs. The remaining hospitals were located throughout the market. No single hospital system owned hospitals in every region of the market; however, some hospital systems owned hospitals and had large market share within one or two regions of the market.

The biggest geographic barrier for accessing care in this market would be drive-time due to heavy traffic concentrations in many regions of the market. That said, there were hospitals located in most of the regions that had large concentrations of people.

We selected Market 5 because of the following characteristics:

- Many independent and small hospital systems are found in this market. While there was one large hospital system with a large market share in the northern region of the market, there were still other hospitals in that region that could compete with the large system. No single hospital system could provide services across the entire market. We wanted to study how carriers and hospitals aligned with each other to compete for membership under these circumstances.
- Many carriers competed for the ACA Exchange membership in this market, and most of them were the carriers that would have traditionally competed for this market's commercial membership too. There was a local provider-owned carrier, a national provider-owned carrier, a Blue Cross and Blue Shield organization and four nationally known health insurance carriers. In addition to the carriers that traditionally competed in Market 5, a Medicaid carrier also competed on the Exchange. There was not a Medicare carrier in this market, nor was there an ACA health care cooperative.
- The networks offered by the health insurance carriers ranged in size: from broad with most hospitals in the market to very limited at less than one-fifth the size of the broadest network. Three of the carriers offered multiple networks.

Hospitals appeared to make very sophisticated decisions about their markets. Different hospitals aligned with different health insurance carriers in both broad and narrow networks.

The characteristics about the market, the population of covered lives on the 2016 Individual Exchange and the competing carriers and their networks as well as the hospital competition are summarized below.

Market Profile

Market 5: A large metropolitan area in a Southern state

Rating Area: Large, covering an area approximately 70 miles long and 70 miles wide across 21 counties

Geography: Urban, suburban and rural

Population: Over 2.5 million people

Total Approximate Covered Lives on the Individual Exchange: 350,000

Exchange Competition: Eight insurance carriers: two provider-owned, one Medicaid, one regional and four nationals

Products Offered: HMO, POS and PPO and 53 product offerings: Bronze, Silver, Gold and Catastrophic

Service Area(s): Only two carriers sold products in all 21 counties; all others sold products in limited service areas

Network Scope: Three carriers offered broad networks, and seven offered narrow networks (two offered both types)

Hospital Competition: The largest hospital system provided approximately 25% of the hospitals services in the market, and the second and third largest hospital systems each provided just under 20%. The remaining 35% of the hospital services were provided by many independent hospitals or small systems.

Balance Billing Regulations: None at the time the case study was researched; however, the state legislature was evaluating options for legislation or regulations.

Premiums and Net Contribution to Member

Table 1 summarizes the key market statistics for evaluating the key information of this case study: the types of carriers and products offered; the size of each service area and hospital network; the premium and net contribution for the member (annual and monthly); and the estimated enrollee market share for each carrier's network.

Premium and the net contribution from the member were compared based on a Silver Plan, Age 40 and Single Rate and an income at 100% to 150% of the federal poverty level.

Table 1 - Key Market Statistics

Market 5 - South U.S. - Metro Area	Carrier:	1	2	3		4	5	6		7	8	
Comparison: premium and net member contribution by carrier, network, and product type.		Local-Provider Owned	Medicaid	Regional		National 1	National 2	National 3		National-Provider Owned	National 4	
	Network:	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*
	Product Type:	*PPO*	*HMO*	*HMO*	*HMO*	*PPO*	*HMO*	*POS*	*HMO*	*HMO*	*HMO*	*PPO*
	Count of Hospitals in the Network:	*22*	*12*	*17*	*32*	*6*	*10*	*34*	*8*	*9*	*29*	*29*
	% of Market Admissions in the Network:	*56%*	*31%*	*35%*	*87%*	*14%*	*25%*	*89%*	*13%*	*25%*	*85%*	*85%*
	Service Area:	*Local*	*Limited*	*Large*	*Large*	*Limited*	*Limited*	*Large*	*Limited*	*Large*	*Large*	*Limited*
	Network Size:	*Local*	*Narrow*	*Narrow*	*Broad*	*Very Narrow*	*Narrow*	*Broad*	*Very Narrow*	*Narrow*	*Broad*	*Broad*
Silver Plan Age 40- Single - Average Monthly Premium:		*$395*	*$265*	*$320*	*$327*	*$351*	*$291*	*$334*	*$311*	*$326*	*$358*	*$311*
Silver Plan Age 40- Single - Average Annual Premium:		*$4,735*	*$3,182*	*$3,837*	*$3,925*	*$4,214*	*$3,497*	*$4,005*	*$3,734*	*$3,917*	*$4,300*	*$3,736*
Relative to Market Average w/o ACA Subsidy as a %:		*21%*	*-19%*	*-2%*	*0%*	*8%*	*-11%*	*2%*	*-5%*	*0%*	*10%*	*-5%*
Relative to Market Average w/o ACA Subsidy in Monthly $$'s:		*$68*	*($61)*	*($7)*	*$1*	*$25*	*($35)*	*$7*	*($15)*	*$0*	*$32*	*($15)*
Silver Plan Age 40- Single - Average Annual Premium Less ACA Subsidy at FPL 100% to 150%:		*$1,416*	*$609*	*$1,264*	*$1,352*	*$1,641*	*$924*	*$1,432*	*$1,161*	*$1,344*	*$1,727*	*$1,163*
Relative to Market Average with ACA Subsidy as a %:		*11%*	*-52%*	*-1%*	*6%*	*29%*	*-28%*	*12%*	*-9%*	*5%*	*35%*	*-9%*
Relative to Market Average with ACA Subsidy in Annual $$'s:		*$140*	*($667)*	*($11)*	*$76*	*$365*	*($352)*	*$156*	*($114)*	*$69*	*$451*	*($113)*
Estimated Carrier/Network Marketshare (% of Enrollees):		0.1%	6.3%	7.4%	0.4%	0.9%	16.3%	45.7%	14.6%	4.6%	1.1%	2.6%

Special note: Many products are only offered in some counties. However, the percentages in this table reflect the total market, not the situation in each county. So the overall percentages must be used in context. The "% of Market Admissions" understates the carrier's presence in the local marketplace. "Relative to Market Average as a %" does not quite reflect the situation in each county, especially in highly populated counties with carriers that sell products using a narrow or local network in that local service area. As one example, the hospitals with Carrier 1 cover 56% of the admissions in the region (see Table 2—Hospital Networks by Carrier below), but the carrier operated in only three counties. Carrier 1's network provides good hospital coverage in these three counties.

Results by carrier product and network are summarized below:

There were four broad networks, but most of the networks were local and focused on particular counties. The local networks generally had lower prices than the broad networks. Table 10 (at the end of the case study) shows the county participation by carrier and network in detail. A summary is the following:

- Carriers 3 and 7 were in most counties
- Carriers 1, 2, 4 and 5 covered less than one-third of the counties and
- Carriers 6 and 8 offered two different products; one covered most counties, the other only a few counties.

Although the carrier and hospital strategy is not discussed in public, it appears that various hospitals and carriers worked together to offer less expensive options in some local communities. For example, two carriers (carriers 6 and 8) offered two choices for members in certain counties: a broad more expensive network and a less expensive local network. This may reflect that local hospitals were willing to accept lower fees to attract members in these locations. Although complex to explain, this is one way to bring more competition to Exchanges and support local hospitals.

As an important historical note, Carrier 6 had been on the Exchange since 2014, while several of the other carriers joined afterwards. Carrier 6's premium rates were substantially higher in 2016 than in previous periods. Their large market share in 2016 may be based in part on their low premiums for ACA Exchange members in previous years.

A summary by carrier is below:

- Carrier 1 (Local-Provider Owned) is a health insurance carrier that was owned by a community-based health care system that was located and operated in some of the rural counties in Market 5. It also operated in other rural counties that were part of another rating area that was not included in the case study. They offered a narrow network with a PPO product design that was available in only a few of the counties in Market 5.
    - The monthly PPO premium was $395, which was 21% and $68 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,416, which was *$140* above the market average.
    - This carrier had a very limited service area (as described above in the Special Note).
        - Given the limited counties for this PPO, and a higher than average premium, this carrier had only 0.1% of the overall membership in Market 5 However, given the very small service area, their impact in their local community is slightly higher.
        - Their network is Network A. It included 22 of the 39 hospitals and covered 56% of the overall hospital admissions.
- Carrier 2 (Medicaid) has historically been a managed Medicaid carrier in multiple states, including Market 5. They offered a narrow network HMO in a limited service area.
    - The monthly HMO premium was $265, which was 19% and $61 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $609, which was *$667* below the market average per year. It was the lowest net contribution in the market.
    - This carrier did not serve a few highly populated suburban counties in the northern half of Market 5. Their counties were a mix of urban, suburban and rural counties.
    - Their network is Network B in the case study. Network B included 12 of the 39 hospitals in Market 5 and 31% of the admissions overall across the entire market.
    - This product was available in 11 of the 21 Market 5 counties. With a narrow HMO, and a lower than average premium, this carrier had 6.3% of the members. This percentage understates their local presence (as described above in the Special Note).
- Carrier 3 (Regional) is a Blue Cross and Blue Shield plan. They offered two networks with an HMO product design: one network was narrow and the other was broad. The premiums were close together.
    - The monthly HMO premium for the broad network was $327, which was within 1% and $1 of the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $1,352, which was $76 above the market average.
    - The monthly HMO premium for the narrow network was $320, which was 2% and $7 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $1,264, which was $11 below the market average.
    - Their networks are Network C and Network D. Network C included 17 of the 39 hospitals in Market 5 and 35% of the Market 5 hospital admissions. Network D included 32 of the 39 hospitals and 87% of the hospital admissions.

- This carrier's narrow HMO had 7.4% of the overall membership, while their broad HMO had 0.4% of the membership. Both networks were available in every county. High enrollment in the narrow network implies an active marketing and sales campaign for the less expensive narrow network; such a small difference in premium is often not noticed by members.
- If the relative success of the HMO is sustained, it may improve market competition in future years.

- Carrier 4 (National 1) is a health insurance carrier that operates nationally. They offer a narrow network PPO in a limited service area.
  - The monthly PPO premium was $351, which was 8% and $25 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $1,641, which was *$365* above the market average.
  - This carrier's product was available only in seven of the twenty-one counties (see Special Note).
    - Their network is Network E. Network E included 6 of the 39 hospitals in Market 5 and 14% of the Market 5 hospital admissions.
    - With a narrow network, and a higher than average premium, this carrier had 0.9% of the Market 5 membership.
- Carrier 5 (National 2) is a health insurance carrier that operates nationally. They offer an HMO with a local network in a limited service area.
  - The monthly HMO premium was $291, which was 11% and $35 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $924, which was *$352* below the market average.
  - This carrier's product was available in seven of the 21 counties (see Special Note).
    - Their network is Network F. Network F included 10 of the 39 hospitals and 25% of the Market 5 hospital admissions.
    - With a narrow network, and a below average net contribution, this carrier had 16.3% of the Market 5 membership, which is significant given its presence in only 1/3 of the counties.
- Carrier 6 (National 3) is a health insurance carrier that operates nationally. They offered two networks: a broad network with a POS product design and a local HMO. The HMO product is offered in less than one-third of the counties.

  <u>POS product</u>
  - The monthly POS premium for the broad network was $334, which was 2% and $7 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,432, which was $156 above the market average.
  - Network G included 34 of the 39 hospitals and 89% of the Market 5 hospital admissions.
  - POS products were available in 19 of the 21 Market 5 counties.
  - The POS had 45.7% of the Market 5 membership, the highest membership in the case study. This product got almost all members who chose a broad network that was available in most counties. There were two other carriers with very similar premiums; therefore, their enrollment reflects other factors than premium or network size. For example, this carrier was an ongoing member of the Exchange and had low rates in previous years.

HMO product

- The monthly HMO premium was $311, which was 5% and $15 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded an annualized net contribution of $1,161, which was $114 below the market average.
- This carrier's HMO product was available in six of the 21 counties (see Special Note).
  - Network H included eight of the 39 hospitals and 13% of the Market 5 hospital admissions.
  - This carrier's HMO had 14.6% of the Market 5 membership. This is a significant local presence given the limited service areas.

- Carrier 7 (National-Provider-Owned) is a health insurance carrier that is owned by a national chain of health care providers. They offer a narrow network HMO.
  - The monthly HMO premium was $326, which was equal to the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,344, which was *$69* above the market average.
  - Their Network I included nine of the 39 hospitals and 25% of the Market 5 hospital admissions.
  - With a narrow HMO, and a higher than average premium, this carrier had 4.6% of the membership in Market 5. This product was available in 20 of the 21 counties.
- Carrier 8 (National 4) is a health insurance carrier that operates nationally. They offered two broad networks: one with an HMO product design and one with a PPO product design.
  - The monthly HMO premium was $358, which was 10% and $32 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,727, which was $451 above the market average.
  - The monthly PPO premium for the broad network was $311, which was 5% and $15 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,163, which was $113 below the market average.
  - Their networks are Network J and Network K. Network J included 29 of the 39 hospitals and 85% of the Market 5 admissions. Network K included the same 29 hospitals.
  - This carrier's HMO had 1.1% of the Market 5 membership, while their PPO had 2.6% of the Market 5 membership. The HMO was available in 18 of the 21 counties, and the PPO was available in only six. This carrier's two products were managed from two separate, independent legal entities.

Hospital Networks by Carrier

Table 2 shows the number and types of hospitals that were included in-network for each of the carrier's networks. As discussed previously, 39 hospitals were identified for Market 5.

With respect to the hospital competition, System X, the largest hospital system, participated on every broad network, but did not participate on the local networks (except for the one rural, local provider-owned carrier's network).

Similarly, System Y, the second largest hospital system participated on each broad network and only on one local network (Carrier 7's Network I has System Y and one other independent hospital). Most of the other hospital systems and independent hospitals participated on both local and broad networks.

Carrier 6's Network G was the biggest network, and it had the most market share at almost 46% of the membership, despite having the third highest price. The other broad networks had very low market share, and the rest of the membership was spread across several of the narrow networks. On the other hand, over 50% of the membership selected local network products

at prices that were below the market average and less expensive than the broad networks. At least in some counties, there was active competition between various hospitals and their carrier allies.

Table 2 - Hospital Networks by Carrier

Market 5 - South U.S. - Metro Area

Market Hospitals and Carrier Network Hospital Participation - Counts and Medicare Admissions

				Carrier										
				1	2	3		4	5	6		7	8	
				Network										
Hospital	System	Type_Hosp	% of Market Admissions	A	B	C	D	E	F	G	H	I	J	K
Hospital 1	System X	Hospital	10.5%	X			X			X			X	X
Hospital 2	System Y	Hospital	7.7%				X			X		X	X	X
Hospital 3	Independent	Educational	4.2%		X	X	X		X	X	X		X	X
Hospital 4	System W	Educational	6.0%	X	X		X			X			X	X
Hospital 5	Independent	Hospital	6.9%	X	X	X	X	X	X	X		X	X	X
Hospital 6	System W	Educational	5.3%	X	X		X			X			X	X
Hospital 7	System X	Hospital	4.8%	X			X			X				
Hospital 8	System Z	Hospital	3.5%	X		X	X		X	X	X		X	X
Hospital 9	System W	Hospital	5.4%	X						X			X	X
Hospital 10	Independent	Hospital	3.3%			X	X	X		X	X			
Hospital 11	System Z	Hospital	3.0%	X		X	X		X	X			X	X
Hospital 12	System Y	Hospital	4.1%				X			X		X	X	X
Hospital 13	System X	Hospital	1.9%			X	X			X			X	X
Hospital 14	Independent	Hospital	2.5%	X		X	X	X		X			X	X
Hospital 15	Independent	Hospital	5.3%										X	X
Hospital 16	System X	Hospital	3.2%		X	X	X							
Hospital 17	System Y	Hospital	3.8%				X			X		X	X	X
Hospital 18	Independent	Hospital	3.0%		X		X						X	X
Hospital 19	Independent	Hospital	2.9%				X		X	X			X	X
Hospital 20	System Z	Hospital	1.6%	X		X	X		X	X	X		X	X
Hospital 21	System Y	Hospital	2.3%			X	X			X		X	X	X
Hospital 22	System X	Hospital	2.1%	X			X			X				
Hospital 23	System W	Hospital	1.5%	X	X		X			X			X	X
Hospital 24	Independent	Hospital	1.0%		X	X	X			X			X	X
Hospital 25	System X	Hospital	1.3%	X			X			X				
Hospital 26	System Y	Hospital	1.6%	X					X	X			X	X
Hospital 27	Independent	Hospital	1.4%			X	X	X	X	X			X	X
Hospital 28	Independent	Specialty	0.1%										X	X
Hospital 29	System Y	Hospital	0.1%	X			X			X		X	X	X
Hospital 30	Independent	Psych	0.4%	X						X	X			
Hospital 31	Independent	Children's	0.1%	X					X	X	X	X		
Hospital 32	Independent	Hospital	0.1%	X	X		X			X			X	X
Hospital 33	Independent	Cancer	0.0%				X	X						
Hospital 34	System X	Hospital	0.1%		X	X	X			X			X	X
Hospital 35	Independent	Hospital	0.1%	X		X	X			X			X	X
Hospital 36	Independent	Hospital	0.0%	X		X	X		X	X				
Hospital 37	Independent	Children's	0.0%	X				X		X	X	X		
Hospital 38	System X	Hospital	0.0%		X	X	X			X	X		X	X
Hospital 39	Independent	Hospital	0.0%	X	X	X	X			X		X	X	X
Total			100.0%											
		Count of Hospitals in the Network:		*22*	*12*	*17*	*32*	*6*	*10*	*34*	*8*	*9*	*29*	*29*
		% of Market Admissions in the Network:		*56%*	*31%*	*35%*	*87%*	*14%*	*25%*	*89%*	*13%*	*25%*	*85%*	*85%*
		Product Type:		*PPO*	*HMO*	*HMO*	*HMO*	*PPO*	*HMO*	*POS*	*HMO*	*HMO*	*HMO*	*PPO*
		Network Size:		*Local*	*Narrow*	*Narrow*	*Broad*	*Very Narrow*	*Narrow*	*Broad*	*Very Narrow*	*Narrow*	*Broad*	*Broad*
		Carrier Type:		*Local Provider Owned*	*Medicaid*	*Regional*		*National*	*National*	*National*		*National Provider Owned*	*National*	

Carrier Characteristics, Plans Offered and Member Plan Selections

Tables 3 and 4 summarize the distribution of membership by metal tier selected by the Individual Exchange members.

Table 3 - Carrier/Network Marketshare Percentage

Market 5 - South U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

				Approx. Historical Market Share %'s by Carrier and Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	PPO	Local-Provider Owned	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Carrier 2	Network B	HMO	Medicaid Carrier	1.2%	4.8%	0.3%	0.0%	0.0%	6.3%
Carrier 3	Network C	HMO	Regional	1.4%	5.9%	0.0%	0.0%	0.2%	7.4%
Carrier 3	Network D	HMO	Regional	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%
Carrier 4	Network E	PPO	National	0.2%	0.6%	0.1%	0.0%	0.0%	0.9%
Carrier 5	Network F	HMO	National	2.8%	12.2%	0.9%	0.0%	0.3%	16.3%
Carrier 6	Network G	POS	National	8.0%	34.4%	2.4%	0.0%	0.9%	45.7%
Carrier 6	Network H	HMO	National	2.6%	10.8%	0.9%	0.0%	0.3%	14.6%
Carrier 7	Network I	HMO	National-Provider Owned	0.8%	3.4%	0.2%	0.0%	0.1%	4.6%
Carrier 8	Network J	HMO	National	0.2%	0.9%	0.1%	0.0%	0.0%	1.1%
Carrier 8	Network K	PPO	National	0.5%	1.9%	0.2%	0.0%	0.0%	2.6%
Total				17.6%	75.5%	5.1%	0.0%	1.9%	100.0%

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org.

Table 4 - Carrier/Network Membership and Product Counts

Market 5 - South U.S. - Metro Area

Carriers offering coverage - market share by benefit plan metal type

				Estimated Historical Market Share - Member Counts Members - Total Rounded to nearest 100					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 1	Network A	PPO	Local-Provider Owned	82	378	40	-	-	500
Carrier 2	Network B	HMO	Medicaid Carrier	4,080	16,826	1,094	-	-	22,000
Carrier 3	Network C	HMO	Regional	4,789	20,648	-	-	563	26,000
Carrier 3	Network D	HMO	Regional	-	1,396	104	-	-	1,500
Carrier 4	Network E	PPO	National	554	2,267	179	-	-	3,000
Carrier 5	Network F	HMO	National	9,961	42,827	3,064	-	1,148	57,000
Carrier 6	Network G	POS	National	27,866	120,302	8,552	-	3,280	160,000
Carrier 6	Network H	HMO	National	9,099	37,760	3,056	-	1,085	51,000
Carrier 7	Network I	HMO	National-Provider Owned	2,818	12,005	844	-	333	16,000
Carrier 8	Network J	HMO	National	712	2,978	227	-	83	4,000
Carrier 8	Network K	PPO	National	1,695	6,715	590	-	-	9,000
Total				61,656	264,102	17,750	-	6,492	350,000

				Number of Plans Offered by Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total**
Carrier 1	Network A	PPO	Local-Provider Owned	2	4	2	0	0	8
Carrier 2	Network B	HMO	Medicaid	6	9	1	0	0	16
Carrier 3	Network C	HMO	Regional	5	5	0	0	1	11
Carrier 3	Network D	HMO	Regional	0	1	1	0	0	2
Carrier 4	Network E	PPO	National	2	3	1	0	0	6
Carrier 5	Network F	HMO	National	2	2	1	0	1	6
Carrier 6	Network G	POS	National	1	1	1	0	1	4
Carrier 6	Network H	HMO	National	2	1	1	0	1	5
Carrier 7	Network I	HMO	National-Provider Owned	3	3	3	0	1	10
Carrier 8	Network J	HMO	National	3	3	2	0	1	9
Carrier 8	Network K	PPO	National	1	2	2	0	0	5
Total				18	25	7	0	3	53

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org.

**From data including rates filed and available from HHS Public Use Files.

Conclusions

As an overview, this Southern state has a particularly complex environment and is different from other parts of the country. It is hard to summarize without losing important details, but, as an overview, very little difference in premiums was seen for any of the programs. Broad networks were slightly more expensive than other products; they had half the market share while alternative networks split the remaining enrollment. This may be partly because of the hospital business decisions. The two major hospital systems contracted with the broad networks.

In addition, many local (small) service areas are found in this market. The major carrier, with the largest enrollment, covers the entire service area. Many other carriers had smaller service areas and had alliances only with local hospitals within the service area.

Case Study 5 provides a useful case for the strategic decisions of the large hospital systems within each local market and Exchange product. The largest hospital system had a dominant market share in the northern half of the market but did not own hospitals in the southern half of the market. This hospital system did not align with any carriers in a narrow network but participated in every broad network. The second largest hospital system had hospitals in multiple areas in the market; it also participated mostly on broad networks, but it also created an alternative product focused on their own hospitals. Since its premiums were not distinctly lower, it had a small market share. The independent hospitals and the smaller hospitals systems participated on broad networks and on multiple narrow networks.

Several major factors were different from other case studies:

- The region is very large. None of the hospital systems owned hospitals with enough geographic coverage to cover all of Market 5. Therefore, the carriers could not offer a narrow network product that was aligned with one hospital system and that could provide coverage across the entire market. In other case study markets, this was possible.
- The differences in the narrow network premiums (and net contribution) to the popular broad network product (Carrier 6's POS—Network G) premium were not as large as was observed in other markets when both types of networks were offered. It is also smaller than the premium differences reported in other major published studies.
- Two of the narrow networks did have significant market share, but they each had only about one-third of the membership that the most popular product had. The POS product that was sold on a broad network had 45% of the membership, despite having premiums and net contributions that were slightly higher than most of the products with narrow networks.

The member product selections observed in the case studies in this state were different than in the first four case studies. In other case studies, there was a large difference in member contribution, and this had a major factor in member decisions. Members did not see a big difference in contribution in this state. Since members did not have a large financial reason to choose a carrier and network, other factors had an impact on member product selections.

Since this market is an exception to the published literature and our case studies, a deeper review of this market could offer insights into Exchanges, hospitals and member decisions.

Other Supporting Data: Case Study 5

ACA Covered Population Characteristics

Estimated Covered Population by Gender, Age, Metal Tier and Federal Poverty Level (FPL%)

Table 5 - Member Mix by Gender and Metal Type

Distribution by Gender and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Female	53.1%	57.3%	51.5%	51.5%	56.0%	56.0%
Male	46.9%	42.7%	48.5%	48.5%	44.0%	44.0%

- More females participated on the Individual Exchange.
- The highest female-to-male proportion was for Silver plans.

Table 6 - Member Mix by Age and Metal Type

Distribution by Age and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Age < 18	7.9%	7.9%	7.9%	0.0%	13.5%	8.0%
Age 18-25	13.5%	13.5%	13.5%	0.0%	23.0%	13.7%
Age 26-34	18.4%	18.4%	18.4%	0.0%	31.4%	18.7%
Age 35-44	18.8%	18.8%	18.8%	0.0%	32.1%	19.1%
Age 45-54	21.7%	21.7%	21.7%	0.0%	0.0%	21.3%
Age 55-64	18.9%	18.9%	18.9%	0.0%	0.0%	18.5%
Age ≥ 65	0.7%	0.7%	0.7%	0.0%	0.0%	0.7%
Total	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%

- 41% of the members on the Individual Exchange were over the age of 45.
- 40% of the members were below the age of 35.

Table 7 - Member Mix by Metal Type within FPL Range

Metal Split by FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total Metal
FPL	17.6%	75.5%	5.1%	0.0%	1.9%	100.0%
100-200%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
200 - 250%	67.6%	21.3%	11.1%	0.0%	0.0%	100.0%
250%-400	60.1%	17.8%	22.1%	0.0%	0.0%	100.0%
400% +	44.0%	14.2%	14.9%	0.0%	26.9%	100.0%

- Over 75% of the members on the Individual Exchange selected the Silver plan, and we estimated that the lowest income bracket was almost exclusively on the Silver plan.
- For higher income brackets, the Bronze plans were selected the most, and the Catastrophic was the second-most selected.

Table 8 - Member Mix by FPL Range within Metal Type

FPL Split by Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL
FPL	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%
100-200%	0.0%	92.8%	0.0%	0.0%	0.0%	70.0%
200 - 250%	36.6%	2.7%	20.9%	0.0%	0.0%	9.5%
250%-400	46.1%	3.2%	58.8%	0.0%	0.0%	13.5%
400% +	17.2%	1.3%	20.2%	0.0%	100.0%	6.9%

- Per the previous exhibits, the Silver plan enrollment is dominated by the lowest income bracket.
- Less than 10% of the membership had income above 400% of the federal poverty level.

Table 9 - Member Mix by FPL Range and Metal Type

Distribution by Metal and FPL	Metal					Total FPL & Metal
	Bronze	Silver	Gold	Platinum	Catastrophic	
FPL	17.6%	75.5%	5.1%	0.0%	1.9%	100.0%
100-200%	0.0%	70.0%	0.0%	0.0%	0.0%	70.0%
200 - 250%	6.5%	2.0%	1.1%	0.0%	0.0%	9.5%
250%-400	8.1%	2.4%	3.0%	0.0%	0.0%	13.5%
400% +	3.0%	1.0%	1.0%	0.0%	1.9%	6.9%

- Platinum plans were not offered, and Catastrophic membership was less than 2% of the total.
- Silver and Bronze combined made up almost 85% of the membership selections.

Carrier Service Area by County

Table 10 - Carrier/Network Service Area Size

Market 5 - South U.S. - Metro Area

Carrier Coverage/Service Area - By County within the Rating Area

	Carrier 1	Carrier 2	Carrier 3	Carrier 3	Carrier 4	Carrier 5	Carrier 6	Carrier 6	Carrier 7	Carrier 8	Carrier 8
	Network A	Network B	Network C	Network D	Network E	Network F	Network G	Network H	Network I	Network J	Network K
County	PPO	HMO	HMO	HMO	PPO	HMO	POS	HMO	HMO	HMO	PPO
County 1	1	0	1	1	1	0	1	0	1	1	0
County 2	0	1	1	1	0	0	1	0	1	1	0
County 3	1	1	1	1	0	1	1	1	1	1	1
County 4	0	1	1	1	0	0	1	0	1	1	0
County 5	0	0	1	1	1	0	1	1	1	0	1
County 6	0	0	1	1	0	0	1	0	1	1	0
County 7	0	1	1	1	1	1	1	1	1	1	1
County 8	0	0	1	1	0	0	1	0	1	0	0
County 9	0	1	1	1	0	0	1	0	1	1	0
County 10	1	1	1	1	0	1	1	1	1	1	1
County 11	0	1	1	1	1	1	1	1	1	1	1
County 12	0	1	1	1	1	1	1	1	1	1	1
County 13	0	1	1	1	0	0	1	0	1	1	0
County 14	0	0	1	1	0	0	0	0	0	1	0
County 15	0	0	1	1	0	0	1	0	1	1	0
County 16	0	0	1	1	0	1	1	0	1	1	0
County 17	0	0	1	1	0	0	1	0	1	0	0
County 18	0	0	1	1	0	0	0	0	1	1	0
County 19	0	0	1	1	1	1	1	0	1	1	0
County 20	0	1	1	1	0	0	1	0	1	1	0
County 21	0	1	1	1	1	0	1	0	1	1	0
Total	3	11	21	21	7	7	19	6	20	18	6
Service Area Size	Local	Limited	Large	Large	Limited	Limited	Large	Limited	Large	Large	Limited

- Some networks covered most of the counties, and many networks covered less than half of the counties.
- The carriers offered different product types—there were HMO, POS and PPO product offerings.

Case Study 6

Southern State: Rural Area

Case Study 6: Market 6, Southern State: Rural Area

National perspective: 12.7 million members enrolled in Exchanges at the beginning of 2016. A premium tax credit was applied 85% of the time, and subsidized members paid 27% of the cost of the program on average. The average premium was $396 per month before the credit with a $106 net member contribution after the credit. For members participating the entire year, the annual premium is $4,752, which is a $1,272 net contribution. This is a national average of all ages and is not directly comparable to the age-40 premiums seen in this case study.[62]

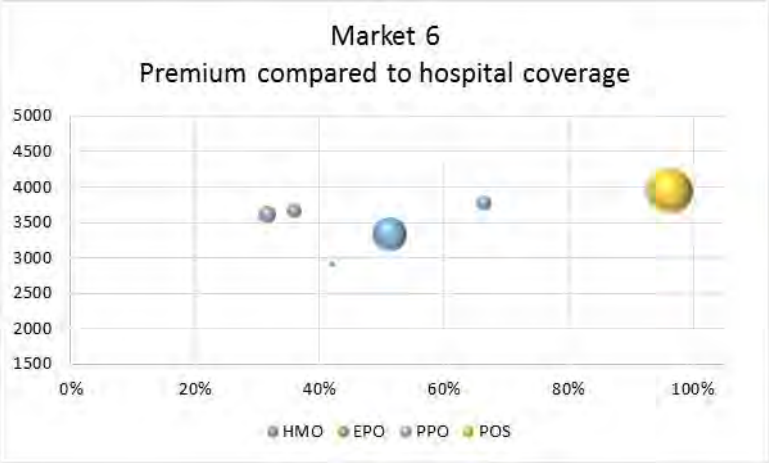
State perspective: Markets 5 and 6 come from the same state. This one is more rural. The other one, Market 5, is a large metropolitan area. These markets have many of the same carriers. These case studies can be reviewed in parallel to see the differences between Exchange programs in various locations.

Summary

Market 6 is a rural area with a small city and many small towns in a Southern state. Three hospital systems in this market provide 85% of the hospital services. Approximately 10% of the services are provided at hospitals outside of Market 6, and the rest are provided by small, independent hospitals in the community.

There are five health insurance carriers: a Medicaid carrier, a Blue Cross and Blue Shield plan and three national carriers. These carriers collectively provided coverage for an average of 34,750 members in Market 6.

The following chart shows the key results for this market. The annual premium is on the left; hospital network coverage is shown on the bottom. The hospital network coverage is the percentage of total admissions that the network covered historically for Medicare fee-for-service members. This is one metric used to assess the network size. The size of the bubble shows relative market share for each network. The color of the bubbles shows the product design.



Fewer carriers offered products in Market 6; as a rural market there are far less members. In both Markets 5 and 6 the same national carrier offered a POS product with a broad network and had the dominant share of the membership at over 50%. This product had the highest premium. The other broad network had very little membership. One of the narrow HMOs was also popular and had 29% of the members even though it was available in only seven of the 11 counties.

Most premiums in this market were very close together, with two exceptions, so members in this market generally did not have clear financial incentives to choose between carriers. There were also many differences in the service areas. As a result, the popular POS product was slightly more expensive than average but had almost half the enrollment. Their main competition was the narrow HMO product. The POS premium was about $600 higher (i.e., $50 per month) than for the HMO. The premium

[62]Page 39 of https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf.

difference and smaller size appears to balance each other. Both products were offered by national carriers that also competed in Market 5.

Other carriers had little market share. Their rates were very close to the broad product offered by the national carrier but with smaller networks. The Medicaid carrier was new to the market in 2016, with less than 1% of the members, despite the lowest premium. The regional carrier and other national carriers had low membership.

A high market share for a broad network that is more expensive than average is somewhat unusual. However, most competing premiums were only slightly less expensive. So members could buy a broad network for almost the same net contribution.

Market 6 provides an example of how Exchanges affected hospital volume. The four largest hospitals in the market did not make exclusive arrangements. Although they aligned with narrow networks that excluded their competitors, they all were also available on the broad networks. The hospital system that owns two of the four largest hospitals got much of the Exchange volume. They were available on both broad networks and were offered on the second-most popular narrow network HMO.

Market Information and Findings

Market 6 is a rural market with a small city in a Southern state. It has a population of approximately 350,000 people in a small urban/suburban area and in surrounding rural counties. The ACA rating area for Market 6 includes 11 counties that span across a geographical area roughly 50 miles long and 60 miles wide. Most of the population lives within 30 miles from the "downtown" area that is in the eastern-most part of the rating area. There are not significant geographic barriers for accessing care other than drive-time for people who live far from the centralized part of the market where the largest hospitals are located. Some areas do not have direct interstate access for several miles.

We selected Market 6 because we wanted to compare a metropolitan market and a rural market in this state. Market 5 is a large, metropolitan area in this same Southern state. Several of the carriers in Market 5 are also in Market 6. This shows differences in carrier strategies. While a few patients travel from Market 6 to Market 5 hospitals for care, none of the Market 6 hospitals are connected to hospital systems in Market 5.

There were not any new carriers in Case Study 6; therefore, carrier labels are the same as for Case Study 5. Two carriers had networks that were local to Market 6, which are labeled with new letters in sequence with Case Study 5 letters.

Four hospitals provide about 86% of the hospital-based services in Market 6: one of the hospitals is independent, two were owned by the same local systems and the fourth is owned by a national chain. About 10% of the hospital services were provided by hospitals outside of Market 6, and about 5% of the services were provided by a few small community-based hospitals in the rural regions.

The carrier competition was similar to Market 5, but there were fewer carriers. There are five health insurance carriers: a Medicaid carrier, a Blue Cross and Blue Shield plan and three nationally known managed care organizations. These carriers collectively provided coverage for an average of 34,750 members in Market 6.

The characteristics about the market, the population of covered lives on the 2016 Individual Exchange and the competing carriers and their networks as well as the hospital competition are summarized below.

Market Profile

Market 6: A small city surrounded by several counties with small towns in a rural part of a southern state

Rating Area: Covers a large geographic area, approximately 50 miles long and 60 miles wide, across 11 counties

Geography: Mostly rural with a small urban/suburban area in the small city

Population: Approximately 350,000

Total Approximate Covered Lives on the Individual Exchange: 34,750

Exchange Competition: Five carriers: one Medicaid, a Blue Cross and Blue Shield plan and three national carriers

Products Offered: HMO and POS and 52 product offerings: Bronze, Silver, Gold and Catastrophic

Service Area(s): Three carriers sold products in all 11 counties; one of those carriers and the Medicaid carrier sold products only in the most populated county. One carrier offered products in only seven counties.

Network Scope: Two carriers offered both broad and narrow networks. Three other carriers offered narrow.

Hospital Competition: The three large hospital systems provide 42%, 32% and 12% of the hospital services, respectively.

Balance Billing Regulations: None at the time the case study was researched; however, the state legislature was evaluating options for legislation or regulations.

Premiums and Net Contribution to Member

Table 1 summarizes the key market statistics for evaluating the key information of this case study: the types of carriers and products offered; the size of each service area and hospital network; the premium and net contribution for the member (annual and monthly); and the estimated enrollee market share for each carrier's network.

Premium and the net contribution from the member were compared based on a Silver Plan, Age 40 and Single Rate and an income at 100% to 150% of the federal poverty level.

Five carriers competed on the Exchanges in Market 6. Two carriers each offered both a broad and a narrow network—one offered two HMO products, while the other offered an HMO and a POS product. The other carriers offered narrow networks with HMO products (see Hospital Networks by Carrier below).

Table 1 - Key Market Statistics

Market 6 - South U.S. - Rural Area	*Carrier:*	2	3		5	6		8
Comparison: premium and net member contribution by carrier, network, and product type.		Medicaid	Regional		National 2	National 3		National 4
	Network:	*B*	*C*	*D*	*L*	*G*	*M*	*J*
	Product Type:	*HMO*	*HMO*	*HMO*	*HMO*	*POS*	*HMO*	*HMO*
	Count of Hospitals in the Network:	*3*	*14*	*17*	*10*	*13*	*1*	*7*
	% of Market Admissions in the Network:	*42%*	*66%*	*99%*	*51%*	*96%*	*32%*	*36%*
	Service Area:	*Local*	*Large*	*Large*	*Medium*	*Large*	*Local*	*Large*
	Network Size:	*Narrow*	*Narrow*	*Broad*	*Narrow*	*Broad*	*Local*	*Narrow*
	Silver Plan Age 40- Single - Average Monthly Premium:	*$243*	*$314*	*$322*	*$278*	*$328*	*$301*	*$306*
	Silver Plan Age 40- Single - Average Annual Premium:	*$2,917*	*$3,772*	*$3,858*	*$3,331*	*$3,939*	*$3,612*	*$3,669*
	Relative to Market Average w/o ACA Subsidy as a %:	*-19%*	*5%*	*8%*	*-7%*	*10%*	*1%*	*2%*
	Relative to Market Average w/o ACA Subsidy in Monthly $$'s:	*($56)*	*$16*	*$23*	*($21)*	*$29*	*$2*	*$7*
	Silver Plan Age 40- Single - Average Annual Premium Less ACA Subsidy at FPL 100% to 150%:	*$598*	*$1,453*	*$1,539*	*$1,012*	*$1,619*	*$1,293*	*$1,350*
	Relative to Market Average with ACA Subsidy as a %:	*-53%*	*15%*	*22%*	*-20%*	*28%*	*2%*	*7%*
	Relative to Market Average with ACA Subsidy in Annual $$'s :	*($668)*	*$187*	*$273*	*($255)*	*$353*	*$27*	*$83*
	Estimated Carrier/Network Marketshare (% of Enrollees):	*0.7%*	*5.2%*	*0.3%*	*28.5%*	*53.2%*	*7.2%*	*4.9%*

Note: Carrier 1 does not offer Exchange products in Market 6; therefore, the numbers in Table 1 start with Carrier 2 to keep continuity with Market 5.

The results of the premium and net contribution (i.e., premium less ACA subsidy) comparison to the straight average of all the carriers are described below, along with brief comments about enrollment in each network.

- Carrier 2 (Medicaid) has historically been a managed Medicaid carrier in multiple states, including Market 6.

They offered a narrow network with an HMO.

- The monthly HMO premium was $243, which was 19% and $56 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $598, which was *$668* below the market average per year. It was the lowest net contribution in the market.
- Their network is Network B. Network B included three of the 19 hospitals in Market 5, which would account for 42% of the Market 5 hospital admissions. This product was available for sale in only one of the 11 Market 5 counties, but it was the most populated county.
- With a narrow network HMO, and a lower net contribution, this carrier had less than 1% of the membership in Market 6. However, this carrier was new to Market 6 in 2016.

- Carrier 3 (Regional) is a Blue Cross and Blue Shield plan that operates in Market 6. They offered two networks with an HMO product design; one network was narrow and the other was broad.
  - The monthly HMO premium for the narrow network was $314, which was 5% and $16 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,453, which was $187 above the market average.
  - The monthly HMO premium for the broad network was $322, which was 8% and $23 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,539, which was $273 above the market average.
  - Their networks are Network C and Network D. Network C included 14 of the 19 hospitals and 66% of the Market 6 hospital admissions. Network D included 17 hospitals and 99% of the admissions.
  - This carrier's narrow network HMO had 5.2% of the Market 6 membership, while their broad network HMO had 0.3% of the Market 6 membership. Both networks were available in every county.
- Carrier 5 (National 2) is a health insurance carrier. They offered a narrow network with an HMO product design.
  - The monthly HMO premium was $278, which was 7% and $21 below the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,012, which was *$255* below the market average.
  - Their network is Network L. Network L included 10 of the 19 hospitals and 51% of the admissions.
  - With a narrow network, and a below average net contribution, this carrier had 28.5% of the Market 6 membership. This carrier's product was available for sale in seven of the 11 counties.
- Carrier 6 (National 3) is a health insurance carrier. They offered two networks: a broad network with a POS and narrow network with an HMO.
  - The monthly POS premium for the broad network was $328, which was 10% and $29 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,619, which was $353 above the market average.
  - The monthly HMO premium was $301, which was 1% and $2 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,293, which was $27 above the market average.
  - Their networks are Network G and Network M. Network G included 13 of the 19 hospitals and 96% of admissions. Network M included 1 hospital and 32% of the Market 6 hospital admissions.
  - This carrier's HMO had 7.2% of the membership but was available only in the largest country. Their POS had 53.2% of members. Despite a premium near the market average the broad network POS had the highest membership in Market 6. The POS products were available in all 11 counties.

- Carrier 8 (National 4) is a health insurance carrier that operates nationally throughout the U.S. They offered one narrow network with an HMO product design.
    - The monthly HMO premium was $306, which was 2% and $7 above the market average. On an *annual* basis, the premium less the ACA premium subsidy yielded a net contribution of $1,350, which was $83 above the market average.
    - Their network is Network J. Network J included seven of the 19 hospitals and 36% of admissions.
    - This carrier's HMO had 4.9% of the Market 6 membership. The HMO product was available in every county.

Hospital Networks by Carrier

Table 2 shows the number and types of hospitals that were included, or in-network, for each of the carrier's networks. There were 19 hospitals identified for Market 6; several of the were located outside of the rating area, but patients still traveled to them for care. Three carriers offered one network, while two carriers offered two networks.

Table 2 - Hospital Networks by Carrier

Market 6 - South U.S. - Rural Area

Market Hospitals and Carrier Network Hospital Participation - Counts and Medicare Admissions

				Carrier						
				2	3		5	6		8
				Network						
Hospital	System	Type_Hosp	% of Market Admissions	B	C	D	L	G	M	J
Hospital 40	Independent	Educational	31.7%			X		X	X	X
Hospital 41	System V	Hospital	23.5%	X	X	X	X	X		
Hospital 42	System V	Hospital	18.1%	X	X	X	X	X		
Hospital 43	National Chain	Hospital	12.2%		X	X		X		
Hospital 44	Independent	Specialty	1.4%		X	X	X			
Hospital 45	National Chain	Specialty	0.9%				X			
Hospital 46	National Chain	Hospital	0.5%		X	X				
Hospital 47	Independent	Educational	0.5%		X	X				
Hospital 48	Independent	Hospital	1.4%		X	X		X		X
Hospital 49	National Chain	High Profile Specialty	0.5%							
Hospital 50	Independent	Hospital	2.3%		X	X	X	X		
Hospital 51	Independent	Hospital	1.4%		X	X	X	X		
Hospital 52	Independent	Hospital	1.4%		X	X	X	X		
Hospital 4	System W	Educational	0.5%	X		X				X
Hospital 53	Independent	Hospital	1.4%		X	X		X		
Hospital 54	Independent	Hospital	0.5%		X	X		X		X
Hospital 55	Independent	Hospital	1.4%		X	X	X	X		X
Hospital 56	Independent	Educational	0.5%			X	X	X		X
Hospital 57	Independent	Hospital	0.5%		X	X	X	X		X
Total			100.0%							
		Count of Hospitals in the Network:		*3*	*14*	*17*	*10*	*13*	*1*	*7*
		% of Market Admissions in the Network:		*42%*	*66%*	*99%*	*51%*	*96%*	*32%*	*36%*
		Product Type:		*HMO*	*HMO*	*HMO*	*HMO*	*POS*	*HMO*	*HMO*
		Network Size:		*Narrow*	*Narrow*	*Broad*	*Narrow*	*Broad*	*Local*	*Narrow*
		Carrier Type:		*Medicaid*	*Regional*		*National*	*National*		*National*

With respect to the hospital competition, the largest independent hospital and the largest hospital system (the

owner of the second and third largest hospitals) participated on the broad networks in the market. They also aligned with competing narrow networks that excluded each other:

- Hospital 40, an independent, educational hospital participated on two broad networks and the narrow networks offered by National 3 and National 4.
- Hospitals 41 and 42, both part of System 5, participated with the broad networks. They also participated on the narrow networks of the Medicaid, regional and National 2 carriers.
- Hospital 43, the fourth largest hospital that is part of a national hospital chain. They participated in only three networks.
- 28% of the members selected the National 2 carrier's narrow network. Hospitals 41 and 42 participated on the National 2 narrow network that excluded Hospitals 40 and 43. Thus, volume shifted to hospitals 41 and 42. The Medicaid carrier, the regional carrier and the National 4 carrier had low membership, so Hospitals 40 and 43 did not benefit much from this alignment.

Like Case Study 5, Carrier 6 (National 3) gained roughly half of the members (45% for Market 5 and 53% for Market 6) with their broad POS product, despite having the highest premium. However, their premiums were only slightly higher than all the other competitors.

The Carrier 5 (National 2) narrow network HMO had a net contribution that was $607 lower ($50 a month) than the National 3 POS product's net member contribution. National 2's HMO did gain 28% of the Market 6 membership despite being in only seven of 11 counties.

The Medicaid carrier's premium was much lower than any other competitor, but they had less than 1% of the members. 2016 was the first year that the Medicaid carrier participated on the Exchange in Market 6; member reactions may change in future years.

Carrier Characteristics, Plans Offered and Member Plan Selections

Tables 3 and 4 summarize the distribution of membership by metal tier selected by the Individual Exchange members.

Table 3 - Carrier/Network Marketshare Percentage

Market 6 - South U.S. - Rural Area

Carriers offering coverage - market share by benefit plan metal type

				Approx. Historical Market Share %'s by Carrier and Metal Type					
Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 2	Network B	HMO	Medicaid Carrier	0.1%	0.6%	0.1%	0.0%	0.0%	0.7%
Carrier 3	Network C	HMO	Regional	0.7%	4.4%	0.0%	0.0%	0.1%	5.2%
Carrier 3	Network D	HMO	Regional	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%
Carrier 5	Network L	HMO	National	4.1%	21.7%	2.0%	0.0%	0.6%	28.5%
Carrier 6	Network G	POS	National	6.9%	41.3%	4.0%	0.0%	1.1%	53.2%
Carrier 6	Network M	HMO	National	1.1%	5.4%	0.5%	0.0%	0.2%	7.2%
Carrier 8	Network J	HMO	National	0.6%	3.9%	0.3%	0.0%	0.1%	4.9%
Total				13.5%	77.5%	6.9%	0.0%	2.0%	100.0%

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org

Table 4 - Carrier/Network Membership and Product Counts

Market 6 - South U.S. - Rural Area

Carriers offering coverage - market share by benefit plan metal type

Estimated Historical Market Share - Member Counts

Members - Total Rounded to nearest 100

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total*
Carrier 2	Network B	HMO	Medicaid Carrier	38	193	19	-	-	250
Carrier 3	Network C	HMO	Regional	252	1,513	-	-	36	1,801
Carrier 3	Network D	HMO	Regional	-	92	8	-	-	100
Carrier 5	Network L	HMO	National	1,429	7,556	696	-	219	9,900
Carrier 6	Network G	POS	National	2,393	14,365	1,376	-	366	18,500
Carrier 6	Network M	HMO	National	375	1,879	186	-	60	2,500
Carrier 8	Network J	HMO	National	213	1,338	118	-	30	1,699
Total				4,700	26,936	2,403	-	711	34,750

Number of Plans Offered by Metal Type

Carrier	Network	Type Plan	Type Carrier	Bronze	Silver	Gold	Platinum	Catastrophic	Total**
Carrier 2	Network B	HMO	Medicaid Carrier	6	9	1	0	0	16
Carrier 3	Network C	HMO	Regional	5	5	0	0	1	11
Carrier 3	Network D	HMO	Regional	0	1	1	0	0	2
Carrier 5	Network L	HMO	National	2	2	1	0	1	6
Carrier 6	Network G	POS	National	1	1	1	0	1	4
Carrier 6	Network M	HMO	National	1	1	1	0	1	4
Carrier 8	Network J	HMO	National	3	3	2	0	1	9
Total				18	22	7	0	5	52

*Estimated from multiple sources, news articles, reports and websites, such as healthinsurance.org

**From data including rates filed and available from HHS Public Use Files

Conclusions

Members in Market 6 could choose from multiple carriers and networks, even though it is a small market. This would not be practical in some areas, but it was done in Market 6 since the same carriers operate in a much larger nearby area.

Market 6 had little difference in premiums between most of the products. So, the broad POS product with slightly higher premium ended up with half the market. One of the two narrow networks with a much lower price did pick up 28% of the market share. This is different from Market 5 where two narrow network products each got around 15% of the members.

Interestingly, in both markets in this Southern state, slightly more members selected broad networks than narrow networks. Several factors probably contributed to this:

- Most premiums are similar.
- The Medicaid insurer was new, and their low-premium product may not have been as visible.
- It is also partly a result of the limited geographic coverage for many products. Although we do not have county level enrollment data, it appears likely that the narrow networks with distinctly lower premiums had a much better presence in some counties than in other counties.

Other Supporting Data: Case Study 6

ACA Covered Population Characteristics

Estimated Covered Population by Gender, Age, Metal Tier and Federal Poverty Level (FPL%)

Table 5 - Member Mix by Gender and Metal Type

Distribution by Gender and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Female	53.1%	57.3%	51.5%	51.5%	56.0%	56.0%
Male	46.9%	42.7%	48.5%	48.5%	44.0%	44.0%

- More females participated on the Individual Exchange.
- The highest female-to-male proportion was in the Silver plan, which occurred in several case studies.

Table 6 - Member Mix by Age and Metal Type

Distribution by Age and Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Avg.
Age < 18	7.8%	7.8%	7.8%	0.0%	13.6%	7.9%
Age 18-25	12.2%	12.2%	12.2%	0.0%	21.4%	12.4%
Age 26-34	19.4%	19.4%	19.4%	0.0%	34.2%	19.7%
Age 35-44	17.5%	17.5%	17.5%	0.0%	30.8%	17.8%
Age 45-54	20.9%	20.9%	20.9%	0.0%	0.0%	20.5%
Age 55-64	21.8%	21.8%	21.8%	0.0%	0.0%	21.3%
Age ≥ 65	0.4%	0.4%	0.4%	0.0%	0.0%	0.4%
Total	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%

- 43% of the members on the Individual Exchange were over the age of 45. This much higher than in Market 5.
- 40% of the members were below the age of 35.

Table 7 - Member Mix by Metal Type within FPL Range

Metal Split by FPL	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total Metal
FPL	13.5%	77.5%	6.9%	0.0%	2.0%	100.0%
100-200%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
200 - 250%	53.0%	28.9%	18.1%	0.0%	0.0%	100.0%
250%-400	41.8%	28.9%	29.2%	0.0%	0.0%	100.0%
400% +	30.0%	18.8%	16.1%	0.0%	35.1%	100.0%

- Over 77 % of the members on the Individual Exchange selected the Silver plan, and we estimated that the lowest income bracket was almost exclusively on the Silver plan.
- In the higher income brackets, Bronze plans were selected the most, with Gold being selected almost as much as Silver.
- In the highest income bracket, the Catastrophic plans were selected the most.

Table 8 - Member Mix by FPL Range within Metal Type

FPL Split by Metal	Metal					
	Bronze	Silver	Gold	Platinum	Catastrophic	Total FPL
FPL	99.8%	99.6%	104.6%	0.0%	100.5%	100.0%
100-200%	0.0%	88.7%	0.0%	0.0%	0.0%	68.8%
200 - 250%	39.5%	3.8%	26.3%	0.0%	0.0%	10.1%
250%-400	47.3%	5.7%	64.7%	0.0%	0.0%	15.3%
400% +	13.0%	1.4%	13.6%	0.0%	100.5%	5.9%

- Per the previous exhibits, the Silver plan enrollment is dominated by the lowest income bracket.
- Close to 6% of the members had income above 400% of the federal poverty level, while 68% of the members had income between 100% to 200% of the federal poverty level.

Table 9 - Member Mix by FPL Range and Metal Type

Distribution by Metal and FPL	Metal					Total FPL & Metal
	Bronze	Silver	Gold	Platinum	Catastrophic	
FPL	13.5%	77.5%	6.9%	0.0%	2.0%	100.0%
100-200%	0.0%	68.8%	0.0%	0.0%	0.0%	68.8%
200 - 250%	5.3%	2.9%	1.8%	0.0%	0.0%	10.1%
250%-400	6.4%	4.4%	4.5%	0.0%	0.0%	15.3%
400% +	1.8%	1.1%	0.9%	0.0%	2.1%	5.9%

- Catastrophic membership was only 2% of the total, and Platinum plans were not offered.
- Silver and Bronze combined made up 91% of the membership selections.

Carrier Service Area by County

Table 10 - Carrier/Network Service Area Size

Market 6 - South U.S. - Rural Area *Carrier Coverage/Service Area - By County within the Rating Area*							
	Carrier 2 Network B	Carrier 3 Network C	Carrier 3 Network D	Carrier 5 Network L	Carrier 6 Network G	Carrier 6 Network M	Carrier 8 Network J
County	HMO	HMO	HMO	HMO	POS	HMO	HMO
County 1	0	1	1	1	1	0	1
County 2	0	1	1	1	1	0	1
County 3	0	1	1	0	1	0	1
County 4	0	1	1	0	1	0	1
County 5	1	1	1	1	1	1	1
County 6	0	1	1	1	1	0	1
County 7	0	1	1	1	1	0	1
County 8	0	1	1	1	1	0	1
County 9	0	1	1	1	1	0	1
County 10	0	1	1	0	1	0	1
County 11	0	1	1	0	1	0	1
Total	1	11	11	7	11	1	11
Service Area Size	Local	Large	Large	Medium	Large	Local	Large

- More than half of the networks covered every county, but two of the network were only in one county, which was the most populated county and the location of the biggest city in Market 6.
- Every carrier offered an HMO product, and one of them also offered a POS product.

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