Accountable Care Organizations in Medicare

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Introduction, Background, and Summary

The Institute of Medicine identified care coordination as a strategy with the potential to improve the effectiveness, safety, and efficiency of the American health care system. Providers of coordinated care aim to ensure that patients, especially the chronically ill, receive the right care at the right time in the right place; avoid unnecessary duplication of services; and prevent medical errors. The Medicare Program encourages coordinated care through several efforts, including the Medicare Advantage program (Medicare managed care) and Medicare fee-for-service programs such as the Comprehensive Primary Care Initiative, Bundled Payments for Care Improvement Initiative, Community-based Care Transitions Program, and several Accountable Care Organization (ACO) programs.

The Agency for Healthcare Research & Quality identifies several elements of care coordination, including organizing multiple participants who are involved in caring for a patient, coordinating providers and resources across all aspects of patient care, and sharing information among participants. Care coordination requires an infrastructure that addresses these elements. Such infrastructure consists of a variety of resources. For example, technology platforms may be used to house electronic health records, patient tracking systems, and data analysis tools. Human resources, such as patient navigators, non-physician practitioners, and other support staff can improve patient access to care and increase opportunities for patient education. Both types of resources can facilitate care coordination.

Coordinated care can help achieve the goals of better care for individuals, better health for populations, and reduced health care costs. The Institute for Healthcare Improvement identifies a set of conditions that are necessary to address these goals. These include a focus on a specific population, external policy constraints, and the existence of an entity that accepts responsibility for coordinating services across all domains of care delivery for the specified population. Medicare’s ACO programs meet these conditions—an organization, the ACO, is responsible for a specific population of patients “assigned” to that ACO based on primary care services provided to those patients and is subject to policy constraints imposed by Medicare that are designed to provide incentives for high quality, efficient care. In addition, these models share a focus on the infrastructure that supports care coordination. The ACO models build
on the Physician Group Practice Demonstration, a pioneering example of an accountable care model in Medicare.⁴

Under Centers for Medicare & Medicaid Services (CMS) initiatives, ACOs are “groups of doctors, hospitals, and other health care providers who come together voluntarily to give coordinated high-quality care to their Medicare patients.”⁵ As the name suggests, ACOs accept accountability for the quality and cost of care delivered to their assigned patients. An ACO model reduces the incentives for overutilization that exist in traditional Medicare fee-for-service programs while providing more flexibility than capitation-based managed care, the Medicare Advantage program. Unlike the incentives under managed care with its provider networks, patients assigned to an ACO retain their freedom under traditional fee-for-service Medicare to choose their own health care providers. ACO models are “positive attraction” models rather than “lock in” models; in the latter, patients are financially penalized for seeking care outside a limited network of providers. ACOs are accountable not only for the care they provide but also for the care other providers furnish to their patients. This provides an incentive for care coordination, as well as a disincentive for overutilization of care.

Medicare ACOs are required to have a minimum number of assigned beneficiaries (e.g., 5,000 assigned beneficiaries for the Medicare Shared Savings Program [Shared Savings Program]). An ACO’s assigned beneficiaries are those patients for whom Medicare has identified the ACO as the provider of more primary care services to the beneficiary than any other provider during that time period. The ACO is held accountable for the cost and quality of care provided to this group of patients. This minimum number of assigned beneficiaries allows for more accurate measurement of an ACO’s financial and quality performance. This requirement also encourages the joint participation of a broader group of providers, which may facilitate coordination of care. Although large independent physician practices or hospital-based provider networks may easily meet this minimum requirement, unaffiliated smaller practices or solo practitioners, as well as other entities, may need to participate in newly formed or adapted provider networks to achieve the minimum required number of patients. Creating these networks is a first step in coordinating care across otherwise unrelated providers. ACOs organize medical providers into entities that can be held accountable for measurable cost and quality performance outcomes.

An ACO that delivers high-quality care while containing spending growth in health care dollars is eligible to share in the savings it achieves for the Medicare program. The Medicare ACO models include both a one-sided and a two-sided option. One-sided models encourage provider participation because there is an upside potential to share in savings, but no downside risk (beyond ACOs’ investment in becoming an ACO and in care coordination infrastructure). The one-sided models introduce an incentive for cost containment while mitigating the provider’s financial risk, the incentives for underuse of services, and risk selection inherent in capitated payment. Two-sided models create the potential for greater upside reward if an ACO is willing to accept downside risk. In addition to the quality performance standard, which determines an ACO’s eligibility to share in any savings generated, an ACO’s rate of sharing rises with higher quality performance. This relationship between quality performance and sharing rates provides an incentive for improving quality performance, rather than just meeting minimum criteria, and acts as a safeguard against underutilization of necessary health care services.
In this brief, we provide an overview of Medicare’s Shared Savings Program. The Shared Savings Program description includes details on assigning patients to an ACO, setting financial benchmarks, calculating savings and losses, measuring the quality of care provided by ACOs, and determining an ACO’s share of any savings it may have generated. We discuss the scope of ACOs in terms of beneficiaries served, provider participation, and geographic distribution. We describe the technical support provided to ACOs, which ACOs use to monitor their progress during a performance year.

**Medicare’s ACO Models**

Currently, Medicare offers several ACO programs, including the Shared Savings Program, the Advance Payment ACO Model, the ACO Investment Model, and the Pioneer ACO Model. Medicare is currently accepting applications for round one of the Next Generation ACO Model, anticipated to begin January 1, 2016.

The Shared Savings Program was established to facilitate coordination among providers to improve the quality and reduce costs of care for traditional Medicare fee-for-service beneficiaries. The Shared Savings Program is intended to improve beneficiary outcomes and increase value of care by (1) promoting accountability for the care of Medicare fee-for-service beneficiaries, (2) encouraging coordinated care for all services provided under Medicare fee-for-service, and (3) encouraging investment in infrastructure and redesigned care processes.6

Under the Shared Savings Program, beneficiaries are retrospectively assigned to an ACO in a performance period if that ACO provides more primary care services to the beneficiary than any other provider during that time period. After each performance period, CMS calculates whether an ACO generates shared savings by comparing its actual expenditures for its assigned beneficiaries in the performance period with its updated benchmark. An ACO’s updated benchmark is calculated as the sum of risk-adjusted historical benchmark expenditures plus the flat dollar amount equal to the projected absolute amount of growth in national per capita expenditures from the benchmark to the performance year. ACOs have the option of participating under a one-sided (Track 1) or two-sided (Track 2) model. An ACO’s actual rate of shared savings or losses depends in part on its quality performance. Quality performance in the Shared Savings Program is based on 33 quality measures that span four domains of care: patient/caregiver experience; care coordination/patient safety; preventive health; and at-risk population.

The Advance Payment ACO Model and the ACO Investment Model are supplementary incentive programs for selected participants in the Shared Savings Program. The Advance Payment ACO Model provides selected physician-based and rural providers with an advance on the shared savings they are expected to earn in the form of up-front and monthly payments. The ACOs use these payments to fund investments in their care coordination and other ACO infrastructure.7 The ACO Investment Model builds on the experience of the Advance Payment Model by providing pre-paid shared savings. The goal of this model, which began implementation in 2015, is to encourage the formation of new ACOs in rural and underserved areas and to encourage current Shared Savings Program ACOs to transition to arrangements that involve greater financial risk.8
The Pioneer ACO Model allows health care organizations and providers that are already experienced in coordinating care for patients across care settings to move more rapidly from a shared savings payment model to a population-based payment model. Pioneer ACOs are typically much larger than Shared Savings Program ACOs. After their first performance year, Pioneer ACOs are required to accept downside as well as upside risk. In addition, the Pioneer ACO Model prospectively assigns beneficiaries to ACOs (as described below). The Next Generation ACO Model builds upon experience from the Shared Savings Program and Pioneer ACO Model. This initiative allows ACOs with experience in coordinating care for populations of patients to assume higher levels of financial risk and reward than exist under the Pioneer ACO Model and Shared Savings Program and offers enhanced benefits for beneficiaries.

As of January 2015, 7.3 million beneficiaries were assigned to 404 Shared Savings Program ACOs, approximately 22% of the national population of beneficiaries enrolled in the traditional Medicare fee-for-service program. Another approximately 600,000 beneficiaries are assigned to 19 Pioneer ACOs. Shared Savings Program ACOs were active in 49 states, plus the District of Columbia and Puerto Rico in 2015.

### Shared Savings Program

**Characteristics of Shared Savings Program ACOs**

As of January 2015, five cohorts of ACOs had started in the Shared Savings Program (see Table 1). ACOs sign with CMS for a three-year first agreement period. The first two cohorts of ACOs started mid-year in 2012: in April (27 ACOs) and in July (87 ACOs). In January 2013, 106 ACOs started agreement periods; in January 2014, 123 ACOs started; and in January 2015, 89 ACOs started. As of January 2015, 404 ACOs were active in the Shared Savings Program. The ACOs active in 2015 include 35 participating in the supplementary Advance Payment Model (which was available only to 2012 and 2013 starters). Only five ACOs have chosen to participate in Track 2 (two-sided risk) of the Shared Savings Program since inception. The application/selection process for the ACO Investment Model is underway with a 2016 performance year start date, and is available to ACOs beginning in the Shared Savings Program in 2012, 2013, 2014, and 2016.

<table>
<thead>
<tr>
<th>Shared Savings Program ACOs by Agreement Start Date</th>
<th>Number of ACOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2012 starters</td>
<td>27</td>
</tr>
<tr>
<td>July 2012 starters</td>
<td>87</td>
</tr>
<tr>
<td>January 2013 starters</td>
<td>106</td>
</tr>
<tr>
<td>January 2014 starters</td>
<td>123</td>
</tr>
<tr>
<td>January 2015 starters</td>
<td>89</td>
</tr>
</tbody>
</table>

Sources:
Some ACOs are organized by institutions, such as a hospital, federally qualified health center, or rural health clinic. Others are purely physician-driven, either through a single integrated group practice or through networks of individual physician practices. ACOs that involve hospitals may have a greater ability to coordinate care, but physician-driven ACOs may have a stronger financial incentive to generate savings, as they do not incur the foregone revenues from reductions in hospital use. It appears that about half of Shared Savings Program ACOs include a hospital, and about one-sixth include a federally qualified health center or rural health clinic.

The care coordination infrastructure (e.g., hiring care managers, electronic health records systems) and quality reporting requirements for a successful ACO can be a challenge, perhaps especially for smaller physician practices participating in the Shared Savings Program. One way providers facing these challenges may be able to overcome them is through partnering with third parties such as management services organizations or insurers, who can provide managerial expertise, implementation support, and coordination to ACOs and can package practices into network model ACOs. Network model ACOs can involve otherwise unrelated providers serving distinct markets in multiple non-contiguous states. As described above, supplementary Medicare programs that provide funding support, such as the Advance Payment Model and ACO Investment Model, encourage participation among providers for whom care coordination may otherwise be difficult to implement.

ACOs include different specialties of physicians but tend to have a strong primary care component. This is because CMS assigns patients to ACOs primarily based on which physician organizations they receive primary care services from, and an ACO must have at least 5,000 assigned Medicare fee-for-service patients to participate in the Shared Savings Program. ACO participants, such as physician groups and sole practitioners, providing primary care are permitted to belong to only one ACO.

In 2013, 45% of Shared Savings Program ACOs were relatively small, with fewer than 10,000 assigned patient person years (see Table 2; person years are the number of patients adjusted downwards for patients with partial years of eligibility). Although numerous, these ACOs accounted for only 21% of all ACO-assigned beneficiary person years. Nine percent of ACOs had 30,000 or more assigned patient person years. Although few in number, these large ACOs accounted for 30% of all ACO-assigned Medicare beneficiary person years. The largest ACO in 2013 had 119,925 assigned patient person years.

**Measuring ACO Financial and Quality Performance**

CMS uses a multi-step process to determine the performance of participating ACOs during each performance year. This involves identifying the patients for which the ACO is accountable during the performance year, calculating the expenditures for those patients, comparing those expenditures to an updated historical benchmark to assess whether the ACO generated savings or losses, assessing the ACO’s quality performance relative to a set of established benchmarks, and ultimately determining whether the ACO is eligible to share in any savings generated during the performance year.
### Table 2: Medicare Shared Savings Program ACO Distribution by Number of Assigned Beneficiary Person Years, 2013

<table>
<thead>
<tr>
<th>Assigned Beneficiary Person Years</th>
<th>Number of ACOs</th>
<th>Percentage of ACOs</th>
<th>Percentage of Total ACO Assigned Beneficiary Person Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>220</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>&lt; 10,000</td>
<td>99</td>
<td>45</td>
<td>21</td>
</tr>
<tr>
<td>10,000–14,999</td>
<td>54</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>15,000–19,999</td>
<td>22</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>20,000–29,999</td>
<td>24</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>30,000–49,999</td>
<td>16</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>&gt;50,000</td>
<td>5</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>


Notes:
1. Person years are the number of beneficiaries adjusted downwards for beneficiaries with partial years of eligibility.
2. Shared Savings Program ACOs are generally required to have at least 5,000 assigned beneficiaries.
3. The number of assigned beneficiary person years for April and July 2012 ACO starters as reported in the Public Use File is the number of assigned beneficiary person years assigned during CY 2013 only. It does not count assigned beneficiary person years from these ACOs’ Performance Year 1 interim periods.

### Assigning Medicare Beneficiaries to ACOs

The first step in assessing an ACO’s performance is to identify the patients for whom the ACO is accountable. As noted above, Medicare beneficiaries do not enroll in ACOs. Rather, beneficiaries are assigned to ACOs based on which practitioners they visit for their primary care service needs. Beneficiaries receiving the largest share (plurality) of their primary care services (measured by allowed charges) from a given ACO in a performance year are assigned to that ACO for that year. Given that this ACO is providing the largest share of the primary care services for the patient, this ACO is considered to have the most control over the patient’s health care utilization. Because assignment is based on patient utilization of services during the performance year, it is determined retrospectively. CMS supplies ACOs with preliminary lists of assigned beneficiaries based on historical information throughout each performance year, but the ACO knows its final list of assigned beneficiaries only after the performance year ends. This has both advantages and disadvantages. The advantage from Medicare’s perspective is that retrospective assignment encourages the ACO to implement care coordination for all of its patients (as the ACO cannot be certain which ones will ultimately be assigned to it). ACOs benefit by being accountable only for those beneficiaries to whom the ACOs actually provide a plurality of primary care. ACOs also benefit by not being accountable for those beneficiaries with whom the ACO had little contact (as well as did not provide a plurality of primary care).

Beneficiaries must receive at least one primary care service from an ACO physician to be eligible for assignment to that ACO. In the Shared Savings Program, primary care services are defined as office and other outpatient evaluation and management services as well as evaluation and management services provided in other settings, such as skilled nursing facilities. Benefits who do not satisfy all of the general eligibility criteria for the ACO program (for example, no months of Medicare Advantage
enrollment) or are assigned to a participant in another Medicare shared savings initiative for the same period are not eligible for assignment to an ACO.

Assignment proceeds through a two-step “competition” process. In the first step, a beneficiary is assigned to an ACO if it provides the plurality of primary care services furnished by primary care physicians (general practice, family practice, general internal medicine, and geriatric medicine). If the beneficiary did not receive a primary care service from any primary care physician (ACO or non-ACO), the beneficiary can still be assigned to an ACO in the second step. In this step, a beneficiary is assigned to an ACO if the ACO provided the plurality of primary care services through specialist physicians and non-physician practitioners. These non-physician practitioners include nurse practitioners, physician assistants, and clinical nurse specialists. This two-step assignment process gives primacy in assignment to whether a patient received their largest share of primary care physicians’ services at an ACO, but still allows patients who did not receive primary care physicians’ services anywhere to be attributed to an ACO.

Calculating Shared Savings and Losses

A calculation determines whether an ACO generated savings during a performance year and whether it can receive a share of those savings from Medicare. A key aspect of determining an ACO’s savings performance is its expenditure benchmark, which we discuss first. We then describe other aspects of the savings calculation, including how quality performance determines the rate at which an ACO shares savings and determines an ACO’s final performance payment. Finally, we discuss differences in the calculation between ACOs that accept one-sided (upside only) versus two-sided (downside as well as upside) risk. Measuring an ACO’s quality of care is described in a later section.

Determining the ACO’s Expenditure Benchmark

In any given performance year, an ACO’s financial performance is judged relative to a benchmark or target expenditures unique to the ACO. Actual Medicare expenditures for ACO-assigned beneficiaries are compared to the benchmark to determine savings or losses. Setting the benchmark is the key to determining ACO financial performance. There are three steps to setting the benchmark: determining the historical benchmark, updating the benchmark, and adjusting the updated benchmark (risk adjustment).

Historical Benchmark

The historical benchmark is determined from Medicare expenditures for the ACO’s assigned beneficiaries in the three years prior to its first performance year. Beneficiaries are assigned independently in each historical year using the same assignment algorithm used for performance years. Annualized per capita expenditures for each Medicare enrollment type are calculated for each beneficiary assigned to the ACO for each historical year. Expenditures are truncated at the national unweighted 99th percentile to prevent a small number of extremely costly beneficiaries from significantly impacting the ACO’s benchmark expenditures. The earlier historical years’ expenditures are trended forward to the most recent historical year using national Medicare fee-for-service expenditure trends. The historical expenditures of the earlier
years are also adjusted to the health risk profile of the most recent historical benchmark year using the CMS-Hierarchical Condition Category (CMS-HCC) diagnosis-based risk scores.

Once the expenditures of the two earlier historical years have been trended and risk-adjusted to the same basis as the most recent historical year, the expenditures of the three years are combined using a 60% weight for the most recent historical year, a 30% weight for the middle year, and a 10% weight for the earliest year. The more recent years of the historical benchmark are given higher weights because they more closely reflect the assigned population for the ACO’s performance year. Altogether, the historical benchmark is defined as the following:

\[
\text{Historical benchmark} = 60\% \times (\text{most recent historical year expenditures}) + 30\% \times (\text{trended and risk-adjusted middle historical year expenditures}) + 10\% \times (\text{trended and risk-adjusted earliest historical year expenditures})
\]

All of these steps are performed for each of four Medicare enrollment types: (1) entitled by end-stage renal disease, (2) entitled by disability (under age 65), (3) entitled by age and by receiving Medicaid benefits (dual eligible), and (4) entitled by age and not receiving Medicaid benefits. Decomposing the steps by the four Medicare beneficiary types increases the accuracy of the benchmark. An ACO’s overall historical benchmark is the sum of its historical benchmark for each beneficiary type weighted by that type’s proportion of total assigned beneficiaries.

### Updating the Benchmark

To serve as a benchmark for the ACO in its performance year, the historical benchmark must be updated. The historical benchmark is updated in three ways: for changes in assigned beneficiary health risk, for national trends in Medicare fee-for-service expenditures, and for changes in the proportions of the four Medicare enrollment types. The national Medicare fee-for-service population determines the reference expenditure trend for each ACO in the Shared Savings Program. The updated benchmark for each of the four enrollment types is calculated as follows:

\[
\text{Updated benchmark} = (\text{historical benchmark}) \times (\text{risk adjustment factor}) + (\text{national expenditure growth increment})
\]

The risk adjustment factor is discussed in the next subsection. The national expenditure growth increment is the absolute dollar change in national Medicare fee-for-service per capita expenditures from the (most recent) historical benchmark year to the performance year. This increment is the same for all ACOs. The national growth increment is added to an ACO’s adjusted historical benchmark (the historical benchmark multiplied by the risk adjustment factor—displayed in the equation above). A uniform, additive, absolute dollar increment for all ACOs leads to a greater percentage update for ACOs with lower historical benchmarks if national Medicare expenditures are rising. However, if national expenditures are falling, which has occurred in some recent time frames, ACOs with lower historical spending receive a larger percentage reduction in their benchmark. Because the historical benchmark is updated separately for each beneficiary type, to adjust for changes in the proportion of beneficiary
types, the benchmarks by type are combined using the updated performance year proportions of ACO beneficiary type.

**Risk Adjustment**

Risk adjustment updates the historical benchmark for the health status expenditure risk of assigned beneficiaries in the performance year. This adjustment accounts for the fact that sicker beneficiaries are more expensive to treat and therefore generate higher expenditures.

\[
\text{Risk adjustment factor} = \frac{\text{estimated risk of beneficiaries assigned in performance year}}{\text{estimated risk of beneficiaries assigned in the most recent historical benchmark year}}
\]

To measure patient health, ACO risk adjustment uses diagnoses that medical providers report in the prior year. CMS is concerned that ACOs may more completely report these diagnoses in response to financial incentives, thereby generating a higher risk score. To address this possibility, a distinction is made between beneficiaries who are newly assigned to the ACO in the performance year versus those who were also assigned to or received a primary care service from the ACO in the previous year, called “continuously assigned” beneficiaries. Because the ACO does not report prior year diagnoses for the newly assigned, the risk of newly assigned beneficiaries is always accounted for by the diagnosis-based (CMS-HCC) risk adjustment model noted above. Because the ACO does report many of the prior year diagnoses for continuously assigned beneficiaries, the change in risk of the continuously assigned beneficiaries is measured by the diagnostic (CMS-HCC) model only if the diagnosis-based risk score falls from historical benchmark to performance years. If the risk score is rising, the change in risk is measured by the change in demographic factors (primarily age and sex) that are not sensitive to diagnosis reporting. The estimated risks of newly and continuously assigned beneficiaries are combined into a single risk score for all beneficiaries assigned in the performance year, which is then compared to the estimated risk of beneficiaries assigned in the historical benchmark year. This factor is used to update the historical benchmark for changes in risk between beneficiaries assigned in the historical benchmark year versus in the performance year. The use of ACO-specific historical benchmarks is also an important part of risk adjustment. ACOs treating a sicker population tend to have higher historical spending, and therefore higher expenditure benchmarks.

**Savings and the Earned Performance Payment**

**Total Savings and the Minimum Savings Requirement**

The difference between an ACO’s updated benchmark and actual Medicare expenditures for beneficiaries assigned to the ACO in the performance year is total savings or losses.

\[
\text{Total savings / losses} = \text{(updated benchmark expenditures)} - \text{(actual expenditures for assigned beneficiaries in the performance year)}
\]

At the end of each performance year, per capita assigned beneficiary expenditures and the updated benchmark expenditures are multiplied by the number of person years in the performance year to
generate the actual and updated benchmark expenditures. Potential savings are generated if actual expenditures are less than the updated benchmark expenditures. For Track 2 ACOs, potential losses are generated if actual expenditures are greater than the updated benchmark expenditures. For an ACO to share savings with Medicare, its savings must exceed a threshold ranging from 2.0 to 3.9% of the updated benchmark, called its minimum savings rate (MSR). For Track 1 ACOs, this threshold depends on the ACO’s number of assigned beneficiaries, with ACOs with a higher number of assigned beneficiaries having a lower threshold and vice versa. This threshold is designed to distinguish savings that are more likely the result of the ACO’s performance from savings that are more likely the result of normal (random) fluctuations in expenditures. Under Track 1, if total savings are greater than or equal to the ACO’s MSR, then savings occurred. Otherwise, neither shared savings nor shared losses were generated. For Track 2 ACOs, the MSR is set at 2%. If savings exceed the MSR, the ACO shares in all of them, not just the savings above the minimum rate, subject to a cap set at a percentage of total updated benchmark expenditures.

**Quality Performance, Shared Savings, and the Earned Performance Payment**

An ACO’s share of its savings depends on its quality performance. For Track 1 ACOs, its sharing rate with Medicare is 50% multiplied by its quality performance score (described below).

\[
\text{Sharing rate} = 50\% \times (\text{quality performance score})
\]

For example, the ACO receives its maximum sharing rate of 50% if it performs perfectly on quality (100% score). If the ACO achieves half of its maximum quality score, it shares 25% (50% x 50%) of the savings.

An ACO’s shared savings are the product of its sharing rate and total savings.

\[
\text{Shared savings} = (\text{sharing rate}) \times (\text{total savings})
\]

Shared savings are capped at 10% of updated benchmark expenditures (for Track 1 ACOs) and are reduced by 2% to satisfy the sequestration requirements of the Budgetary Control Act of 2011. These calculations result in the ACO’s “earned performance payment,” which is the amount CMS pays to the ACO. Medicare savings are total savings minus the ACO’s earned performance payment.

**One-Sided Versus Two-Sided Risk**

ACOs can participate in two mutually exclusive tracks in Medicare’s ACO program. Track 1 is upside only, under the one-sided shared savings model, in which the ACO does not owe shared losses to Medicare and may receive a positive earned performance payment.\(^\text{30}\) A Track 2 ACO accepts downside as well as upside risk, under the two-sided shared savings / losses model. A Track 2 ACO can receive an earned performance payment, owe money to Medicare, or neither receive nor owe money.

To encourage ACOs to take downside risk, ACOs under the two-sided model have the opportunity to achieve a greater upside (reward). The Track 2 inducements are (1) a higher maximum rate of shared savings—60% as compared to 50% in Track 1—and (2) a higher shared savings cap of 15% of total benchmark expenditures (as compared to 10% in Track 1).
Track 2 has a downside loss calculation not present in Track 1. If the expenditures of beneficiaries assigned to an ACO in the performance year exceed the ACO’s expenditure benchmark, a loss occurs. The loss must exceed a flat 2% of the benchmark—the “minimum loss rate (MLR)”—for the ACO to share in the loss. The rate at which the ACO shares in its losses is one minus the rate at which it shares in its savings.

\[
\text{Loss sharing rate} = 100\% - (\text{savings sharing rate}) = 100\% - 60\% \times (\text{quality performance score})
\]

The loss sharing rate is capped at 60%, the Track 2 maximum savings sharing rate. For example, if an ACO’s quality performance is perfect (quality score of 100%), its loss sharing rate is 40%. If its quality performance score is 80%, its loss sharing rate is 52%. If its quality performance score is 50%, its loss sharing rate is set at the cap of 60%. An ACO’s shared losses, owed to CMS, are the product of its loss sharing rate and its total loss.

\[
\text{Shared loss} = (\text{loss sharing rate}) \times (\text{total loss})
\]

Shared losses are capped at 5% of the updated benchmark in a Track 2 ACO’s first performance year (of its initial agreement period), 7.5% in its second performance year, and 10% in its third performance year.

### Measuring Quality of Care in Medicare ACOs

ACOs are accountable for providing high-quality care to their assigned patients. An ACO’s ability to share in any savings generated, as well as the rate at which savings are shared, depends on its quality performance.

The list of ACO quality measures was revised for 2015 from the original set (released in 2011) based on a number of factors, including clinical guideline changes, efforts to harmonize with other CMS programs, an increased emphasis on outcome-based measures, and an effort to reduce the burden of data collection for the ACOs. Although the total number of measures remains at 33 for 2015, the changes CMS made included removing five ACO-reported measures, adding four claims-based measures and one survey-based measure, and updating ACO 11 (Percent of Primary Care Physicians who Successfully Meet Meaningful Use Requirements) to reflect 2015 program changes.

To be eligible to share in any savings, the ACO must demonstrate that it met the quality performance standard for the performance year. In 2015, CMS will measure quality of care using 33 nationally recognized measures in four key domains:

1. Patient/Caregiver Experience (8 measures)
2. Care Coordination/Patient Safety (10 measures)
3. At-risk Population
   - Diabetes (2 measures scored as 1 composite measure)
• Hypertension (1 measure)
• Ischemic vascular disease (1 measure)
• Heart failure (1 measure)
• Coronary artery disease (1 measure)
• Mental health (1 measure)

4. Preventive Care (8 measures)

The 33 quality measures are reported using several different data sources:\n
- medical records data abstracted and reported by ACOs through a CMS-provided web portal (the Group Practice Reporting Option Web Interface) designed for capturing clinical quality measure data (17 measures)
- Medicare claims data (7 measures) and Medicare and Medicaid Electronic Health Record Incentive Program administrative data (1 measure)
- the Consumer Assessment of Healthcare Providers and Systems (CAHPS) for ACOs Survey data, on patient and caregiver experience of care (8 measures)

**Medical Records Abstracted Measures**

For the 2015 reporting period, ACOs will report on 17 measures using data abstracted from medical records. These measures are the largest segment of quality measures in the ACO program, representing the At-risk Population domain, the Preventive Care domain, and 2 of the 10 measures in the Care Coordination domain. These measures include both process-of-care and outcome-based measures, and they target high-cost chronic conditions, preventive care, and patient safety. Measures related to a single clinical condition are grouped together as follows: care coordination, coronary artery disease, heart failure, hypertension, ischemic vascular disease, diabetes, mental health, and preventive care.

Shared Savings Program ACOs use the Group Practice Reporting Option Web Interface as the data collection tool for reporting data to CMS. ACO-reported measures are aligned with the measure requirements for practices selecting the Group Practice Reporting Option Web Interface for the Physician Quality Reporting System. CMS produces a single set of measures that can be used by all relevant programs, including the Physician Quality Reporting System program (for group practices reporting via the Group Practice Reporting Option Web Interface) and the Shared Savings Program. The Web Interface is prepopulated with select clinical quality measure data for a sample of each ACO’s beneficiaries; ACOs are expected to collect and report any additional data needed to calculate the performance rate for each measure.

**CMS Claims and Electronic Health Record Incentive Program Measures**

ACOs are expected to coordinate the range of medical care that, among other factors, affects admission and readmission rates for their assigned beneficiaries. In the 2015 reporting year, eight measures are calculated from CMS administrative data, including seven claims-based measures and one measure that uses data from the Electronic Health Record Incentive Program. This is an increase of four claims-based measures, compared to the 2014 reporting year. Of the seven claims-based measures, two focus on 30-day readmission rates for different settings, two assess condition-specific admission rates, and three
assess all-cause admission rates for beneficiaries with specific conditions. All of the claims-based measures are in the Care Coordination domain. For all of these measures calculated from CMS administrative data, the ACOs do not need to collect or submit additional data beyond normal billing activities. All of these measures have detailed measure specifications provided in a publicly available measure information form, which is updated annually.

The Risk-Standardized, All-Condition Readmission measure assesses assigned beneficiaries’ rate of readmission within 30 days of a hospitalization. Similarly, the Skilled Nursing Facility 30-Day All-Cause Readmission measure assesses assigned beneficiaries’ rate of readmission, but this measure focuses on beneficiaries who were discharged to a skilled nursing facility after their hospitalization. Specifically, this measure assesses discharge rates within 30 days of the post-hospitalization skilled nursing facility discharge. Both of these measures use a risk-standardized readmission rate, which is the predicted readmission rate over the expected admission rate multiplied by the average readmission rate across all ACOs. The predicted readmission rate is the predicted ACO admission rate after adjustment for ACO case mix and individual ACO effect, and the expected readmission rate is the expected ACO admission rate after adjustment for ACO case mix only. Lower risk-standardized readmission rates indicate better quality of care.

Three of the condition-specific claims-based measures use a Risk-Standardized Acute Admission Rate, which, like the risk-standardized readmission rate, uses a risk-adjusted ratio of predicted over expected. These measures apply the ratio to acute admissions rather than readmissions. Here, too, a lower rate indicates better quality of care. These three measures assess the rate of all-cause unplanned admissions for assigned beneficiaries with diabetes, heart failure, or multiple chronic conditions.

The two remaining claims-based measures are based on the Agency for Healthcare Research and Quality’s Prevention Quality Indicators. One measure focuses on admission rates for chronic obstructive pulmonary disease or asthma in older adults, and the other focuses on admission rates for heart failure. Unlike the other claims-based measures, which use a ratio of predicted to expected, the prevention quality indicators use a risk-adjusted ratio of observed discharges to expected discharges. A lower rate indicates better quality of care. Higher rates suggest that outpatient treatment and patient adherence to treatment guidelines with respect to chronic obstructive pulmonary disease/asthma or heart failure should be improved.

In 2015, the one measure that uses CMS Electronic Health Record Incentive Program data, will measure the percentage of ACO primary care physicians who successfully meet Meaningful Use requirements for the Medicare or Medicaid Electronic Health Record Incentive Program Incentive Payment. This measure is double-weighted when calculating the total quality score, due to the importance of adopting electronic health records in providing coordinated care. CMS uses the necessary Medicare claims files and Electronic Health Record Incentive Program files to determine the denominator population of providers and to calculate the rate for this measure for each ACO.

Eight CAHPS patient survey measures comprise the Patient/Caregiver Experience domain. To assess the patient experience of care, ACOs must select and pay for a CMS-approved vendor to administer the CAHPS for ACOs survey. The CAHPS for ACOs is based on the Clinician and Group CAHPS. Specifically, it includes core questions from version 2.0 of the Clinician and Group CAHPS survey and supplemental items from the CAHPS Patient-Centered Medical Home Survey, Core CAHPS Health Plan Survey Version 5.0, existing CAHPS supplemental items, and new content developed for the CAHPS for ACOs survey, among other sources. In addition, the survey includes questions that collect information on English proficiency, disability, and self-reported race and ethnicity categories required by Section 4302 of the Affordable Care Act. The CAHPS for ACOs survey is offered in multiple languages, such as Spanish and Korean.

Quality Benchmarks and Scoring

The quality performance standard for ACOs in their first performance year is pay-for-reporting. Pay-for-performance is phased in during the second and third performance years of an ACO’s first three-year agreement period. Under pay-for-reporting, ACOs must completely and accurately report on all quality measures to be eligible to share in savings, if generated. Further, under years where the quality standard is pay-for-performance on measures, an ACO must also meet minimum attainment on at least one pay-for-performance measure in each domain. ACOs who meet the quality performance standard will be eligible to share in savings, if the ACO generated savings equal to or greater than its MSR.

Under pay-for-performance, ACOs earn points based on how they perform on each measure relative to an established benchmark. Therefore, ACOs become increasingly responsible for quality performance throughout the agreement period. CMS established quality measure benchmarks for Shared Savings Program ACOs entering pay-for-performance in the 2014 and 2015 reporting periods (and the 2013 pay-for-performance period for Pioneer ACOs) for the original set of 33 quality measures for which ACOs are accountable. Updated benchmarks for applicable measures will be released for the 2016 reporting period at the end of 2015.

Quality measure benchmarks were determined using available data on the Medicare fee-for-service population (the reference population). Data sources for each measure vary by the type of measure and include the following:

- Quality data reported through the Physician Quality Reporting System by physicians and groups of physicians;
- Quality measure data calculated from Medicare claims data submitted by physicians and groups of physicians;
- Quality data reported by ACOs, including ACOs participating in the Pioneer ACO model; and
- Quality measure data collected from surveys administered to the larger Medicare fee-for-service population, including under pay-for-performance demonstrations.
With the exception of the Electronic Health Record measure, which is double-weighted, an ACO can earn a maximum of two points for each scored individual or composite measure. An ACO earns points on a sliding scale based on the level of performance, measured at each decile (between the 10th and 90th percentiles). To earn points for a given measure, an ACO must meet the minimum attainment level of the 30th percentile. Table 3 shows the points earned when ACOs achieve each percentile level of performance.

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Points Associated with Meeting or Passing This Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30th percentile FFS data or &lt;30 percent</td>
<td>No points</td>
</tr>
<tr>
<td>30th percentile FFS data or 30+ percent</td>
<td>1.10</td>
</tr>
<tr>
<td>40th percentile FFS data or 40+ percent</td>
<td>1.25</td>
</tr>
<tr>
<td>50th percentile FFS data or 50+ percent</td>
<td>1.40</td>
</tr>
<tr>
<td>60th percentile FFS data or 60+ percent</td>
<td>1.55</td>
</tr>
<tr>
<td>70th percentile FFS data or 70+ percent</td>
<td>1.70</td>
</tr>
<tr>
<td>80th percentile FFS data or 80+ percent</td>
<td>1.85</td>
</tr>
<tr>
<td>90+ percentile FFS data or 90+ percent</td>
<td>2.00</td>
</tr>
</tbody>
</table>


Notes: FFS = fee-for-service

In general, fee-for-service performance rates for the reference population at each decile are used as the benchmark for that percentile. However, Shared Savings Program regulations require that benchmark percentages are set equal to the decile itself (“flat percentages”) under two scenarios: (1) for measures where the performance rate of the 60th percentile of the reference population is greater than or equal to 80%; or (2) for measures where the performance rate of the 90th percentile of the reference population is greater than or equal to 95%. In these cases, the 50th percentile benchmark is equal to a performance rate of 50%, the 60th percentile benchmark equals 60%, and so on. This policy allows high-scoring ACOs to earn maximum quality points while also rewarding improvement in subsequent years for ACOs starting out with lower performance rates. Using flat percentage benchmarks for these measures also ensures that ACOs with high performance on a measure are not penalized as low performers. Table 4 provides examples of both types of benchmarks using the Falls Risk Screening measure (benchmarks at each performance rate decile of the reference population) and the Blood Pressure Screening measure (benchmarks set based on “flat percentages”).

Starting with the 2015 reporting period, CMS will also award additional points to ACOs for quality improvement in each domain if the ACO successfully reported quality in both the prior year and the current year and showed significant improvement. Once points are assigned to each measure, the points are summed within each domain, yielding a domain score; the four domain scores are then averaged to yield an overall quality score, which is then factored into the shared savings calculations.
Table 4: Quality Measure Benchmarks and Associated Points, Falls Risk and Blood Pressure Screening

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Falls Risk Screening Benchmarks</th>
<th>Blood Pressure Screening Benchmarks</th>
<th>Points Associated with Meeting or Passing This Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>30th percentile</td>
<td>17.12%</td>
<td>30.00%</td>
<td>1.10</td>
</tr>
<tr>
<td>40th percentile</td>
<td>22.35%</td>
<td>40.00%</td>
<td>1.25</td>
</tr>
<tr>
<td>50th percentile</td>
<td>27.86%</td>
<td>50.00%</td>
<td>1.40</td>
</tr>
<tr>
<td>60th percentile</td>
<td>35.55%</td>
<td>60.00%</td>
<td>1.55</td>
</tr>
<tr>
<td>70th percentile</td>
<td>42.32%</td>
<td>70.00%</td>
<td>1.70</td>
</tr>
<tr>
<td>80th percentile</td>
<td>51.87%</td>
<td>80.00%</td>
<td>1.85</td>
</tr>
<tr>
<td>90th percentile</td>
<td>73.38%</td>
<td>90.00%</td>
<td>2.00</td>
</tr>
</tbody>
</table>


Reporting and Other Support for Medicare ACOs

CMS provides reports and data to Shared Savings Program ACOs to help them implement their care coordination activities for their assigned beneficiaries. The major reports and data feeds are the following:

- Assignment List Report,
- Assignment Summary Report,
- Expenditure/Utilization Report,
- Historical Benchmark Report,
- Financial Reconciliation Report,
- Quality Performance Report, and
- Claims and Claims Line Feed.

The first three reports listed are provided on a quarterly and annual basis, including for the three historical benchmark years prior to the ACO’s agreement start date. Quarterly reports are run for the trailing 12-month period on a rolling basis and are generally provided to ACOs within two months of the end of each calendar year quarter. The Historical Benchmark Report is provided to ACOs on three occasions. ACOs receive a Preliminary Historical Benchmark Report shortly after the start of the ACO’s agreement period. A Final Historical Benchmark Report is produced after the end of the first quarter of the ACO’s agreement period. This allows for the three-month claims run-out period from the end of the third benchmark year as required by program regulations. An Adjusted Historical Benchmark Report is produced at the start of subsequent performance years during the agreement period if the ACO makes changes to its participant list for that performance year. The Financial Reconciliation and Quality Performance Reports are produced annually about six months after the end of each performance year, which allows for three-month claims run out as required under the program’s regulation. An ACO can request to receive monthly claims and claims line feed files for a beneficiary it has notified about data.
sharing and the beneficiary’s opportunity to decline sharing data with ACOs (as required under the program’s regulations).

The Assignment List Report contains a list of beneficiaries assigned to the ACO based on Medicare claims data from the 12-month time period used for the report. The report contains beneficiary name, age, sex, identification number, and date of death (if applicable), and identifies the ACO physician practices and individual physicians from which the beneficiary received the largest number of primary care services during the assignment period. The report also identifies why beneficiaries assigned in the most recent prior report are no longer assigned to the ACO. In addition, this report provides ACOs with information that can be used to identify and contact their assigned beneficiaries.

The Assignment Summary Report provides information on assigned beneficiaries, including the percentage of the ACO’s total patients who were assigned; the number assigned in Steps 1 and 2; the proportion of primary care services provided by the ACO; the number of primary care visits with the ACO; and the enrollment type, hospice use, age and sex distribution, and diagnosis frequency. This report also identifies counties in the ACO’s service area and shows the distribution of assigned beneficiary residence across the service area counties.

The Expenditure/Utilization Report provides information on the ACO’s assigned beneficiaries compared to median all-ACO and national Medicare fee-for-service benchmarks. Information provided includes person years and expenditures by enrollment type; components of total expenditures (e.g., hospital inpatient, hospital outpatient, physician, home health); care coordination measures, such as readmission rates; and other medical care utilization rates, such as hospital discharges, primary care visits, and emergency department visits. Using this report, ACOs can trend their cost and utilization performance versus benchmarks on a quarterly basis.

The Historical Benchmark Report shows the determination of an ACO’s three-year historical average benchmark expenditures. The assigned beneficiary annualized per capita expenditures for each Medicare enrollment type are presented for each benchmark year. The risk scores and risk ratios as well as national expenditures used in weighting and trending forward expenditures for each enrollment type by year are provided along with the enrollment type proportions and finally, the resulting historical benchmark value.

The Financial Reconciliation Report shows the determination of an ACO’s annual financial performance. The calculation from the underlying data of the ACO’s historical benchmark, updated (performance year) benchmark, and shared savings and losses (if any) are detailed. Supplemental tables report the development of the risk adjustment and national expenditure trend factors for the historical and updated benchmarks, as well as the determination of the ACO’s minimum savings requirement.

The Quality Performance Report conveys information on an ACO’s performance year quality performance, culminating in each ACO’s summary Quality Score. This report shows how an ACO’s summary quality performance score is built up from ACO performance on individual quality measures relative to benchmarks, aggregated into domains, and then summarized into a single score. Points
earned out of total possible points are shown by individual measure and by domain. For comparison, mean, median, 30th percentile, and 90th percentile of ACO rates are shown. Numerators and denominators that are used to compute individual performance measures are reported, as applicable.

ACOs are provided with Medicare claims line feeds on a monthly basis, according to the ACOs’ requests for these data and accounting for beneficiaries’ data sharing preferences (including declining to share their data with ACOs). This feed provides claim-level detail on beneficiary utilization of services and expenditures, including beneficiary and provider identifiers, types and dates of service, diagnoses, and claim payment amounts. Prescription drug (Part D) claims are included, even though they are not part of an ACO’s shared savings calculation. Beneficiary demographics/enrollment information are also provided. Substance abuse treatment claims for all beneficiaries are excluded. Using the data in this feed, ACOs can perform detailed, customized monitoring and reporting to support their care coordination efforts.

In addition to reports, CMS supports ACOs with about 50 webinars, webcast, and web-based training opportunities each year. Topics included details on the reports ACOs receive, an overview of financial reconciliation, technical support for quality measure data collection, guidance on how to use the claims line feeds, and an “open mic” (participant-led question/discussion session). Detailed specification manuals for the ACO programs are posted on CMS’ website. To further support the Shared Savings Program ACOs, a web portlet, accessible through the CMS web portal, has been developed to share helpful program-related information. 37

Endnotes

11 The number of ACOs and their assigned beneficiaries are from http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/All-Starts-MSSP-ACO.pdf for 2015. The percentage of ACO in total Medicare fee-for-service beneficiaries is derived from the estimate of slightly less than 33 million persons were enrolled in fee-for-service Medicare Part B (Supplementary Medical Insurance) in 2012 from http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2013_Section2.pdf#Table2.1. Enrollment in both Medicare Parts A and B is required for ACO beneficiary assignment, and almost all Part B enrollees are also enrolled in Part A.


13 http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/All-Starts-MSSP-ACO.pdf. Accessed May 18, 2015. ACOs are considered active in a state if their service area contains at least one county in the state. An ACO can be active in more than one state.


21 Such as in a partnership, in a joint venture, or as an employer of ACO professionals.


25 Some have questioned whether post-acute care evaluation and management codes should be included in Medicare ACO assignment, because they shift some patients from the physician group providing their outpatient primary care to a different group providing their inpatient post-acute care. See McWilliams, J. M., Chernew. M. E., Zaslavsky, A. M., & Landon, B.E. (2013). Post-acute care and ACOs—Who will be accountable? Health Services Research, 48(4), pp. 1526–1538.

26 Medicare Advantage and other Medicare health plans are private insurer plans enrolling Medicare beneficiaries, often called managed care plans.


28 An alternative would be to use regional or local reference expenditure trends.

29 Beneficiaries who were not assigned but had a visit to an ACO provider in the previous are also counted as continuously assigned.
To the extent that ACOs invest in care coordination infrastructure, ACOs are in effect at risk for these investment costs. The minimum savings requirement is also a flat 2% of the benchmark in Track 2. Because Track 2 ACOs assume downside risk, it is not necessary to give the Medicare program extra protection from the greater random variability of smaller ACOs’ expenditures through a higher minimum savings requirement for smaller ACOs.


The SSP ACO Portlet is a web-accessible application, which will allow users to view programmatic information, such as announcements and calendar events, and access select ACO-specific reports.

**Disclaimer:** RTI International is the Accountable Care Organization (ACO) Program Analysis Contractor for the Medicare Shared Savings Program and Pioneer ACO Model, under contract to the Centers for Medicare & Medicaid Services (CMS). This Policy Brief was supported by internal RTI funding, was not produced under contract with CMS, and does not necessarily reflect the views or policies of CMS. This Policy Brief relies only on publicly available information. RTI assumes responsibility for any interpretations, errors, or omissions.

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