

Health Equity from an Actuarial Perspective

Provider Contracting and Network Development

The American Academy of Actuaries Health Practice Council created the Health Equity Work Group with a goal of contributing to efforts to reduce health disparities and improve health equity among racial and ethnic minority populations and other underserved or disadvantaged communities. The work group is examining actuarial practices and methods in the health area to assess the extent to which they may affect health disparities and recommend changes when appropriate, educate actuaries and other stakeholders on health equity issues, and apply an equity lens to the Academy's health policy work.

An initial discussion brief, "[Health Equity from an Actuarial Perspective: Questions to Explore](#)," introduced the first phase of the work group's work—an identification of areas in which health actuaries are involved that may affect health equity and development of a list of questions and topics to explore further. This discussion brief is part of a follow-up series providing more context and details on these questions. This discussion brief focuses on questions related to the reimbursement contracts and networking arrangements between health plans and health care providers. Other briefs focusing on questions related to [health plan pricing](#) and [health plan benefit design](#), and a forthcoming brief on managing population health, are part of this series.

Taken together, the series forms the foundation for the next phase of the group's work—investigation and analysis to answer the questions. By sharing an actuarial perspective through this series, the work group hopes to actively engage not only the actuarial profession, but also policymakers and the health policy community, to help advance the public discourse on health equity solutions.

The Health Equity Work Group has found it instructive to refer to the following definitions in its work:

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

Health disparities are differences in health or its key determinants that adversely affect marginalized or excluded groups. Disparities in health and in the key determinants of health are the metric for assessing progress toward health equity.

Social determinants of health are nonmedical factors such as employment, income, housing, transportation, child care, education, discrimination, and the quality of the places where people live, work, learn, and play that influence health.

Source: Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. [What Is Health Equity? And What Difference Does a Definition Make?](#) Princeton, NJ: Robert Wood Johnson Foundation, 2017.



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Health plans contract with health care providers (e.g., hospitals, physicians) to develop networks of providers to serve their members. The provider contracts establish health plan reimbursements for various services and other terms for network participation. Network contracting and development reflect the balance and trade-offs among the plan goals of access, cost, and quality, which may vary depending on customer preferences and market competition. Actuaries work with health plan network development departments to identify “efficient” physicians and hospitals to include in the network. In addition, actuaries work with the contracting departments to develop the financial contractual arrangements between the plan and providers within the health plan’s network, which can range from fee-for-service payments to alternative payment arrangement and risk-bearing contracts. This discussion brief details the questions the work group is exploring regarding whether the methodologies or approaches actuaries use to identify providers for a network and to develop provider payment arrangements might contribute to health disparities among under-resourced or underserved populations, such as communities of color, or whether they can help mitigate these disparities.

How do overall health plan spending goals or other outcome goals and considerations affect network development and provider contracting, and do these have effects on access to care and health disparities?

A health plan typically insures health care risk by collecting premiums from members or their employers, and contracting with provider entities to provide care for these members. To provide a competitive premium, the plan negotiates reimbursement to providers through fee schedules (prices per service) that represent a discount from the provider’s typical billed charges, or via another method such as a value-based contract or risk contract. In general, the narrower the provider network, the deeper the discount providers are willing to accept (and the lower the premiums), in exchange for higher expected patient volume.

Actuaries are often involved in setting a health plan’s spending goals for claim payments to providers, which may be used as targets for provider prices or provider contract discount levels. Higher targets can support broader networks and higher provider prices; lower targets can require more limited networks and the exclusion of higher-cost providers.

Health insurance products with limited or narrow networks have gained in popularity over the past few years, especially in the individual market plans offered on the Affordable Care Act (ACA) exchanges. A question to consider is whether the plan budget and resulting provider network allow for access for all segments of the enrolled population, and whether they consider the health care access issues faced by people who live in underserved or under-resourced communities, who lack access to reliable transportation, or who belong to groups that have been economically or socially marginalized.

Access issues may be caused by too few providers, inconvenient provider locations, or the exclusion of providers that serve racial or ethnic minority communities or groups that have been economically or socially marginalized and that other providers tend not to reach. An additional but important aspect of access is whether providers are culturally competent for the enrolled population, through race, ethnicity, language, or other cultural similarities. Related considerations include how providers are evaluated for network inclusion and whether cost and quality metrics reflect the needs and challenges of groups experiencing social or economic disadvantage. These questions will be explored further below.

Larger providers with infrastructure and capital often have negotiating leverage that they can use to get better pricing terms with health plans. These providers might be more likely to be situated in communities with greater social and economic resources. Smaller providers and providers with less negotiating leverage, and therefore less favorable pricing terms with health plans, might be more likely to serve communities experiencing poverty or communities with a concentrated number of people that belong to racial and ethnic minority groups.

Providers without such leverage might: (1) agree to lower prices, or (2) opt out of the insurer's network. With either option, it's important to consider the potential effects on health equity. If providers that serve under-resourced communities agree to lower prices, these providers will have fewer resources to provide care to their patients, which could be especially problematic for providers who serve a greater proportion of patients with lower incomes or racial and ethnic minority groups who face disadvantages related to education, employment, or other factors that can negatively impact their health. If providers opt out of the network, patients might not have adequate access to providers because of barriers due to geographic location, office hours, or language or other cultural barriers.

Providers in some networks, especially narrow networks, might be subject to ongoing performance requirements related to cost or other outcome and quality measures, such as hospital readmissions or preventive screenings (quality measures are discussed in more detail below). Scoring methodologies for these network participation requirements do not typically account for differences in these measures caused by social or other factors outside the control of the provider (e.g., the ability for the patient to adhere to medical recommendations and treatment plans). Such unadjusted requirements could further prevent access to providers who are likely to serve groups who experience disadvantages that negatively impact their health, and could, in fact, cause providers to avoid patients who experience such disadvantages.

How do alternative payment models and cost targets for risk-bearing provider contracts affect provider incentives and disparities in health care access and outcomes?

Provider contracts are complex and take many forms. Actuaries work with health insurer contracting departments to develop and monitor the financial agreements between the insurer and the health care provider. Alternative payment models (APMs) and risk-bearing arrangements shift varying levels of risk to providers to create financial incentives to provide health care efficiently. Unlike the traditional fee-for-service model, these arrangements can encourage providers to reduce unnecessary medical services, shift medical care to similar but less costly (yet still appropriate) services or sites of care, improve health care quality, and improve the general health of the population. For instance, under a shared savings arrangement with upside and/or downside risk, a provider's actual utilization is compared to a target. If the actual spending is lower than the target, the provider may be eligible to receive additional funds; if the actual spending is higher, the provider may have to make payments to the insurer.

Actuaries analyze historical data and use tools such as risk adjustment to develop a fair capitation rate or cost target for various APM or risk-bearing contract arrangements. These types of analyses typically do not consider socioeconomic factors and barriers to care. For example, health plan members who face social or economic disadvantage may have less flexible work arrangements, lack of transportation, or other barriers that cause them to use health care less often than other groups. A provider group that historically cares for high utilizers of health care will inevitably negotiate a higher capitation or budget amount compared with a group of physicians who historically care for lower utilizers of health care. The provider group that cares for lower utilizers may receive fewer resources to care for these patients, even though their patients' health care needs could actually be higher. Therefore, a question to consider is whether using historical data to develop cost or other outcome targets, without adjustment for socioeconomic or other factors, embeds existing disparities into provider payments and contributes to continued disparities.

It is also important to consider whether incentives inherent in APMs and risk-bearing contracts affect provider behavior in ways that exacerbate or mitigate health disparities. For instance, do incentives cause providers to limit or improve access to care for certain members via office hours or location convenience? Do the incentives lead providers to heighten their focus on certain conditions or populations and under-focus on others? In trying to meet cost targets, do providers limit care in ways that disproportionately and adversely affect members who may need care the most (e.g., not referring patients to specialists)?

Are quality provisions and outcome measures in APM contracts aligned with achieving equitable health outcomes?

Actuaries help establish and value meaningful measures for quality and other outcomes, which can be used to adjust payments to providers. Such measures include clinical processes, clinical outcomes, patient safety, patient experience, utilization, and costs. Quality measures are used not only because of the recognition that positive health outcomes rely on receiving quality care, but also to guard against the reduction of necessary care that could result from capitating provider payments or otherwise tying provider payments to controlling costs. How these measures are designed and evaluated may have implications for health equity, either positive or negative. Implications may stem from changes in provider behavior or capacity, or the characteristics of the providers included in the network.

The foremost principle in quality measurement is that the metrics should be aligned with the goals of both the quality program and the payment system. When assessing quality metrics and their impact on health care and health outcomes, many questions need to be considered, including: whether the metrics used are correlated with health outcomes; whether the metrics can be reported easily without undue administrative burden on providers, payers, or patients; how many metrics are reasonable to collect and use; whether metrics should apply to particular conditions or procedures or be applicable to all patients; whether and how provider performance is compared to a benchmark or against the performance of other providers; and whether and how metrics are risk-adjusted.

Some of these questions are especially relevant for considering whether quality measures are aligned with provider financial incentives to improve health equity. For instance, are the specific measures collected and used relevant to the types of conditions and care received by populations experiencing disparate health outcomes, and/or are there any quality metrics specifically geared toward measuring health disparities? If not, it might be difficult to meaningfully assess health care quality for those populations, and any provider payments based on these measures could affect health disparities. Similarly, if a provider's quality performance is measured against a benchmark or against the performance of other providers, do those comparisons reflect the population being served? And, do they recognize differences in patient characteristics or health care needs? If benchmarks are not adjusted for these differences, does the quality program provide an incentive for the provider to avoid serving patients who need their services more?

Closely related to the selection of the quality metrics and the method of assessing provider performance are any approaches for risk-adjusting or normalizing quality measures for population characteristics that influence successful achievement. Without effective ways to recognize that hospitals that serve populations experiencing social or economic disadvantage may face special challenges, providers serving such populations may be disadvantaged in their ability to provide high-quality care. However, adjustments need to be designed to promote equitable treatment without introducing excuses for poor quality that can exacerbate disparities. As an example, some APM programs use hospital readmission metrics to levy penalties on hospitals with high readmission rates. Many hospitals that treat populations with higher socioeconomic risk have

difficulty meeting the readmission requirements because of the increased challenges meeting the needs of this population, especially outside of the hospital setting. A question to explore is whether adjusting for diagnoses and other clinical factors, but not for patient socioeconomic characteristics, exacerbate or mitigate disparities.

How do the risk adjustment methods used in provider contracting and network development affect access to care and health outcomes?

The issue of risk adjustment has been raised numerous times in this discussion brief, with respect to both network development and provider contracting. Risk scores are widely used in both of these activities as a way to account for patient health status. Providers with healthier members are expected to have lower utilization, lower costs per member, and better health outcomes than providers with less healthy populations. Therefore, risk-adjusted utilization, cost, and quality metrics may be used to compare providers for the purpose of determining efficiency or for setting cost and quality targets that providers are expected to meet in order to receive advantageous contracting, achieve favorable network placement, or benefit from risk sharing arrangements. In some settings, risk adjustment can also be used in setting provider panel sizes based on how many patients providers are expected to serve, because higher-risk patients would be expected to require additional time and therefore lower average panel sizes. Actuaries are often involved in establishing and valuing historic risk scores (retrospective) as well as projecting future risk scores (prospective) and effects of changes in risk scores on target costs, health plan budgets, and quality metrics. A question to consider is whether risk adjustment techniques applied to cost targets or quality measures support health equity or instead perpetuate historical health disparities.

Prospective risk scores, typically designed to predict patients' costs, may not always align with the health status of the population. In particular, populations with lower access to care, lower health literacy, fewer resources to spend on health care, and less trust in the health care system may have lower risk scores than members with similar health status that do not face such barriers to care simply due to the lower utilization of health care services by these groups. These risk score discrepancies for members of similar health status, but with different socioeconomic levels or within different racial or ethnic groups, can be attributed both to inequities in utilization reflected in the data and to modeling choices. This could impact health equity in a number of ways.

When risk adjustment is used in network development, a provider serving a larger proportion of patients in racial or ethnic minority groups or patients with low incomes or experiencing other disadvantages that could negatively impact their health may have a lower health risk score. This may make the provider appear less efficient than their counterparts because the historical utilization that generated the lower risk score does not reflect the true underlying need of the population, which a higher-quality provider will uncover and treat. If this mistaken inefficiency results in the provider being excluded from a network, barriers to care could increase for members facing social or economic disadvantages.

Furthermore, to the extent that the use of risk adjustment, or the lack thereof, results in lower provider payments—either through lower cost targets or through lower quality bonuses (or higher quality penalties)—the resources for providers treating patients in such categories could be decreased, potentially worsening outcomes and exacerbating disparities. Therefore, a question to explore is whether and how risk adjustment tools—including how they are designed, the data sources they employ, and how they are applied—affect access to care and health care outcomes among people facing social and economic disadvantages.

NEXT STEPS

The questions raised in this discussion brief provide a context and framework for considering the impact of network development and provider contracting on health disparities. A thorough examination of these questions can help actuaries, public policymakers, and others better understand whether current methods used to create provider networks and reimburse providers are inherently biased in ways that contribute to disparities and whether actuarial methods could be used to help reduce disparities. The aim is to comprehensively capture aspects of these areas that may directly or indirectly be increasing or decreasing health care disparity.

The work of the American Academy of Actuaries Health Equity Work Group involves a further investigation of many of these questions to analyze how actuarial practices may affect health disparities, either positively or negatively. Each of these questions is being considered independent of others, but the interactions of multiple factors will also be considered. If the analysis suggests that certain practices contribute to disparities, options for making changes—including the potential for actuarial principles to help reduce disparities—will be explored.

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