Introduction

Policymakers at both the federal and state levels are looking to address growth in health care spending, and one major factor involves how care is delivered and the incentives built in to support the delivery of high-quality and efficient care. One potential solution is the expansion of high-performance networks (HPNs), which generally focus on delivering high-quality care that also is efficient care. These networks generally result in lower total costs for health programs.

HPNs are not just narrower networks. HPNs work differently from typical networks by:
• *Taking a wide variety of actions.* Starting with the basics of improved member health and reduced unnecessary hospital admissions and readmissions, HPNs also devote additional time to actions that target specific medical conditions and reduce waste throughout their health system.
• *Using a variety of expertise throughout the system.* The unique strengths of hospitals, each type of physician, and insurers are maximized in a collaborative approach.
• *Developing infrastructure and economies of scale to support their providers and staff.* For example, analytics may be performed centrally, rather than some performed by the provider and some performed by the insurer. In addition, HPN infrastructures can provide support and education that is practical and useful to the providers at the right point in time.
• *Linking the provider’s reimbursement to the network’s financial results.* Provider contracts include downside risk, not just upside risk, or strong performance guarantees. For individual providers, payments are being selectively moved from fee-for-service payment over time to other forms that incent appropriate care and utilization.1

1 See *Lessons from Higher Performing Networks* for a more detailed list of key elements among high-performing networks.
The High-Performance Network Work Group of the American Academy of Actuaries Health Care Delivery Committee developed this white paper to provide an examination of the development and measurement of high-performance networks and organizations, integrated financial arrangements, reimbursement methods, benefit designs, and stakeholder collaboration for financially successful performance networks and health programs designed around them.

**Background**

Providers can be organized in many different ways. In some cases, providers may be independent or loosely connected by function or specialty. This can potentially result in fragmented care with no single entity managing a system or tracking and monitoring a patient through the continuum of care. Traditionally, services have been provided when someone gets sick, rather than proactively providing services to maintain health. A fragmented health system may not provide enough support or information to improve system performance and personal health.

HPNs are not common in all states. While many health programs offer benefit plans that are tied to alternative or narrow provider networks that offer lower premium rates, these lower-cost networks do not necessarily mean high performance. For example, an alternative network could be designed based on an insurer receiving better contracts from the providers offered in its narrow network product. Low premiums for health programs, therefore, do not necessarily mean the care is delivered in a high-quality, efficient manner.

However, programs that engage providers and align financial incentives can perform significantly better than a more typical health system. There are generally four paths to building these networks and giving them support.

- The insurer or third-party administrator (TPA) path typically starts with data on claims and measurable quality, identifying physicians and/or hospitals whose data reflects high performance. After additional analysis, such as reviewing the partner relationships, strategic importance, etc., these providers are offered as an alternative network to the insurer’s or TPA’s members through products using the alternative network.
- Physician-based programs generally identify physicians through a voluntary approach. Clear financial and quality goals are presented to physicians in the community; physicians then choose whether to join these programs.
- A subset of hospital systems that aim for high performance often start with a leadership group committed to improving quality and reducing waste in their system. Over time, the expertise they gain often leads these hospitals to create Accountable Care Organizations (ACOs) and even hospital-owned insurance companies to offer their own products to the market.
- Illness-based initiatives are essential to improving the system because this is how providers work. These types of initiatives may be a stand-alone community response to a local challenge or be part of the initiatives used by larger organizations. These programs are becoming more widespread, including major state-wide programs.

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2 In this paper, the term “provider” generally refers to any kind of health care provider (e.g., hospitals and physicians).

3 The term “programs” in this document typically refers to health insurance packages or programs that may be offered by health insurance companies, third-party administrators, or provider organizations.

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*The Academy also thanks Greger Vigen for his contributions.*
Some of these high-performance or alternative networks and programs have been available for years within programs like Medicare Advantage or health maintenance organization (HMO) products. Some are new, including initiatives such as ACOs, patient-centered medical homes (PCMH), bundled payments, and changes in primary care payment.

Choosing the right providers is essential. Many providers will improve performance with the right support and financial agreements.

**Building the Network**

Basic network development considerations include developing the network, matching the network to the population to be served, defining elements of success, determining providers to include in the network, identifying incentives to change delivery of care practices, and providing infrastructure support.

**Developing the network and associated programs**

High-performing network developers include insurers, TPAs, and provider organizations.

An insurer that develops a performance network may do so using incentive arrangements and a number of underlying value-based programs. One insurer may use PCMHs; another may build a more extensive network that is still focused around primary care. Insurers may also design them around the performance of individual providers (physicians or hospitals) using analytical techniques to identify higher-quality, cost-effective providers. The providers may participate through separate contracts or incentive arrangements. Some insurers also identify existing high-performing providers or networks and base an HPN around these providers.

Provider-based networks typically start with the entire provider organization. Specific providers may be given a choice about participation in the new program. Providers are measured on performance and chosen based on personal experience, professional standards, and organization-based metrics. Insurers using the provider-based network then contract with the network as part of a performance product. ACOs are examples of provider-based performance networks.

Being developed by the providers does not, by itself, define the network as high performance. Neither does development by an insurer. That is just the beginning. Being defined as high performance requires numerous other requirements to be in place.

Initially, developers of performance networks focused only on contracting with lower-cost providers based on how much the provider charged (the unit costs for each service). The industry now uses much more sophisticated approaches using quality and efficiency measures to help identify HPNs.

These more sophisticated network developers have identified lower-performing, higher-cost providers or provider groups and narrowed the breadth of their networks by excluding these providers from their networks. They then market such networks at a lower relative price as a separately offered product. These networks have evolved from more open access larger preferred provider organization (PPO) type models to multi-tiered or exclusive provider networks and often promote value-based benefit designs integral with their contracted networks. More information on value-based benefit designs is included in Appendix 1—Considerations When Purchasing HPN-Based Health Insurance.

**Matching the Network to the Populations Served**

Identifying the characteristics of the population a HPN serves helps define the breadth and depth of needed provider types and specialties. Overall these programs can include a wide range

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4 American Academy of Actuaries issue brief; "New Models of Care Delivery"; April 2014.
5 American Academy of Actuaries issue brief; "An Actuarial Perspective on Accountable Care Organizations"; December 2012.
of providers: primary care along with a broad array of general surgical and medical specialties; primary and secondary hospitals to tertiary facilities; and outpatient surgical centers, imaging centers, lab services, behavioral health, and general pharmacy chains.

These are then matched to the populations served.

- Commercial populations may focus on primary care providers and certain hospitals.
- For some Medicaid populations, a greater emphasis is placed on pediatric services for the larger child populations commonly served and on services focused on disabled beneficiaries, including rehabilitative services, community-based long-term care, and home care.
- For Medicare, an emphasis on senior services is needed, including skilled nursing facilities, nursing homes, home care, and community-based medical support services.

Additional statutory requirements for access to certain provider types and/or specialties may also apply to provider networks in states where minimum requirements for access to health care have been adopted. Such requirements may address access based on geographic proximity, providers with practices open to new patients, and minimum per capita availability.

**Defining Elements of Success**

To maintain operations, HPNs define and adopt measures of success and implement initiatives to achieve their financial and other business goals. Insurer-, HMO-, and TPA-developed networks may define their success measures around sustained enrollment growth, market price position, and financial performance within their insurance markets. High-performing provider-developed networks may focus on best practice clinical processes along with patient outcomes and satisfaction, as well as financial and other business goals.

Success of HPNs should benefit all the key participating stakeholders—patients, network providers, and insurers/plan sponsors—by decreasing cost and increasing quality of care. Some specific success measures of higher-performing networks include:

- High proportions of engaged members who follow network-sponsored health improvement and disease prevention programs and who provide patient satisfaction results.
- High-quality medical care based on currently accepted evidence-based medicine, including early detection and patient support.
- Successful clinical outcomes that meet or exceed published clinical experience.
- Appropriate use of health care services (prevention, care coordination, prescription drug compliance, disease management, low emergency room visits, appropriate hospital admissions).
- Competitive costs, value-based provider payment arrangements, and other reimbursement methods: shared financial risk, Diagnostic Related Groups, bundled payments, capitation, chronic disease maintenance, fee-for-service (FFS).
- Patient understanding of expected out-of-pocket costs: clear advanced/timely communication of health plan benefits well-coordinated between plan administrators and network providers at the point of care.

In addition, a key component for success of an HPN is collaboration between the providers and the insurer when developing the network, incentives, and other parts of the program.

**Providing Incentives**

HPNs engage key stakeholders with incentives to support sustained desired processes and continuous performance improvement. Incentives in HPNs vary by type of stakeholder, but all demonstrate a significant degree of alignment among the various stakeholders’ needs to sustain and improve desired performance.
Some attributes of key incentives include the following:
- each stakeholder is at risk for what it can control;
- incentives are specific to each stakeholder’s role and aligned with success of the whole;
- providers are financially protected from unmanageable disruption/catastrophic events; and
- network funding (performance payments or budgets) is sufficient to provide reasonable compensation from stakeholder perspectives.

Infrastructure Support
To support, achieve, and maintain successful performance, HPNs employ stakeholder agreements to develop key organizational structures and resources to be jointly shared or maintained separately by each participating entity. Some key infrastructure elements of HPNs include the following:
- governance and operational leadership are clearly defined;
- business plans, operating budgets, performance targets, and periodic reporting are developed, monitored, and maintained;
- dedicated personnel/vendors/expertise are hallmarked by effective training, personnel performance incentives, and employee retention practices;
- timely and actionable information is available to the people who make decisions; and
- sources of capital to fund operational initiatives are sufficient.

Measuring High Performance
The Centers for Medicare & Medicaid Services (CMS) has defined a three-part goal, including better care, smarter spending, and healthier people.\(^6\)

These three dimensions also drive the metrics that are used by provider organizations and insurers to measure performance. A fourth addition under CMS consideration is workforce health. This element is about the link between health care workers who are well-trained and empowered with healthy incentives and motivation, and positive patient experience and clinical outcomes.

An HPN is meant to be able to deliver better quality, lower cost, or both. Measurement is made for all three goals noted above, not just quality or reducing the per capita cost.

The following four questions should be considered when determining measures for high performance:

**What should the measure accomplish?**
Performance metrics should be comprehensive and each measure should have a specific purpose. Measures also should be meaningful for the entire covered population, e.g., pediatric, prenatal/maternity, and geriatric. For example, prenatal measures may not be meaningful for a Medicare population, and likewise colonoscopy rates may not be meaningful for a Medicaid population comprised primarily of younger families and children. Choosing an appropriate set of measures requires a balance between the effect the measure has on quality and cost of care and the administrative complexities of actually performing the calculation of the measure.

**How will it be measured?**
HPNs work closely with providers being measured to choose which standards to use and develop agreed-upon measures that drive to the specific goals of the program.

For example, several measures can be used to measure the management of diabetes. In fact, the National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS)\(^7\) tool has dozens of measures for diabetes care. Practical decisions are made to choose some measures, rather than all, to represent the outcomes that are most important for the program.

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\(^7\) National Committee for Quality Assurance; "Healthcare Effectiveness Data and Information Set & Performance Measurement”, 2018.
Efficiency measures typically are financial measures and may take the form of loss ratios, per member per month (PMPM) costs, costs per episode of care, or dollar values. Consideration should be made as to whether risk adjusting the measures are necessary for appropriate comparisons.

What is the target value for each measure?
The target value is the value placed on the measure that will determine success. For example, what percentage rate of childhood immunization is considered high quality for the given population? Targets can be set from benchmark averages, at high percentiles of national standards, from sources such as other HPNs, NCQA results, or Medicare Star targets. Targets also can be set as period-over-period improvement, for example, 5 percent reduction in emergency room visits over the prior year. Targets also can be set based on financial measures representing savings due to lower-than-expected costs.

How will success be rewarded?
Linked to the measures is the issue of how measurement against the target will be turned into a reward (or penalty) for the network or provider. When there are many measures, they should be weighted in a way to encourage priority of the most important ones.

Performance often is set up as a pass/fail, where the measure is achieved if some core threshold is met. Above this threshold providers can be scored on a sliding scale, in which a provider will receive a portion of a reward depending on its score. Finally, a ranking method can be used in which all providers are ranked on a given measure and the top performers receive a higher reward. Scoring models can become very complicated, and simpler models often are preferred because they are easier to understand and are less likely to be perceived as gamed.

Comparing Measures of Quality and Efficiency
HPNs may include incentives for network providers based partially on measures of patient satisfaction, clinical quality, clinical outcomes, and cost of care. Such measures may or may not exclude unusual situations, such as high-cost and complicated patients. Provider-specific results may be reported within a specialty by provider type at an aggregated level. Specific patients are not identifiable in summary performance reports but are available to each individual provider. A minimum number of patient encounters often are required to reflect a certain level of credibility for reporting performance and for payment of incentives. Some areas of focus including use of the previously noted categories of measurement may be reported subject to the following criteria:

- measures grouped by medical specialty/disease category;
- provider types/groups: performance accountabilities vary by facilities, clinics, physicians, other health care professionals;
- report on uncomplicated patients (financial incentives triggered by measured compliance and successful specialty and total cost outcomes); and

<table>
<thead>
<tr>
<th>What should the measure accomplish?</th>
<th>How will it be measured?</th>
<th>What is the target value?</th>
<th>How will success be rewarded?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care: High rates of well child visits</td>
<td>HEDIS W34: Visits for children age 3 to 6, divided by number of attributed children age 3 to 6</td>
<td>69.9%, based on NCQA PPO results</td>
<td>Pass/fail: credit given if the target is exceeded</td>
</tr>
<tr>
<td>Hospital or Surgeon: Reduction in readmissions</td>
<td>Readmission rate vs. predictive model for appropriate readmissions</td>
<td>Rate below the predictive value</td>
<td>Credit given on a sliding scale based on how far the rate falls below the predictive value</td>
</tr>
</tbody>
</table>

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8 Medicare.gov; "Star Ratings."
• complicated patients (patients with multiple conditions or issues) aggregated across a provider type or specialty (to compare provider’s treatment of patients with complications against other providers who treat patients with complications).

The table on page 6 provides examples of measures that an HPN might use, framed in the context of the four questions posed above.

**Additional Measurement Considerations**

An important consideration in quality measurement is the data available to the measuring organization. CMS often releases Medicare and Medicaid data, but insurer data may not be available. If the organization is a newly forming commercial network with limited or no data, it may need to start with a smaller list of measures that only require a limited amount of data.

Other considerations include:

• Ways in which a given population will be attributed to the network or specific providers.

• Whether a network understands its total cost of care. While provider systems generally have data for utilization within the system, they often do not have the full utilization experience of the attributed population and must rely on CMS or the contracting health plan for these data.

• Tailoring of measures to several variables that will be unique to that network. The population covered may be known but the measure and the target will be different for Medicare, Medicaid, commercial, or other populations. In addition, the network’s provider mix also may drive the selected measures because different measures have value for different providers.

• Measures must keep up with clinical practice.

• Targets for measures may need to vary for different populations—vulnerable populations generally result in worse scores, but providers serving these vulnerable populations may be necessary for care continuity.

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**Financial and Incentive Considerations**

There are numerous financial agreements included in an HPN arrangement. There is the arrangement between the purchaser of health insurance (individual or employer group) and the insurer or TPA through the purchase of a health benefit coverage product that includes an HPN. In some cases the purchaser, usually an employer group, buys directly from the provider organization. Appendix 1 includes a discussion of considerations for purchasers when looking at HPN options.

Other agreements (more details are included in Appendix 3) include those between:

• insurers and HPN provider organizations;

• insurers and separate providers identified as high-performing providers, in cases where the insurer designs its own high-performance network;

• HPN provider organizations and their member providers; and

• medical services organization and insurers.

Key components of financial agreements between an insurer/purchaser (usually an employer group) and a high-performing provider organization are risk sharing and incentive payments related to the financial results of a health program or products to incent the efforts made by the provider organization. In an insured arrangement, if the provider organization creates high-quality efficient care that has resulted in claims costs being less than expected in the pricing of the product, without a shared savings arrangement, the carrier would retain the savings, which could help to decrease the premiums in future periods. However, as claims costs decrease to a more highly efficient level, providers who receive fee-for-service payment only see declining revenue.

Most HPNs include incentives to support the efforts of the provider organization to continue to change behavior and create quality, efficient, effective care. Shared savings incentive arrangements (e.g., those which share a portion of the savings with providers) tied to quality
improvement efforts provide an opportunity to decrease costs (and future premiums) while maintaining the incentive payments in the calculation of the product pricing. The Affordable Care Act’s (ACA) defined medical loss ratio (MLR), used for determining rebates to purchasers of insured health care products, includes quality improvement costs in its calculation.

Reimbursement Methods and Incentive Arrangements
Reimbursement methods and incentive arrangements are key components of high-performance networks.

Traditional fee-for-service (FFS) reimbursement methods may create problems related to higher cost of health care due to overutilization. If there are few or no controls in place, the fact that payment is related to how many services are performed may influence providers’ behavior. In the context of HPNs, FFS reimbursement may create business challenges for providers due to provider revenue declining as they work to create more efficient care.

Different payment approaches reward quality and efficiency (use of resources) by their design. Additional quality payments may be used based on formal quality metrics that are targeted to specific illnesses or provider type or measured across the entire membership population. Including incentive payments based on quality metrics may help mitigate the risk of withdrawing necessary care, which is often a concern when designing cost-based incentives. Many reimbursement and incentive approaches are designed based on value-based payments. Some of these are listed in Appendix 4.

Funding of incentive programs may come from the savings generated when actual results are better than target in shared savings programs. In some instances, funding comes directly from the organization wanting to meet certain goals, without the prior requirement of cost savings. If outcomes result in better patient satisfaction and health, generally there is the expectation that health care costs also will decrease.

Consumer/Patient Satisfaction
An important element in optimizing a health system is improving the experience of the individual (both satisfaction and quality). High-performance networks work to improve the patient experience in health care. Patient perceptions of service can be measured by sampling techniques or by more thorough methods using technology in an attempt to reach all patients. National survey tools can also be used. Communicating the results from such patient surveys, HPNs encourage network providers to improve patient services, often supported by payment incentives.

Patient perceptions of treatment value also can be measured by sampling techniques or by more thorough methods. Surveys related to medical care and patient perceptions of care or treatment value may be timed at specific intervals following medical or surgical treatment to understand how patients perceive treatment during recovery or rehabilitation, for example. Communicating the results from such patient surveys, high-performance networks encourage network providers to improve patient outcomes and/or better inform patient expectations, often supported by payment incentives.

Professional Assessment of Clinical Quality
HPNs often use various educational methods and tracking and reporting efforts to improve performance of providers. This can be as informal as classes or weekly meetings to review treatments or as extensive as independent professional medical review such as patient chart reviews, comparisons with current evidence-based medical protocols, and exchanges of professional experience among colleagues. Results usually are used internally due to privacy and professional issues arising from such reviews. Some networks support these improvement efforts through incentives.
The insurer also may play a role in sharing rolled-up results of measures used to determine quality and efficiency, possibly blinded at first, and then, as provider groups become accustomed to being measured, un-blinded, which can result in sharing of practices on how to increase results of measurement.

**Summary**

The complex and challenging effort to become an HPN includes the work of continuous improvement. Constituents from all parts of an HPN health program must work together. Insurers, providers, employer groups, and members must be engaged and focused on the same goals of providing the right care at the right place at the right time at the right price and risk.

We have provided a few examples of different types of networks in some of the appendices attached. These are meant to be illustrative of different models only and are not included here as an endorsement.

An example of a performance network design for the primary care portion of a network is provided in Appendix 5, which describes Vera Whole Health. This example illustrates a PCMH network located at an employer group site. Incentives are included for members to engage, as well as for the providers in the network. Infrastructure also is provided to share information and clinical protocols.

The initial network selection of engaged providers offers a solid foundation and often shows short-term gains. To reach higher performance, however, ongoing improvement across the system is essential. Ongoing improvement requires:

- Analysis;
- Clear initiatives that are prioritized;
- Information and support; and
- On a targeted basis, alternative payment structures.

A case study of an evolving potential HPN is included in Appendix 6, which describes how a network began as a narrow network, some of the problems it experienced, and some solutions between the insurer and the network.

An example of an insurer-built potential HPN, Blue Cross Blue Shield of Michigan’s Value Partnership program, is included as Appendix 7.

Other details about HPNs can be found in the appendices:

- Appendix 1—Considerations When Purchasing HPN-Based Health Insurance
- Appendix 2—Measures of Quality and Efficiency
- Appendix 3—Financial Agreements
- Appendix 4—Example Reimbursement and Incentive Arrangements Based on Value-Based Payments
- Appendix 5—Vera Whole Health
- Appendix 6—Case Study of the Evolution of a Potential High-Performance Network
- Appendix 7—Value Partnerships, Blue Cross Blue Shield of Michigan

Actuaries are key in supporting both the development and the ongoing work of HPNs. They are trained to understand risk and project expected costs and changes in expected costs due to quality and efficiency programs. They are often involved in:

- provider contracting;
- reimbursement analysis and design;
- incentive designs;
- measurement design and monitoring;
- network development based on measurements chosen;
- reporting on results; and
- maximizing revenue potential.
Appendix 1

Considerations When Purchasing HPN-Based Health Insurance

**Benefit Design**

HPNs can be utilized in combination with several different product types. Insurers may include differing member cost sharing to incentivize members to use the higher-performance networks. The underlying benefit designs differ by product type.

**HMO**

An HPN HMO may operate by requiring members to select and visit a primary care physician (PCP) to receive a referral for all other services. In addition, members can only visit physicians and facilities that fall within the high-performance network, except in emergency situations, in order to have the service covered by insurance.

**PPO**

A PPO with an HPN is designed similarly to other PPOs. It may be comprised of two tiers. Providers and facilities in the HPN comprise the first tier, which has limited member cost sharing. The member cost sharing for using a provider outside of the HPN is greater than using HPN providers—sometimes two to three times greater, but the member is not financially responsible for the full cost of all out-of-network services.

**EPO**

An exclusive provider organization (EPO) with an HPN is similar to a PPO except that it only employs one tier. Providers and facilities in the HPN are covered by the insurer with limited member cost sharing. If a member uses a provider or facility outside of the network, they must pay the full cost of the service. One difference between an EPO and an HMO may be that an EPO does not require a PCP referral.

**POS Plans**

Point of sale (POS) plans split providers into three tiers. The first tier is the high-performance tier and has the lowest member cost share. The second tier is comprised of providers and facilities that have contracts with the insurer but do not qualify either on quality or cost to be included in the HPN. The member cost sharing for the second tier is greater than that of the first tier to incentivize members to use the HPN. The third tier includes out-of-network providers and facilities. Services in this tier have the highest member cost share, incentivizing members not to use them.

**Innovative Plan Designs**

HPNs also are central to other innovative product types. ACOs utilize an HPN in combination with provider risk sharing to provide low-cost, high-quality patient-centric care. Benefit designs of these products vary. Some allow members to opt into the ACO network or continue to get care outside of the ACO without any financial repercussions. This is the Medicare ACO pilot approach. Others may financially reward ACO users with lower member cost sharing.
Design at the specific benefit level also can be used to encourage quality, efficient care. Value-based benefit designs, for example, that encourage appropriate chronic care prescription drug treatments can help to decrease acute care episodes. For example, decreasing the cost share for chronic obstructive pulmonary disease\(^9\) drugs when an insured patient picks up the prescription monthly without missing a month can help decrease inpatient episodes. So the benefit design also can help incent patients to practice good health care to increase quality and efficiency.

**Attractiveness to Buyer Decision-Makers**

Many health programs today offer benefit plans that are tied to limited provider networks that offer lower premium rates. In the case of benefits tied to HPNs the lower premiums may be a result of some price concessions on the part of providers in exchange for volume but also because providers in these networks often will have incentives to deliver high-quality care in an efficient manner. While lower price (premiums in the case of fully insured products or claims cost in the case of self-funded products) is one of the decision points, additional considerations may play a role.

When an employer group is considering products to purchase, one consideration may be how the new product compares to benefits that are already offered to employees:

- Can it replace the current insurance plan or supplement it?
- Can benefits be customized?
- Is the network comprehensive enough?
- What kind of access will be available to members?
- Will quality of care help with retention of employees?

From a financial point of view, if the employer is large enough, some performance guarantees related to the HPN may be attractive, such as trend or savings guarantees.

On an individual customer level, depending on the marketing approach, products based on HPNs may be attractive because of price (good quality for lower price) or price and selection of providers (if customer’s doctor is in the network), as well as ease of access (how long will she/he need to wait for appointment, are extended hours available, etc.).

While it is believed that price is most important factor at the individual customer level, depending on the competitive environment and demographic characteristics of the customers, other considerations may play as significant a role.

A product that includes shared savings incentive arrangements with providers also may be attractive to the purchaser. If the incentives are tied to quality improvement efforts, there is an opportunity to decrease claims, which supports not only a lower premium but also potentially lower member cost shares while increasing quality.

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\(^9\) Mayo Clinic; “Chronic obstructive pulmonary disease”; 2018.
Access Issues
The ACA changed the way health insurance plans for commercial individual and small group insurance are sold. Prior to the establishment of the exchange marketplace created by the ACA, there was not a single place for consumers to price compare insurers and products in these two markets. “eHealth”\textsuperscript{10} was available but not all insurers were included. Even if consumers did research, it was not easy to compare the value of the products they were comparing on price. Post-ACA, insurers are required to design products that meet specific actuarial values and are categorized into metal levels. Plans with similar actuarial values from all insurers in a market are now placed side-by-side with a premium rate prominently attached. With a more informed consumer base, insurers began to more heavily compete on premiums. As noted earlier, a way that insurers have chosen to reduce premiums is to narrow the network.

To protect consumers from excessively narrow networks in both the ACA and the Medicare Advantage markets, regulatory bodies established network adequacy requirements. For commercial plans sold on the exchanges, the ACA requires that networks be “sufficient in number and types of providers … to assure that all services will be accessible without unreasonable delay”\textsuperscript{11} and that provider directories be available for potential members. Since then, stricter network adequacy requirements have been imposed on insurers. The CMS also enforces network adequacy requirements in Medicare Advantage plans. For example, many of the requirements include distance or time standards by specialty and provider to covered person ratios for highly utilized specialties.

The purchaser of a health insurance product should be aware of access issues when considering a plan with a narrow network or HPN.

Appendix 2
Measures of Quality and Efficiency
Types of Measures
Measures can be defined in different ways, such as ones that measure:

- structure (e.g., measures related to health IT)
- process (e.g., preventive care)
- outcome (e.g., mortality, lab results)
- care experience (e.g., patient experience surveys)
- cost and resource use (e.g., cost of care, readmissions, emergency room visits)
- Medicare Advantage Star program generally follows the structure above
- Preventive care (e.g., HEDIS)
- Specialty care (e.g., a generic prescribing rate is somewhat easy to implement, but need targets that vary by specialty, which is difficult because there are so many specialties)
- Decreasing utilization (e.g., ER visits, readmissions, average length of stay)
- Financial (e.g., total cost of care, or episodic (bundled) cost of care for certain procedures)

\textsuperscript{10} eHealth; “Mission”; 2018.
\textsuperscript{11} Department of Health and Human Services; “156.230 Network adequacy standards”; Oct. 1, 2016.
Measurement at the Network Level
- Star Ratings
- Cost measures
- Can include risk adjustment if comparing to a benchmark or other networks
- Scoring algorithms

Measurement at the Individual Provider Level—How Networks Evaluate Their Own Providers
- Financial targets
- Credibility considerations, minimum number of patients or services
- Incentive models—can end up being complex and disengaging, simplicity is sometimes better
- Comparing physicians to each other—percentile ranking
- Challenges measuring specialists—volume (HEDIS is generally primary care-type measures; plans have developed their own)
- Challenges measuring different types of hospitals—e.g., safety net, academic, community, different populations served (e.g., pediatric hospitals, behavioral health hospitals, tertiary hospitals, community hospitals)
- Incentivizing technology adoption for physicians, or penalizing lack of use; population health software encourages engagement

Appendix 3

Financial Agreements Between Purchaser and Insurer
When the purchaser of health insurance is an individual, the financial agreement is a benefit plan design sold as a product. The individual purchaser may buy the product based on the price and the expectation that the network is an HPN, if it is marketed that way. Or, they may buy based on price and the fact that their doctors are in the network. If the product is marketed as an HPN, many states require the definition of high performance be based on some measure of quality and performance, rather than just a discount.

When the purchaser of health insurance is an employer group, if the employer is large enough, it may require some performance guarantees related to the HPN. Trend or savings guarantees or guarantees that additional fees associated with the HPN result in claims savings at a greater value. Reporting requirements also may be included in the agreement.

If the employer group is a self-insured group, there even can be additional agreements between the group and the provider organization related to claims costs savings outside of the administrative services agreement with the insurer or TPA, as savings in claims accrue directly to the employer group and not the insurer/TPA.
Between Buyer and Provider Organization
When the purchaser of health insurance is an employer group that contracts directly with a provider organization to provide health care services on a self-insured basis, the employer is fully at risk for claims costs. The employer may wish the provider organization to focus on key issues the employer has in its delivery of care and may design unique requirements to be included in the financial agreement. Guarantees and shared savings arrangements between the provider organization and the employer group often are used in the contract.

Between the Insurer and the High-Performance Provider Organization
In cases where the provider organization has designed its own HPN, the insurer and the provider organization may have a financial agreement that creates a separate product that only has that provider organization as its network, or the insurer may offer that provider organization as part of a bigger HPN that combines the provider organization with other high-performing providers the insurer has identified. The insurer also may offer the provider organization as part of a much bigger, non-HPN, such as in a PPO or POS product that may or may not include benefit tiers. Tiered networks generally include lower member cost shares if the member or patient goes to the high-performing (lower-tier) providers and higher cost shares if the patient goes to a non-high-performing provider.

The financial agreement for each of these kinds of insured product offerings may or may not be the same. There may be a standard financial agreement that includes special arrangements for the different kinds of products in which the provider organization would be included.

Between the Insurer and Separate High-Performing Providers
In cases where the insuring organization designs its own HPN from individual providers or provider groups, the financial agreements may include participation in an insurer’s quality programs, which generally include incentive payments. Depending on the size of the provider group, these providers may not even know they are included in a HPN product design. They may instead just contract to participate in a quality program, such as a PCMH program, a HEDIS quality improvement program, or some other insurer-designed program that provides payments or bonuses to providers for participation and, possibly, outcomes.

If the provider group is large or a specialty group, there also may be financial agreements related to claims cost targets or shared savings based on all care provided by the group or specialty.

Between the High-Performance Provider Organization and Individual Providers
High-performance provider organizations often are organized as a group of providers operating under a particular arrangement. Accountable Care Organizations are an example. Independent practice associations also may be an example. These groups may include hospitals, primary care physicians, specialist physicians, and possibly other health care professionals.
As the provider organization has financial agreements with an insurer that includes incentives, the provider organization will have financial agreements with its own member providers. To be a member provider, the individual provider may be paid on a FFS basis, a salary basis, a capitation basis, or some other non-FFS-based methodology. There may be requirements of the individual provider to practice using the provider organization’s practice guidelines, using tools offered by the parent organization (e.g., electronic medical records, referral tools, reporting and practice management tools, and coding tools).

The provider organization may pass incentives it collects from various insurer organizations directly to the individual providers, or the provider organization may have its own bonus and incentive arrangements based on the individual provider’s entire patient population, rather than just an individual insurer’s subset population. The provider organization has its own goals and methods for incenting providers to provide high-quality efficient care, and these agreements would not necessarily be shared with insurers.

**Between an MSO, Providers, and Insurers**

A medical services organization (MSO) may be used by providers and/or an insurer to provide administrative services to a provider group. It may provide claim coding services, referral services, patient appointment services, practice guideline tools, and reporting services. Some MSOs that contract with insurers involve evolving financial agreements that provide savings guarantees or quality improvement guarantees, such that their revenue is affected by shared savings, quality improvement, or other bonus arrangements. Some arrangements may share savings not only with the MSO but also with the providers for whom the MSO is providing services.

**Appendix 4**

**Example Reimbursement and Incentive Arrangements**

*(Based on Value-Based Payments)*

- **Diagnostic Related Group (DRG) payments:** DRG payments to hospitals pay on a case basis for an entire hospital stay using diagnoses of the patient grouped into one of a number of grouping methodologies. This approach encourages efficient treatment and care of the patient while in the hospital, as the DRG payment does not vary based on the length of time the patient stays in the hospital.

- **Bundled payments:** Under bundled payments there is a total payment for a particular type of treatment (e.g., knee replacement, hip replacement, coronary artery bypass grafting). This approach encourages integration, quality, and efficient use of resources. In order for bundled payment contracts to be successful, they will have predetermined ways of dividing payment among the hospital and physicians, and all the involved providers would need to agree to its terms. The payer may not be involved in the dividing of the bundled payments.
• Capitation: Capitation is a prepayment for services on a PMPM basis. This type of payment creates different underlying incentives than FFS (where FFS can incent overuse of services, capitation does not vary by the number of services provided, so may incent more appropriate use of services) and may be supplemented by incentive bonus payments related to quality, efficiency, and other nonfinancial targets. Capitation often is used as payment to professional groups (primary or specialist care), although hospital capitation also can be used.

• Global payment (or global capitation): Similar to capitation but the payment per person is made to a key organization (e.g., large hospital, ACO) to prospectively compensate for all or most of the care that patients may require.

• Partial global payment: A potential variation on global payment, this approach may be applied to a major subset of care, with some services carved out of the capitation (e.g., outpatient services excluding pharmacy).

• Pay for performance: The term refers to payment methods using incentives to encourage and reinforce the delivery of evidence-based practices and promotes as efficient outcomes as possible. The goal is to change the status quo by stimulating immediate but also long-term improvements in performance of providers that result in positive outcomes for patients. Pay-for-performance programs vary significantly in size and financial commitment. What they have in common is existence of predefined measures that are used to determine goals and incentive payments.

• Shared savings: This is a payment methodology in which cost savings (actual cost compared to targeted cost for an attributed population) are shared between an insurer and a provider organization or sometimes employer and provider organization in a self-insured situation. Because shared savings are meant to lower costs, it is important that setting and adjusting targeted goals occur on a regular basis and account for changes in performance. Self-funded accounts may agree to share savings. Shared savings arrangements typically are an upside-only sharing such that providers share if there are gains in experience as compared to a target. However, if experience is worse than target, providers in a shared savings arrangement do not share in losses. The CMS implemented shared savings in Medicare through ACO pilots. Commercial insurers use shared savings as well.

• Shared risk: Shared risk arrangements are similar to shared savings arrangements except that the providers also share in any losses compared to targets. These arrangements are both upside and downside sharing, thus pass some risk to providers. However, because it is shared, it is not like capitation, which passes all of the risk to providers of actual results being lower or higher than expected for the services included in the capitation.

Other incentive arrangements also exist, such as incentives for patient outcomes in PCMH programs, patient satisfaction incentives, quality incentive programs, etc.
Appendix 5

Vera Whole Health
Reference in this paper to any specific commercial product, process, or service or the use of any trade, firm, or corporation name is solely for illustration purposes and does not constitute endorsement, recommendation, or favoring by the American Academy of Actuaries or any board or committee of the Academy.

Vera Whole Health’s main business is a primary care-based employer on-site clinic using employed primary care physicians. It uses a PCMH philosophy for treating patients built around clinical protocols. Its success is based on engagement of the patient in wellness—focusing on assessing the needs of the patient and developing treatment/coaching plans. It stratifies the population to identify the sickest patients to develop programs to help them stay as healthy as possible. It also focuses on the healthier patients as well, using a bio-psycho-social assessment that involves determining how the patient will engage with their health plan and the patient’s goals for achieving/maintaining health and well-being.

Incentives are included for providers as well as for patients. For providers, incentives are based on engagement of the patient through completion of the assessment, completion of treatment services developed from the wellness plan, and patient satisfaction. For patients, incentives are based on engagement—initial engagement with Vera as well as against their individual wellness plans—and the incentives are developed with the agreement of the employer as sponsor of the health plan. Patients include the employees and also their spouses and other dependents.

According to Vera, value to the employer comes from a capitation arrangement for Vera services, including the primary care services. Total cost is measured with a goal of achieving savings on the total cost of care based on trended historical claims, with a goal of decreasing trend to Consumer Price Index (CPI) levels in the long term. Some employers also are beginning to track unplanned paid time off patterns to attempt to measure the value of higher productivity at work.

Vera, acting under the capitation arrangements with employers, leaves the community providers to focus on their FFS patients. Specialty providers also receive more qualified referrals for patients from the Vera PCMH program, based on clinical protocols. Vera reviews the claims data by provider based on clinical indicators and a technical grouper to identify low-cost, high-quality providers to use for referrals. Vera then shares information with other local providers on opportunities for higher efficiency and quality.

According to Vera, success as an HPN depends on the following:
• Relationships between the patient and a team of providers for holistic, integrated care;
• PCMH principles, with primary care providers being accessible the same day or next day;
• Care coordination using data analytics to predict high-cost patients with current patterns of fragmented care to change that pattern for the benefit of the patient;
• Patient engagement not only for the sickest patients but for all patients, based on their goals for well-being; and
• Episode condition comparison to identify opportunities for low-cost, high-quality care with actionable information shared with providers.
Appendix 6

Case Study of the Evolution of a Potential High-Performance Network

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A health insurer created a narrow network HMO product with a discounted provider reimbursement rate for being an exclusive HMO network product. The largest provider in the network was an ACO that participated in the Medicare Pioneer ACO pilot program. The ACO believed it had strong controls for managing the care at the right place and the right time, with little waste. The insurer offered a risk arrangement, sharing profit at 50 percent with the ACO.

The HMO product included two other hospital/physician systems, and members were not required to choose a PCP. Therefore, attribution was necessary to identify members to the three various provider systems.

Membership data related to attributed members and claims data (with allowed values protected between systems) was provided to the ACO and one of the other systems. Quarterly financial reporting also was provided to the ACO from the insurer.

Problems that existed in the early period of the network included:

- Members not being required to choose a PCP, such that members could easily move between systems and were often attributed to different systems in a single year.
- Members going to emergency rooms out of network and then continuing to seek care from non-network providers.
- ACO doctors referring patients to non-network hospitals because they had admitting privileges at non-network hospitals.
- No PCP referral was required for specialist services, such that coordinated, monitored, and managed care that was expected by both the ACO and the insurer was not seen for all members.
- Attribution process—the ACO may not know its members until after some claims occurred and then later lost track of the members if the member was later attributed to someone else; proactive management was very difficult.
- The ACO was not using the claims information and the system it had purchased for reporting for outreach and management purposes.

Some solutions between the insurer and ACO included:

- Quarterly joint operating committee meetings started between the insurer and the ACO.
- Insurer began to identify members who were with the insurer prior to a calendar year effective date who enrolled in the HMO product, and use historic claims to attribute members before any claims occur in the first month of coverage in the HMO product. This helped with members that were staying with the insurer and moving into the product but did nothing for new members.
- Insurer shared a list of new members with the ACO, and the ACO identified which of these members were members with claims in the ACO, such that these members also could be attributed before claims occurred.
**Appendix 7**

**Value Partnerships, Blue Cross Blue Shield of Michigan**

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Blue Cross Blue Shield of Michigan has a program called “Value Partnerships,” which is focused on improving health care for Michigan residents.\(^1\)

The goals of this program are to enhance quality, decrease complications, manage costs, eliminate errors, and improve health outcomes. It has been in existence for more than 10 years.

The components of the program include:

- hospital pay for performance incentive program;
- physician group incentive program;
- collaborative quality initiatives; and
- value-based reimbursement.

Providers work together to identify measures and targets to change health care delivery. Thus, they have mutually developed, clearly defined measures and goals. Information is shared, registries are created, and strategies for changing health care delivery are discussed. Reimbursement is moving away from FFS, which incents more services, to ones incenting quality, appropriate care.

As an HPN design, this example shows well-developed provider relationships, in which measures are set together, goals are well defined, financial arrangements including incentives are used, and information is shared—and, thus, has the basics for being an HPN.

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12 Blue Cross Blue Shield of Michigan; *“Value Partnerships Overview”, 2018.*