



A Closer Look at ACOs

A series of briefs designed to help advocates understand the basics of Accountable Care Organizations (ACOs) and their potential for improving patient care.

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Accountable Care Organizations: Determining Shared Savings or Losses

As discussed in the accompanying brief, [*Putting the Accountability in Accountable Care Organizations: Payment and Quality Measurements*](#), one of the central challenges to making an Accountable Care Organization (ACO) work is determining whether the ACO in fact saves money. A closely related question is how the incentive payment will be calculated. Answering these questions requires determining the following:

1. the benchmark against which expenditures will be compared,
2. the minimum savings rate,
3. the sharing or loss rate, and
4. how the benchmark will be updated.

1. Determining the Benchmark

The benchmark is what the ACO's expenditures will be compared against to determine if it has generated savings or losses. There are two different ways to calculate the benchmark: the cohort model and the historical expenditure model.

- **Cohort Model**

In the cohort model, the ACO's expenditures are compared to the expenditures of a control population that is located in the same geographic area but that does not receive its care from the ACO. For example, the ACO could be compared to other ACOs in the same region or to non-ACO providers. This is the approach that was used in the Medicare Physician Group Practice demonstration, which is often referred to as the predecessor of ACOs in Medicare.¹

This approach has the benefit of accounting for unexpected increases in utilization of health services in a given area, such as would occur with a flu outbreak or a natural disaster. However, the ACO population and control population may have very different characteristics that risk adjusting cannot adequately account for, such as socioeconomic status. Not adjusting for differences in the patient population characteristics could make it difficult for the ACO to generate savings, or it could result in the ACO sharing in savings that result from factors other than changes in the way the ACO delivered care.

- **Historical Expenditure Model**

Under the historical expenditure model, the benchmark is calculated using the ACO's historical expenditures trended forward to current year dollars. For example, in the Medicare Shared Savings Program ACO (MSSP ACO), the benchmark will be established using the ACO's previous three years of expenditures for the assigned patient population, trended forward using the national growth rate in Medicare Parts A and B.²

While this approach does not account for unexpected increases in utilization, it provides for a more fair comparison, since it compares the ACO to itself and thus mitigates concerns about differences in patient population. Any savings that are generated are more likely to reflect changes in the ACO's practice patterns.

Under either the cohort or the historical expenditure model, determining the benchmark requires establishing the following: 1) the patient population; 2) whether there will be one per-capita benchmark or benchmarks for different categories of beneficiaries or services; and 3) the appropriate adjustments to the benchmark, such as adjusting for patient characteristics or unusually high-cost claims.

- **Determining the Patient Population**

The patient population that is used for the benchmark could be the assigned patient population, a subset of the assigned population, or the entire ACO patient population. Setting the benchmark using the entire patient population has the benefit of determining how the ACO is lowering costs for all of its patients and not just the assigned population. For example, in the case of Medicare, the benchmark would include non-Medicare patients in addition to Medicare beneficiaries. On the other hand, calculating the benchmark for a subset population, for example, patients with three or more chronic conditions, could show whether the ACO is managing care and costs for high-cost patients.

A benchmark based on the assigned population must use either the patient population that would have been assigned to the ACO in the years prior to the ACO's establishment (based on historical expenditure data) or the actual population assigned to the ACO. These two approaches produce different benchmarks because, as experts have found, the patient population changes from year to year by about 25 percent as patients die, move away, or change providers.³

In the MSSP ACO, the benchmark will be determined based on the population that would have been assigned to the ACO during the three years of historical expenditure data that were used to calculate the benchmark. This approach should make the benchmark a reasonable reflection of the ACO's average patient population, and it should indicate the types and levels of expenditures that the ACO generally will have over a period of time. However, it could incentivize the ACO to avoid continuing to treat the high-risk patients that were included in the benchmark calculation in order to lower its expenditures compared to the benchmark.

By contrast, basing the benchmark on the actual assigned patient population is more reflective of the ACO's actual expenditures for the patient population treated. However, it is difficult to implement such a benchmark because it must be adjusted to reflect partial claims data for patients that join or leave the ACO during each year of the agreement period. (The agreement period for the MSSP ACO will be three years, but it can be longer or shorter for other ACOs.)

■ **Determining the Benchmark Category**

The benchmark can be calculated based on utilization (e.g., the number of inpatient hospital days), expenditures (a per-capita expenditure benchmark), or both. In addition, different benchmarks can be established for different categories of beneficiaries.

The MSSP ACO will establish spending levels for patients with end-stage renal disease (ESRD), those with disabilities, those who are dually eligible for Medicare and Medicaid, and non-dually eligible aged patients. However, in other ACOs, benchmarks could be established for categories of services, such as inpatient care, outpatient care, and advanced imaging. Having different benchmarks for different populations or types of services will help the ACO see where it is spending the most and can help target changes in care delivery in those areas by developing improvement programs for the specific service or population.

■ **Adjusting the Benchmark**

The benchmark will also need to be adjusted to reflect the characteristics of the patient population. Without risk adjustment, some ACOs may realize savings simply because they are treating a healthier population than the population that was used to determine the benchmark. It may also be appropriate to adjust the benchmark to minimize the impact of "shock claims," which are unusually high claims that are not likely to occur frequently.⁴ These claims could be excluded or capped at a certain amount or percentage. For example, the MSSP ACO will cap patient claims at approximately \$100,000.

2. Determining the Minimum Savings or Loss Rate

From one year to the next, an ACO will have different levels of expenditures. This could be the result of changes in practice patterns, or it could be due to random variation. To account for random variation, it is necessary to establish a minimum savings or loss rate. This is a percentage above which the ACO would share in savings or pay back losses. As an example, CMS has set the MSSP ACO minimum savings or loss rate of at least 2 percent. Because smaller ACOs are more likely to have random variation, CMS set the minimum savings rates for small MSSP ACOs between 2 and 3.9 percent, with the smallest MSSP ACOs having the higher minimum savings rate.

▶ Example

If an ACO with 5,000 assigned beneficiaries (a small ACO) lowers expenditures by 6 percent during the first agreement period and meets the minimum quality requirements, it would be able to share in 2.1 percent of the savings, because it would be subject to the 3.9 percent minimum savings rate ($6 - 3.9 = 2.1$). If the same ACO lowered expenditures over the same time period by only 3.4 percent, it would not be able to share in savings, because it did not attain the minimum savings rate of 3.9 percent. On the other hand, an ACO that agrees to take on risk (by sharing in savings and losses) whose expenditures increase by 1 percent during the first year of the agreement period would be protected from paying back the difference because its losses were below the minimum loss rate of 2 percent. However, if the same ACO increased expenditures by 4 percent over the same period, it would be required to pay back a portion of those expenditures.

3. Determining the Sharing or Loss Rate

The sharing rate is the percent of the savings that the ACO will receive as an incentive payment. The loss rate is the percent of the losses that the ACO will have to repay to the insurer. Only ACOs that assume risk will have both a sharing rate and a loss rate.

The MSSP ACO will use a 50 percent sharing rate for the ACOs that are in the shared savings only model and a 60 percent sharing rate for ACOs that assume risk. The MSSP ACO loss rate will not exceed 60 percent. In both cases, the ACO's quality score determines its shared savings or loss rate. The higher the ACO's quality score, the higher the savings rate or lower the loss rate.

▶ Example

If an ACO that is a shared savings only model generates \$100,000 in savings above the minimum savings rate and receives the maximum quality score of 100%, it would receive \$50,000 as an incentive payment ($50\% \times 100\% \times \$100,000$). However, if the ACO's quality score is 75%, the ACO would receive only \$37,500 as an incentive payment ($50\% \times 75\% \times \$100,000$).

4. Updating the Benchmark

Any benchmark will need to be updated at regular intervals. The benchmark could be updated annually or at the end of the agreement period. A predetermined flat percentage or dollar amount, general inflation, a national or regional growth rate, or some other factor can be used to update the benchmark. The MSSP ACO benchmark will be updated annually at the beginning of each year of the agreement period using the national growth rate in Medicare Parts A and B.

When updating a benchmark, it may be appropriate to take into consideration investments that an ACO makes to improve quality or efficiency, such as investments in health information technology. It may also be appropriate to update the benchmark to reflect external changes that have affected utilization or the cost of care, such as a recession or natural disaster.

Issues to Watch

▶ Upcoding

Once the benchmark is calculated, the ACO may have an incentive to change its coding practices in ways that would make the patient population appear to be sicker than it previously appeared. This is referred to as “upcoding.” This would allow the ACO to obtain a higher risk adjustment, which would make it easier for the ACO to look as if it created savings, when, in fact, nothing had changed.

More precisely identifying patients’ diagnoses and needs is not a bad thing, of course. A more thorough and accurate diagnosis and description of the patient’s health helps ensure that the patient receives the care that he or she needs. Nonetheless, ACOs should be monitored for this potential problem to ensure that the ACO providers are in fact better identifying patients’ needs and changing the way they deliver care, rather than simply coding claims to increase payment.

▶ Cherrypicking

ACOs may also have an incentive to either get rid of sick patients or to not accept new sick patients and instead pursue relatively healthy patients, a practice that is known as cherrypicking, in an attempt to lower expenditures compared to the benchmark. Because the sickest patients stand to benefit the most from integrated, coordinated care, it is important that these people not be excluded from ACOs. An ACO’s patient population should be monitored over the course of the agreement period, and drastic changes in the population should be investigated to determine if the ACO is engaging in cherrypicking.

▶ Withholding Medically Necessary Care

It’s also important to monitor the care that is delivered by ACO providers to ensure that patients receive the care they need when they need it in the most appropriate setting. ACOs have an incentive to withhold care in an attempt to lower their expenditures from year to year. This may be particularly true if the benchmark is established by service category. For example, if the ACO has a benchmark for inpatient care, it may try to limit the number of inpatient stays, despite the fact that it may be medically necessary for the patients.

Rigorous monitoring of quality and accountability standards, as discussed in the accompanying brief, [*Putting the Accountability in Accountable Care Organizations: Payment and Quality Measurements*](#), is essential to avoiding all of the problems described here.

Endnotes

¹ Centers for Medicare and Medicaid Services, *Medicare Physician Group Practice Demonstration Fact Sheet* (Washington: CMS, July 2011), available online at https://www.cms.gov/DemoProjectsEvalRpts/downloads/PGP_Fact_Sheet.pdf.

² Centers for Medicare and Medicaid Services, *Medicare Shared Savings Program Final Rule* (Washington: CMS, October 2011), available online at <http://www.federalregister.gov/articles/2011/11/02/2011-27461/medicare-program-medicare-shared-savings-program-accountable-care-organizations>.

³ Centers for Medicare and Medicaid Services, *Medicare Shared Savings Program Proposed Rule* (Washington: CMS, April 2011), p. 19,605, available online at <http://www.gpo.gov/fdsys/pkg/FR-2011-04-07/pdf/2011-7880.pdf>.

⁴ Engelberg Center for Health Care Reform, The Brookings Institution, *ACO Learning Network Tool Kit* (Washington: Engelberg Center for Health Care Reform, January 2011), available online at <https://xteam.brookings.edu/bdacoln/Documents/ACO%20Toolkit%20January%202011.pdf>.

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