

ACO Value Metrics Series: A Cost-Benefit Analysis of ACO Formation

The four-part *HC Topics Series: ACO Value Metrics* will consider the value metrics and capital formation costs associated with forming *accountable care organizations (ACOs)*. The first installment provided the background of the value metrics used to assess these emerging healthcare entities, and this month's Part II installment will discuss the cost-benefit analysis that must be conducted in considering ACO formation. Part III will address the financial feasibility of potential ACOs, and Part IV will consider the monetary and non-monetary value metrics that should also be evaluated. This *HC Topics Series* is excerpted from the book authored by HCC President Bob Cimasi, entitled, "*Accountable Care Organizations: Value Metrics and Capital Formation*," to be published by Taylor and Francis Group later this year.

Last month's installment of the *HC Topics Series: ACO Value Metrics* discussed the basic financial considerations involved in *federal* accountable care organization (ACO) formation, including start-up and ongoing operational costs and potential revenue generation under the *one-sided* and *two-sided* models of the Medicare Shared Savings Program (MSSP). Entities that are contemplating *federal* ACO formation must select the appropriate model depending on their organization's degree of integration and care coordination, and the potential savings that may be experienced under each model must be considered against the prospective ACO's start-up and ongoing operational costs. Because of the numerous possible variations in reimbursement and organizational structures of *commercial* ACOs, this month's installment will examine the cost-benefit analysis that entities considering *federal* ACO formation must perform.

As discussed in last month's installment, there are four areas in which developing ACO enterprises will initially invest their capital: (1) *network development and management*; (2) *care coordination, quality improvement, and utilization management*; (3) *clinical information systems*; and, (4) *data analytics*. In a study published by the American Hospital Association in 2011, entitled "*The Work Ahead: Activities and Costs to Develop an Accountable Care Organization*," each enterprise studied made an initial front-end investment in staff and organization to coordinate ACO activities.¹ In addition to investments in leadership, the ACOs

studied made a variety of other initial investment decisions. Integral to the concept of an ACO is the ability to provide a wide variety of services. Consequently, common investments included recruiting, acquiring, and developing a variety of primary care physicians, nurse practitioners, physician assistants, and a network of specialty providers.² Start-up costs also included ongoing legal costs, ranging from \$24,000 to \$55,000 per year, and additional non-legal costs related to consulting services involving physician integration and organizational development strategies, and actuarial and financial analyses.³ Another key element in the newly-formed ACOs was the employment of hospitalists (hospital-based general physicians) with an annual salary ranging from \$160,000 to \$250,000. The study's ACOs also invested heavily in the focus on patient education and support programs, including diabetes patient education centers and emergency medicine resources for the uninsured.⁴

An important source of potential efficiency and cost gains may be an ACO's focus on the implementation of health care information technology (HIT). The consolidation of financial information among the member entities of an ACO requires a common *practice management system*, which represented a key initial investment of capital among the ACOs participating in the AHA study.⁵ In order to meet their clinical information system needs, newly-formed ACOs also invested heavily in electronic health records (EHRs) with installation costs; software licenses; hardware; paper records conversion; and, office staff costs, amounting to between \$40,000 and \$75,000 per physician. In addition to the initial installation and setup costs for the EHR systems, additional costs were also incurred to provide system interoperability. These costs, though typically minimal (in the range of \$15,000), were immensely important, as they allowed physicians to share clinical and claims data in a meaningful way.⁶ Among the ACOs included in the AHA study, the requisite analysis and reporting of patient care and quality data led to significant capital investment in information systems capable of collecting and analyzing this type of group data. The software used to integrate and analyze data from a variety of sources cost approximately \$40,000 for initial installation and approximately \$100,000 a year for maintenance.⁷

Overall, total startup costs for the observed ACOs

ranged from \$5 million to \$12 million, with ongoing annual costs ranging from \$6 million to \$14 million.⁸ The studied ACOs incurred significant expenses related to analyzing patient records and tracking key measurements to meet quality reporting requirements, which also necessitated additional data warehousing and a substantial staff investment.⁹ Accordingly, as ACOs increase in size, both capital and operational costs in support of data analytics programs are likely to grow as well.

While a specific technology investment is not required for either *commercial* or *federal* ACO development, the reality is that an ACO is unlikely to succeed without it. Without various technology enhancements, an ACO may not be able to reach the level of integration required for the requisite coordination of patient care, and is unlikely to be able to effectively measure outcomes and report the required quality measurements. Many healthcare enterprises currently seeking ACO status are large, integrated health systems, where the cost of technology, if not already in place, is likely to be the most significant capital requirement in their development of an ACO.¹⁰

As discussed in last month's installment, to receive shared savings payments, ACOs must reduce Medicare patient expenditures to a percentage amount below the Centers for Medicare and Medicaid (CMS)-established benchmark.¹¹ Similarly, there is a maximum amount of savings that ACOs can achieve, and both the minimum and maximum possible shared savings will vary based on the disbursement model a particular ACO chooses for its initial contract period with CMS.¹² Generally, the *one-sided model* provides low risks, and low rewards, while the *two-sided model* involves greater risk, but yields higher rewards. In exchange for greater possible shared savings payments, ACOs under the *two-sided model* are also responsible for sharing any losses incurred by the Medicare program.

Under the *one-sided model*, an ACO meeting all threshold and quality requirements will receive 50 percent of the total shared savings amount. An ACO may optimally achieve 10 percent of the CMS established benchmark as their 50 percent shared savings proportion, as the MSSP caps one-sided shared savings payment distributions at 10 percent of the CMS-established benchmark. CMS retains any portion of the ACO's 50 percent shared savings payments that exceeds the 10 percent cap, creating a disincentive for the ACO to achieve any cost reductions over this amount. While the *two-sided model* has similar caps and thresholds, it allows ACOs to experience greater shared savings payments. ACOs under the *two-sided model* experience a larger percentage of the shared savings amount, as the shared savings rate is set at 60 percent for ACOs that achieve quality requirements. Further, ACOs under this model have a shared savings payment cap set at 15 percent of the CMS-established benchmark.¹³ The calculations for shared losses mirror those for shared savings under the *two-sided model*. An ACO whose

actual patient expenditures exceed its CMS-established benchmark will be responsible for paying 60 percent of the total overage to CMS.¹⁴ However, an ACO must have actual patient expenditures exceed the benchmark by 102 percent before they are liable to CMS, and the total amount an ACO may have to pay to CMS is also capped.

To justify the significant expense associated with ACO development and operation, a potential ACO investor should consider whether the anticipated annual shared savings will offset the required ACO-related capital expenditures. Given the cap on shared savings, some ACOs, primarily small ones, may never be able to accumulate the necessary financial benefit to offset the ACO-related costs. An ACO whose costs exceed the amount of shared savings offered under its chosen MSSP disbursement model will never be able to cover required ACO capital expenditures, and therefore cannot break even.

As healthcare reform continues to take center stage and moves toward an outcome-centered payment system, developing a sustainable financial model is imperative. It will require a complicated, in-depth analysis of the challenges of capital and operating costs, as well as a realistic assessment of the opportunity for significant financial benefit that might be associated with investing in an ACO. Before initiating an in-depth financial analysis of the feasibility of ACO investment, managers should consider the probability of achieving cost sharing revenue; the expenses related to acquiring the necessary expertise to realize any possible revenue from cost sharing; and, the entity's access to capital markets. Largely, these considerations will be specific to each enterprise contemplating investment in an ACO. Once a healthcare entity has overcome these initial threshold concerns, then further robust and in-depth analysis of the ACO investment opportunity is warranted. Next month's installment will address the financial feasibility of potential ACOs.

For more information on ACOs, see the following *Health Capital Consultants* publications:

- [ACO Value Metrics Series – Part I – “Need to Know Basics on the Costs of Forming an ACO” Health Capital Topics Newsletter, Vol. 5, No. 9, September 2012.](#)
- [“Accountable Care Organizations: Value Metrics and Capital Formation” By Robert J. Cimasi, Saint Louis, MO: Taylor and Francis Group, forthcoming 2012.](#)
- [“ACO Final Rule: CMS Responds Favorably to Provider Concerns” Health Capital Topics News Alert, October 2011.](#)
- [“Accountable Care Organizations Series: How Are ACOs Compliant?” Health Capital Topics Newsletter, Vol. 4, No.10, October 2011.](#)
- [“Accountable Care Organizations Series: When Are ACOs?” Health Capital Topics Newsletter, Vol. 4, No.9, September 2011.](#)

- [“Accountable Care Organizations Series: Where Are ACOs?” Health Capital Topics Newsletter, Vol. 4, No.8, August 2011.](#)
 - [“ACOs and the Stark Law: How to Co-exist” Health Capital Topics Newsletter, Vol. 4, No.1, January 2011.](#)
 - [“Accountable Care Organizations Series: Who Are ACOs?” Health Capital Topics Newsletter, Vol. 4, No. 7, July 2011.](#)
 - [“Accountable Care Organizations Series: What Are ACOs?” Health Capital Topics Newsletter, Vol. 4, No. 6, June 2011.](#)
 - [“Accountable Care Organizations Series: Why Do We Need ACOs?” Health Capital Topics Newsletter, Vol. 4, No. 5, May 2011.](#)
 - [“CMS Issues Proposed Rule on Accountable Care Organizations” Health Capital Topics Newsletter, Vol. 4, No. 4, April 2011.](#)
 - [“Emerging Healthcare Organizations in an Era of Reform: Accountable Care Organizations” Health Capital Topics Newsletter, Vol. 3, No. 8, August 2010.](#)
- [“New Proposals for Accountable Care Organizations” Health Capital Topics Newsletter, Vol. 2, No.12, December 2009.](#)
- 1 “The Work Ahead: Activities and Costs to Develop an Accountable Care Organization” American Hospital Association (April 2011), p. 4.
 - 2 *Ibid*, p. 6.
 - 3 *Ibid*, p. 5.
 - 4 *Ibid*, p.8.
 - 5 *Ibid*, p. 6.
 - 6 *Ibid*, p. 9.
 - 7 *Ibid*, p. 10.
 - 8 *Ibid*, p. 13, 16.
 - 9 *Ibid*, p. 10.
 - 10 *Ibid*, p. 2.
 - 11 “Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations” Federal Register Vol. 76 No. 212, (November 2, 2011), p. 67927.
 - 12 *Ibid*, p. 67929.
 - 13 *Ibid*, p. 67987.
 - 14 *Ibid*.



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