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The math of ACOs: Summary in brief

Factors shaping the financial performance of physician- and hospital-led organizations under total cost of care payment models

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Broad consensus has long existed among public- and private-sector leaders in US healthcare that improvements in healthcare affordability will require, among other changes, a shift away from fee-for-service (FFS) payments to alternative payment models that reward quality and efficiency. The alternative payment model that has gained broadest adoption over the past ten years is the accountable care organization (ACO), in which physicians and/or hospitals assume responsibility for the total cost of care for a population of patients. The Centers for Medicare & Medicaid Services (CMS) runs the largest demonstration of this payment model, encompassing 500-plus ACOs and more than 11 million assigned beneficiaries as of January 1, 2020.

While savings in this program have been relatively limited, numerous examples of successful ACOs with meaningful savings—in excess of 5 percent of total cost of care—have emerged, rewarding both the participating provider organizations as well as the sponsoring payers. This wide disparity of performance among ACOs (and across Medicare, Medicaid, and Commercial programs) raises a critical question: Why are some healthcare provider organizations faring better than others under total cost of care arrangements?

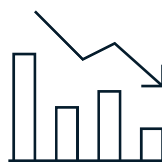
In this article, we examined four factors—bonus payments, "demand destruction," market share gains, and operating costs—underpinning the "math of ACOs" (Exhibit 1).

- **Bonus payments:** Defined as the share of estimated savings received by an ACO, key components include (A) the savings rate; (B) the inclusion of a Minimum Savings Rate (MSR) or a "haircut" to benchmark; (C) the benchmark definition including the use of provider-specific, market-specific, and/or national baseline and trend factors; and (D) the frequency of re-baselining, as implied by the use of a single-year or multi-year baseline. Our research found that while the greatest attention is often given to the savings rate (that is, the percent of any estimated savings earned by the ACO), the MSR, benchmark definition, and baseline are equally, if not more, important factors in determining an ACO's financial sustainability.
- **"Demand destruction":** Defined as the economic impact of a reduction in patient volume, key components include (A) foregone economic contribution based on reduced utilization in the ACO population, which could be 30 to 70 percent of foregone revenue; and (B) spillover effects from reduced utilization in the non-ACO population, which has been quantified as between 1 and 3 percent of total cost of care for non-ACO lives. The adverse impact of demand destruction is what most distinguishes the math of hospital-led ACOs from that of physician-led ACOs.

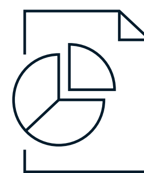
Exhibit 1

The equation for the math of ACOs.

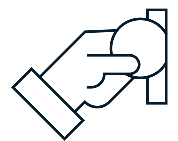
Bonus payments
Effective shared savings received by organization for ACO performance



Demand destruction
Loss of revenue due to reduced utilization from ACO population and spillover effects from non-ACO patients



Market share gains
Increased share due to improved network status and reduced system leakage



Operating costs
Incurred fixed and variable costs associated with running an ACO

ACO, accountable care organization.

- **Market share gains:** Defined as improved profitability through market share, key components include (A) reduced system leakage (generally from 30 to 50 percent for hospitals, in the absence of ACOs and/or other interventions) through improved alignment of referring physicians across both ACO and non-ACO patients; and (B) improved network status as an ACO, in which an ACO may receive preferential status within a network by entering into a total spending arrangement with a payer (true only of private health payers). We found that market share gains are the key difference between a net-neutral hospital-led ACO and a significantly profitable hospital-led ACO.
- **Operating costs:** Defined as additional operating costs associated with running an ACO, these costs vary widely depending on the provider organization's scale, operating model, and ACO patient population. We found that operating costs are generally lower for physician-led ACOs than for hospital-led ACOs; we also found that investing in fixed costs (for example, data and analytics solutions) that are more transformational in nature may result in lower near-term profitability but can provide a greater return on investment in the long term.

Based on ACO results published to date, physician-led ACOs generally do better and are more profitable than their hospital counterparts. Thus, the real question we aimed to unpack is how can hospital-led ACOs adapt to be more profitable? We created a series of scenarios in an attempt to represent most hospitals in the United States and found four common themes:

- **Know the implications of your structure:** As our results show, hospitals that commit to ACOs—high savings rate from taking on two-sided risk and a large number of lives—will find it easier for the math to work. But making the commitment itself is not enough: A hard look needs to be taken at the internal and external structure, both of the hospital and affiliated network, as well as the local market, to understand the probability of success. A hospital can take certain broad actions, such as having the right organizational structure or owning the right assets, to increase the probability of success. However, certain factors are unchangeable but important to account for, such as geographic isolation.
- **Take a multi-year view:** When a hospital fully commits to becoming an ACO, it is essential to take a multi-year view. This view applies to major contract terms, such as aligning on the re-baselining methodology, as well as investments in programs to manage the concepts of "demand destruction" and to improve physician satisfaction.
- **Operationalize locally:** As hospitals develop new programs, they must avoid using "blunt" instruments and instead take a nuanced and personalized approach. While vendors of population health programs may offer off-the-shelf solutions, those capabilities need to be tailored to manage the profile of the covered lives under the ACO. Furthermore, pulling the same levers (for example, post-acute care) may be common place for all ACOs, but how it is done (for example, network optimization, owning assets) may differ based on the local market. Accounting for the local market will be important to effectively manage spillover effects, which our results show can be a critical difference between profitability and unprofitability.
- **Be smart about economies of scale when building infrastructure:** No one doubts the additional operating expenses involved in becoming an ACO. Yet it is important to be strategic about what to build versus what to buy. Many of the needed capabilities, such as analytics, have been developed and can be leveraged off-the-shelf through partnerships, vendor arrangements, and the like. Accessing these services can lessen the burden of high fixed costs to aid hospitals when they first decide to participate in an ACO.

The above themes help determine why it is important to "know who you are." Without access to all of these value levers and the ability to adjust each variable in the math equation, the success rate for a hospital-led ACO narrows significantly. Thus, not all hospitals are set up for success as an ACO, given the way ACOs currently operate. Completing a checklist of readiness (see sidebar at the end of the full article) that also contemplates timing of implementation is important to assess impact and the likelihood of success.

Likewise, for private and public payers, these findings should help identify potential modifications in ACO designs that will both increase the number of hospitals that could be successful and decrease the margin of error for a participating hospital to make programs more attractive. ACOs are important vehicles that can help the United States realize its healthcare spending goals, but they require further refinement to increase adoption and success.

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