



Report to the Ranking Member,  
Committee on Ways and Means, House  
of Representatives

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April 2015

# MEDICARE

## Results from the First Two Years of the Pioneer Accountable Care Organization Model

# GAO Highlights

Highlights of [GAO-15-401](#), a report to the Ranking Member, Committee on Ways and Means, House of Representatives

## Why GAO Did This Study

ACOs were established in Medicare to provide incentives to physicians and other health care providers to better coordinate care for beneficiaries across care settings such as doctors' offices, hospitals, and skilled nursing facilities. The Pioneer ACO Model was established as a result of the Patient Protection and Affordable Care Act of 2010 creating CMMI in CMS to test new models of service delivery in Medicare. Thirty-two ACOs joined the model in 2012, the first year. Under the model, CMS rewards ACOs that lower their growth in health care spending while meeting performance standards for quality of care.

GAO was asked to review the results of the Pioneer ACO Model and CMS's oversight of the ACOs. In this report GAO (1) describes the financial and quality results for the first two years of the model and (2) examines how CMS oversees and evaluates the model.

To do this work, GAO analyzed data from CMS on the financial and quality results for each ACO for 2012 and 2013 (the first two years of the model). GAO analyzed ACOs' expenditures, spending benchmarks, the amount of shared savings and losses, and payment amounts for shared savings or losses. GAO also reviewed relevant laws, regulations, and documents describing CMS's oversight and evaluation role and interviewed CMS officials about the agency's oversight and evaluation activities.

View [GAO-15-401](#). For more information, contact Kathleen M. King at (202) 512-7114 or [KingK@gao.gov](mailto:KingK@gao.gov).

April 2015

## MEDICARE

### Results from the First Two Years of the Pioneer Accountable Care Organization Model

## What GAO Found

Health care providers and suppliers voluntarily form accountable care organizations (ACO) to provide coordinated care to patients with the goal of reducing spending while improving quality. Within the Centers for Medicare & Medicaid Services (CMS), the Center for Medicare & Medicaid Innovation (CMMI) began testing the Pioneer ACO Model in 2012. Under this model, ACOs can earn additional Medicare payments if they generate savings, which are shared with CMS, but must pay CMS a penalty if their spending is higher than expected. ACOs must report quality data to CMS annually and meet quality performance standards.

GAO found that fewer than half of the ACOs earned shared savings in 2012 and in 2013, although overall the Pioneer ACO Model produced net shared savings in each year. Specifically,

- Forty-one percent of the ACOs produced \$139 million in total shared savings in 2012, and 48 percent produced \$121 million in total shared savings in 2013.
- In 2012 and 2013 CMS paid ACOs \$77 million and \$68 million, respectively, for their shared savings.
- The Pioneer ACO Model produced net shared savings of \$134 million in 2012 and \$99 million in 2013.

GAO also found that ACOs that participated in both years had significantly higher quality scores in 2013 than in 2012 for 67 percent of the quality measures.

CMS oversees the use of Medicare services by beneficiaries receiving their care from ACOs and the quality of care that ACOs provide, consistent with the contract between CMS and ACOs and CMS regulation, and has reported publicly on findings from its evaluation of the model. CMS reviews reports on each ACO's service use, expenditures, and quality performance and investigates complaints about ACOs. As of February 2015, CMS officials said the agency had investigated two potentially discrepant trends in service use. CMS determined that one ACO did not meet the quality performance standards in 2013, and, as a result, CMS is requiring it to implement an action plan to ensure future compliance. Based on its monitoring efforts, CMS has no substantiated evidence suggesting that beneficiary care has been compromised, as of February 2015. CMS reported publicly on its evaluation findings, as provided for by law, in 2013. CMS included in this initial report findings related to Medicare service use and expenditures and ACO characteristics—two of the eight research areas that it established for the evaluation. CMS officials told GAO that the agency has shared preliminary findings within CMS for five of the six remaining areas and that it plans to report publicly on additional findings in 2015.

In commenting on a draft of this report, the Department of Health and Human Services (HHS) emphasized the overall goal of the Pioneer ACO Model. HHS also provided technical comments that GAO incorporated as appropriate.

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## Abbreviations

ACO	accountable care organization
CMMI	Center for Medicare & Medicaid Innovation
CMS	Centers for Medicare & Medicaid Services
HHS	Department of Health and Human Services
MedPAC	Medicare Payment Advisory Commission
MSSP	Medicare Shared Savings Program
SNF	skilled nursing facility

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April 22, 2015

The Honorable Sander M. Levin  
Ranking Member  
Committee on Ways and Means  
House of Representatives

Dear Mr. Levin:

Medicare beneficiaries often receive care from multiple unrelated providers. Such fragmented care can result in higher costs when duplicative services are provided, and in lower quality for example, when beneficiaries experience poor transitions between settings—including doctors' offices, hospitals and nursing homes. Further, Medicare payments are not generally linked to improving care coordination and quality outcomes.<sup>1</sup> Accountable care organizations (ACO) are organizations of health care providers and suppliers that come together voluntarily to provide coordinated care to a defined group of patients with the goal of reducing spending while improving quality. ACOs that accomplish these goals may receive additional payments from Medicare, and ACOs that are successful in coordinating the care of Medicare beneficiaries and reducing costs could help slow the growth in Medicare spending while improving quality.

The Patient Protection and Affordable Care Act created the Center for Medicare & Medicaid Innovation (CMMI) within the Centers for Medicare & Medicaid Services (CMS) to test innovative payment and service delivery models to reduce Medicare and Medicaid program expenditures while preserving or enhancing the quality of care.<sup>2</sup> Under this authority, CMMI is testing the Pioneer ACO Model, in which ACOs can earn additional Medicare payments if they achieve savings for Medicare and meet quality performance targets, but are penalized for poor performance by having to pay CMS a penalty if their spending is higher than expected.

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<sup>1</sup>However, beginning in fiscal year 2013, the Centers for Medicare & Medicaid Services (CMS) decreased its payments to some acute care hospitals that provided a lower quality of care to beneficiaries under CMS's Hospital Value-Based Purchasing Program.

<sup>2</sup>Pub. L. No. 111-148, §§ 3021(a), 10306, 124 Stat. 119, 389, 939 (2010) (adding § 1115A to the Social Security Act); (codified at 42 U.S.C. § 1315a).

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Beginning in 2012, CMS contracted with 32 ACOs to provide services to Medicare beneficiaries for a 3-year period as part of the Pioneer ACO Model. In the first year of the model, Pioneer ACOs provided services to approximately 670,000 beneficiaries. Beneficiaries may continue to obtain Medicare services from providers not participating in the model.

There is debate among health policy analysts and other stakeholders about the potential for ACOs, including those in the Pioneer ACO Model, to achieve significant savings for the Medicare program. For example, some health policy analysts and other stakeholders believe that the Pioneer ACO Model has the potential to achieve significant savings and improvements in quality over time, as demonstrated by early successes of certain Pioneer ACOs. In contrast, others have expressed concern that some Pioneer ACOs have increased Medicare spending more than expected, and that the model may not be sustainable since, as of December 2014, 13 of the original 32 Pioneer ACOs had withdrawn. In addition, some health policy analysts have raised concerns that some ACOs may be restricting Medicare beneficiaries' access to necessary services that are expensive, or avoiding beneficiaries with greater health care needs altogether, in order to reduce expenditures.

CMS is responsible for overseeing Medicare beneficiaries' use of services in the Pioneer ACO Model and ACOs' compliance with the model's quality-of-care standards, as broadly defined in the contract between CMS and Pioneer ACOs and in applicable regulation. Under applicable law, CMS is also responsible for evaluating the model's effect on expenditures and quality performance results and making the evaluation findings available to the public in a timely manner.

You asked us to describe the results of the Pioneer ACO Model and the oversight that CMS provides of the ACOs participating in the model. In this report, we (1) describe the financial and quality performance results for the first two years of the Pioneer ACO Model and (2) examine how CMS oversees and evaluates the Pioneer ACO Model.

To describe the financial and quality performance results for the first two years of the Pioneer ACO Model, we analyzed 2012 and 2013 CMS data for each ACO in the model. These data were the most recently available data at the time of our analysis. We used these data to determine the number of ACOs that had savings or losses shared with Medicare and the average amount and range of shared savings or losses for each year, and whether the ACO continued to participate in the model. We analyzed the average amount and range of payments that CMS made to ACOs

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based on their shared savings and the average amount and range of payments that ACOs made to CMS for their shared losses, for each year. We also analyzed ACOs' total quality scores and their actual and expected expenditures per Medicare beneficiary for each year. We also used these data to compare ACOs' scores for the individual quality measures in the first year to ACOs' scores in the second year for the ACOs that participated in the model both years. To determine whether the differences we observed in quality scores were statistically significant, we used the Wilcoxon signed-rank test, a nonparametric statistical test.<sup>3</sup> We reviewed the CMS data for reasonableness and consistency, including screening for outliers. We also reviewed documentation about the CMS data and spoke with CMS officials about steps taken to ensure data reliability. Based on this review, we determined that the data used in this report were sufficiently reliable for our purposes.

To examine how CMS oversees and evaluates the Pioneer ACO Model, we reviewed relevant laws, regulations, and documents describing CMS's oversight and evaluation responsibilities and activities, and we interviewed CMS officials. The documents we reviewed included CMS's Pioneer ACO Model Innovation Agreement, which provides the template for contracts between CMS and each ACO and outlines CMS's oversight role. We also reviewed an agency plan for evaluating the model, which includes the evaluation's research areas, objectives, and study design, as well as reports that describe findings from CMS's evaluation of the model. We interviewed CMS officials to obtain information about the agency's ongoing and planned oversight and evaluation activities. We focused on CMS's oversight of beneficiaries' use of Medicare services and the quality of care that ACOs provide to beneficiaries, as well as CMS's progress in publicly reporting information about the evaluation results.

We conducted this performance audit from December 2014 to April 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings based on our audit objectives.

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<sup>3</sup>We used the Wilcoxon signed-rank test because the differences in ACOs' scores from the first to second year were not normally distributed for some of the quality measures.

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## Background

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### Timeline and Goal of Pioneer ACO Model

The Pioneer ACO Model's overall goal is to improve the delivery of Medicare services by reducing expenditures while preserving or enhancing the quality of care for patients. Beginning in 2012, CMS contracted with ACOs for a 3-year period and subsequently offered a 2-year contract extension to ACOs that completed the first three years.<sup>4</sup> The ACOs are expected to meet the goal of the model, in part, by coordinating the care they provide to Medicare beneficiaries and engaging beneficiaries in their own care. CMS designed the model for organizations with experience in providing coordinated care to beneficiaries at a lower cost to Medicare. Another goal of the Pioneer ACO Model is to help inform potential future changes to the agency's permanent ACO program, the Medicare Shared Savings Program (MSSP), which began about 3 months after the Pioneer ACO Model. MSSP ACOs share less financial risk with CMS than Pioneer ACOs, as many are not responsible for paying CMS for any losses that they may generate during their contract period.

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### Pioneer ACO Model Participation Requirements

CMS established eligibility requirements for participation in the Pioneer ACO Model through the request for applications and the contract between CMS and Pioneer ACOs. The requirements include the following:

- **Organizational structure.** ACOs must be structured to allow the organization to partner with groups of providers including ACO professionals such as physicians or physician assistants, to accept joint responsibility for the cost and quality-of-care outcomes for a specified group of patients. For example, ACOs may be structured as ACO professionals in a group practice or as partnerships between ACO professionals and hospitals.
- **Care improvement plan.** ACOs must implement a care improvement plan, as they described in their applications. These plans include a range of care strategies such as providing remote patient monitoring to beneficiaries with chronic illnesses and engaging beneficiaries through shared decision making.

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<sup>4</sup>As of February 2015, the 19 Pioneer ACOs that participated in the first three years are participating in the fourth year, according to CMS officials.



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- **Beneficiary protections.** ACOs must ensure that their providers and suppliers make all Medicare-covered services available to beneficiaries and that they do not inhibit beneficiaries' freedom of choice to obtain health services from providers or suppliers not participating in the model. The ACOs annually provide CMS with a list of the providers and suppliers that have elected to participate as Pioneer providers or suppliers.
  - **Quality performance standards.** ACOs must completely and accurately report quality data annually to CMS for 33 measures that address four quality domains.<sup>5</sup> The four domains are (1) patient experiences of care, (2) care coordination and patient safety, (3) preventive health care, and (4) disease management for at-risk populations, such as beneficiaries with diabetes.<sup>6</sup> ACOs must also meet performance standards for quality. In the first year (2012), CMS defined the quality performance standard as completely and accurately reporting all of the quality measures, regardless of the ACO's scores on the measures. Beginning in 2013, CMS required that ACOs score a minimum level for at least 70 percent of the quality measures within each of the four quality domains. CMS determined a minimum performance level for each quality measure, based on performance benchmarks.<sup>7</sup> The same performance benchmarks for quality apply to all participating ACOs.

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<sup>5</sup>The quality measures, most of which are nationally endorsed, are based on several data sources, such as Medicare claims and beneficiary surveys.

<sup>6</sup>CMS defines the term at-risk beneficiary as meaning, but not limited to, a beneficiary who (1) has a high risk score on the CMS Hierarchical Condition Category risk adjustment model; (2) is considered high cost by having two or more hospitalizations or emergency room visits each year; (3) is dually eligible for Medicare and Medicaid; (4) has a high utilization pattern; (5) has one or more chronic conditions; (6) has had a recent diagnosis that is expected to result in increased cost; (7) is entitled to Medicaid because of disability; or (8) is diagnosed with a mental health or substance abuse disorder. See 42 CFR 425.20.

<sup>7</sup>CMS established the performance benchmarks by using available and applicable Medicare fee-for-service data. The minimum performance level corresponds to the 30th percentile for each measure.

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## CMS's Oversight and Evaluation Responsibilities

CMS's oversight and evaluation responsibilities are broadly defined in the contract between CMS and the Pioneer ACOs and in regulation.<sup>8</sup> CMS is responsible for monitoring beneficiary service use and investigating any unusual service use patterns to assess, for example, whether ACOs may be compromising beneficiary care. CMS is also responsible for monitoring whether ACOs may be avoiding at-risk beneficiaries. CMS may use a range of methods to conduct this monitoring, including analyzing beneficiary and provider complaints, and may investigate patterns suggesting that an ACO has avoided at-risk beneficiaries. In addition, CMS's oversight role includes monitoring ACOs' compliance with the quality performance standards. CMMI's Seamless Care Models Group is responsible for carrying out the agency's oversight responsibilities for the model.

CMS is responsible for conducting an evaluation of the model's financial and quality performance results and making the evaluation findings available to the public in a timely manner.<sup>9</sup> CMS hired a contractor to conduct the evaluation and has chosen to focus the evaluation on eight research areas, based on a conceptual model outlining the pathways in which various factors can affect ACO performance results.<sup>10</sup> The eight research areas are (1) Medicare service use and expenditures, (2) unintended consequences of ACOs, (3) beneficiary access to care, (4) ACOs' care coordination activities, (5) quality of care, (6) health care markets served by ACOs, (7) ACO characteristics, and (8) ACO attrition.<sup>11</sup>

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<sup>8</sup>See 42 C.F.R. § 425.316 (2013).

<sup>9</sup>See 42 U.S.C. § 1315a(b)(4). The law does not specify a timeline for making these findings available to the public. Under this provision, CMS is responsible for evaluating models to test innovative payment and service delivery, such as the Pioneer ACO Model. Taking into account the evaluation findings, the Secretary of Health and Human Services may expand the duration and scope of the Pioneer ACO Model.

<sup>10</sup>To conduct the evaluation, the CMS contractor is analyzing several data sources, including Medicare claims, beneficiary surveys, and case studies with participating ACOs. According to CMS officials, the evaluation is designed to examine the model's effect on expenditures and quality compared to the absence of an intervention, and the payment model is designed to compare expenditures and quality to specific targets.

<sup>11</sup>Each area has one or more research objectives. For example, under the research area of ACO characteristics, the CMS contractor will examine whether features of ACOs' administration and structure (e.g., ACO organization type) are related to ACOs' financial and quality performance results.

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## Beneficiary Alignment and Medicare Expenditures in the Pioneer ACO Model

Medicare beneficiaries are assigned by CMS to Pioneer ACOs based on their prior use of primary care services. CMS refers to this as “alignment.” ACOs are responsible for the annual expenditures of their aligned beneficiaries.<sup>12</sup> CMS determines through an analysis of Medicare claims data which beneficiaries have received the plurality of their primary care services from primary care providers affiliated with an ACO in the prior three years.<sup>13</sup> The ACO’s financial performance is based on the annual expenditures of its aligned beneficiaries for services covered by Medicare Parts A and B, which include hospital stays, outpatient services, physician visits, and skilled nursing facility (SNF) stays. To assess financial performance, CMS includes the expenditures for services provided by the ACO as well as by non-ACO Medicare providers since aligned beneficiaries may continue to obtain services from providers that are not affiliated with the ACO.

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## Pioneer ACO Model Payment Arrangements

Pioneer ACOs chose one of five payment arrangements with CMS that specified the type of risk sharing and the sharing rates, that is, the percentage of savings or losses that the ACO shared with CMS. The type of risk sharing is one- or two-sided. Under one-sided risk sharing, the ACO may receive a payment from CMS if it generates a minimum amount of savings but does not owe CMS a payment if it generates losses.<sup>14</sup> In comparison, an ACO owes CMS a payment if it generates a minimum amount of losses under two-sided risk sharing, and is eligible to receive a payment from CMS if it produces savings. Four of the five arrangements required two-sided risk sharing in the first and second years; the other arrangement allowed for one-sided risk sharing, but only in the first year. Half of the ACOs (16 of 32) that participated in the first year selected the arrangement with one-sided risk sharing in the first year, and half (16 of 32) selected arrangements with two-sided risk sharing. The sharing rate specifies the maximum amount of savings that the ACO can share with

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<sup>12</sup>CMS has other alignment requirements, such as the requirement that the beneficiary cannot be enrolled in a Medicare Advantage plan or Medicare cannot be the secondary payer for the beneficiary.

<sup>13</sup>Beneficiaries with limited primary care services provided by primary care providers may be aligned to ACOs based on primary care services provided to them by certain types of affiliated specialists. Oncologists and cardiologists are examples of eligible specialists.

<sup>14</sup>CMS payments for savings are in addition to the Medicare fee-for-service payments that CMS makes to ACO providers for billed services.

CMS and the maximum amount of losses that the ACO may share with CMS. The sharing rates increase from the first to the second year in each of the payment arrangements.<sup>15</sup> (See table 1.)

**Table 1: Pioneer Accountable Care Organization (ACO) Model Payment Arrangements for the First Two Years**

	Payment arrangements				
	Pioneer alternative 1	Pioneer core option a	Pioneer alternative 2 <sup>a</sup>	Pioneer core <sup>a</sup>	Pioneer core option b
	<b>First year (2012)</b>				
Risk sharing	One sided	Two sided	Two sided	Two sided	Two sided
Sharing rate for savings (percentage)	50	50	60	60	70
Sharing rate for losses (percentage)	0	50	60	60	70
	<b>Second year (2013)</b>				
Risk sharing	Two sided	Two sided	Two sided	Two sided	Two sided
Sharing rate for savings and losses (percentage)	70	60	70	70	75

Source: GAO analysis of CMS data. | GAO-15-401

<sup>a</sup>While the Pioneer alternative 2 and core payment arrangements have the same sharing rates in the first and second years (60 and 70 percent, respectively), their sharing rates are not the same in the third year.

## Methodology to Determine ACOs' Shared Savings, Losses, and Final Payment

CMS determines whether each Pioneer ACO has generated savings, losses, or neither by comparing the actual expenditures for their aligned beneficiaries for each year against their spending benchmarks. Each ACO's spending benchmark is based on the baseline expenditures for the ACO's aligned beneficiaries. Specifically, the spending benchmark incorporates each ACO's actual expenditures for their aligned beneficiaries from 2009 to 2011 and the Medicare national growth rate.<sup>16</sup> CMS subtracts the ACO's expenditures for each year from the ACO's spending benchmark, and if the ACO's expenditures are lower than the benchmark by at least a minimum amount, the ACO has produced shared

<sup>15</sup>The sharing rate for savings is the same as the sharing rate for losses in all but one of the arrangements—Pioneer alternative 1. Under this arrangement, the sharing rates are different because the ACO is not responsible for any losses in the first year, and thus the sharing rate for losses is 0.

<sup>16</sup>The baseline expenditures are updated with more recent expenditures, beginning in the fourth year.

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savings. In contrast, if the ACO's expenditures exceed the benchmark by at least a minimum amount, the ACO has generated shared losses.<sup>17</sup>

CMS calculates a dollar amount for each ACO's final annual payment if the ACO generates shared savings or losses. To perform this calculation, CMS multiplies the amount of shared savings or losses by the ACO's final sharing rate. For shared savings, CMS calculates the final sharing rate by multiplying the ACO's sharing rate by its total quality score. As a result, ACOs with higher total quality scores will have higher final sharing rates for savings and thus, will receive a higher portion of any shared savings. To calculate the final sharing rate for losses, CMS first adds 40 percent to the ACO's sharing rate and then subtracts the product of the sharing rate and the ACO's total quality score.<sup>18</sup> As a result, ACOs with higher total quality scores will have lower final sharing rates for losses and thus, will owe CMS a lower portion of any shared losses. The total quality score is calculated with the 33 quality measures that the ACOs report to CMS each year. ACOs earn from 0 to 2 points for each measure, depending on their level of performance relative to the performance benchmarks CMS established. The total quality score is a percentage of the maximum number of points that an ACO can earn for the measures combined. The maximum total quality score is 100 percent.<sup>19</sup> As an example of a final sharing rate for an ACO with savings, an ACO with a sharing rate of 50 percent and a quality score of 80 percent would have a final sharing rate of 40 percent ( $0.50 \times 0.80 = 0.40$ ). In this example, CMS would pay the ACO an amount equal to 40 percent of the shared savings it generated. (See fig. 1.)

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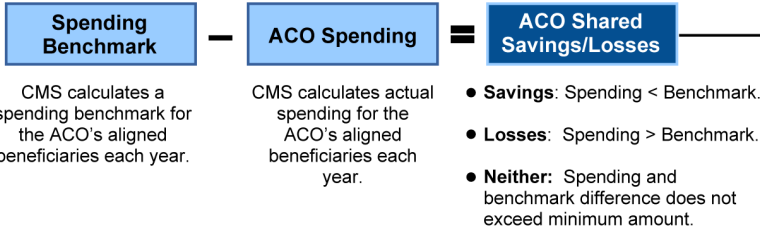
<sup>17</sup>The minimum amount of savings or losses is used to determine whether the ACO will be eligible to share in savings or will be responsible for shared losses. CMS established these minimum amounts to account for normal variation in Medicare expenditures. For example, in 2013 the minimum amounts for shared savings or losses ranged from 1 to 2 percent, depending on the ACO.

<sup>18</sup>CMS applies a ceiling to this calculation equal to the sharing rate established in the ACO's payment arrangement.

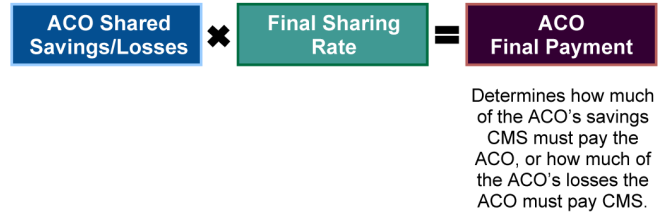
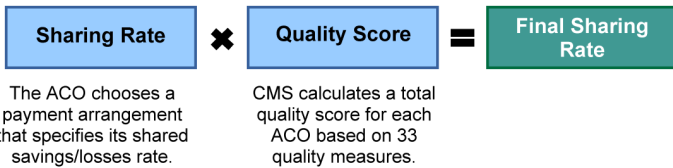
<sup>19</sup>In the first year of the model (2012), each ACO received the maximum total quality score of 100 percent for completely and accurately reporting on the 33 quality measures.

**Figure 1: Calculation of Final Payment to Accountable Care Organizations (ACO) for Shared Savings or Final Payment to CMS for Shared Losses in Pioneer ACO Model**

**Calculation of ACO Shared Savings/Losses**



**Calculation of Final Sharing Rate**



Source: GAO. | GAO-15-401

Note: To calculate the final sharing rate for losses, CMS uses the following calculation: (40 percent + sharing rate) – (sharing rate x quality score).

## Fewer Than Half of the Pioneer ACOs Earned Shared Savings, and Scores Increased for Two-Thirds of the Quality Measures

Fewer than half of the ACOs that participated in the Pioneer ACO Model in the first two years earned shared savings in each year, although the ACOs overall produced net shared savings. The 23 ACOs that participated in the model both years had significantly higher quality scores in the second year than in the first year for 67 percent of the quality measures that they reported to CMS.

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## Fewer Than Half of Pioneer ACOs Earned Shared Savings in First and Second Years, and the Pioneer ACO Model Produced Net Shared Savings

Fewer than half of the ACOs that participated in the Pioneer ACO Model in 2012 and 2013—the first two years of the model—earned savings that were shared with CMS. Of the 32 ACOs that participated in 2012, 13 (about 41 percent) produced about \$139 million in total shared savings. Of the 23 ACOs that participated in 2013, 11 (48 percent) produced about \$121 million in total shared savings.<sup>20</sup> The amount of shared savings that the 13 ACOs produced in 2012 (\$139 million) and the amount the 11 ACOs produced in 2013 (\$121 million) each represent about 4 percent of the total expenditures for the ACOs that produced shared savings in each year.<sup>21</sup> The average amount of shared savings that the ACOs produced each year was about \$11 million (per ACO with shared savings).<sup>22</sup> CMS provided payments to these ACOs for about 56 percent of the total shared savings each year. For example, in 2012, CMS paid 13 ACOs \$77 million of the \$139 million that they produced in shared savings. The average payment amount that CMS made to ACOs that produced shared savings was about \$6 million in each year.

One of the 32 Pioneer ACOs (3 percent) that participated in the first year produced losses that were shared with CMS, and 6 of the 23 participating ACOs (26 percent) produced shared losses in the second year.<sup>23</sup> The total amount of shared losses that the ACO produced in 2012 was \$5.1 million, and in 2013 the 6 ACOs produced about \$23 million in total shared losses.<sup>24</sup> On average, ACOs with shared losses in 2013 produced \$3.8 million each in shared losses, with a range from \$2.2 million to \$6.3 million. In 2013, ACOs with shared losses paid or are expected to pay CMS about \$11 million, an amount equal to about 48 percent of the

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<sup>20</sup>In addition to the 9 ACOs that did not participate in 2013, 4 other ACOs have subsequently left the model, for a total of 13 ACOs that no longer participate, as of February 2015. Eight of the 13 ACOs that left the model have transitioned, or plan to transition, to the MSSP.

<sup>21</sup>Each year the shared savings represent about 2 percent of the ACOs' expenditures when comparing the amount of shared savings to the expenditures for all of the ACOs that participated in each year.

<sup>22</sup>Of the 11 ACOs with shared savings in 2013, 9 also earned shared savings in 2012.

<sup>23</sup>As stated earlier, half of the ACOs participated in one-sided risk sharing in the first year.

<sup>24</sup>One ACO generated shared losses in both years of the model.

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\$23 million in shared losses that they produced.<sup>25</sup> The remaining ACOs did not produce shared savings or shared losses in either year. Eighteen of the 32 ACOs (56 percent) did not produce shared savings or losses in 2012.<sup>26</sup> Six of the 23 ACOs (26 percent) did not have shared savings or losses in 2013. (See table 2.)

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<sup>25</sup>Three ACOs deferred reconciliation for the second year until the third year and will owe CMS for shared losses after CMS reconciles the second and third year results, according to CMS officials.

<sup>26</sup>All 9 of the Pioneer ACOs that did not participate in the model in 2013 did not produce shared savings or losses in 2012. Most of these ACOs (8 of 9) had a one-sided risk sharing arrangement, and their financial results show that most would have had shared losses had they chosen to participate in a two-sided risk sharing arrangement.



**Table 2: Financial Results for the Pioneer Accountable Care Organization (ACO) Model's First and Second Years**

	First year (2012)	Second year (2013)
<b>ACOs with shared savings</b>		
Number of ACOs with shared savings	13	11
Total amount of shared savings (dollars in millions)	138.8	121.3
Average amount of shared savings (dollars in millions)	10.7	11.0
Range of amount of shared savings (dollars in millions)	1.7 – 23.3	2.0 – 24.6
Total amount of savings CMS paid to ACOs (dollars in millions)	77.3	67.8
Average amount of savings CMS paid to ACOs (dollars in millions)	5.9	6.2
Range of amount of savings CMS paid to ACOs (dollars in millions)	1.0 – 14.0	1.2 – 13.4
Average total quality score factored into CMS payment to ACOs (percentage)	100	84.0
Range of total quality scores factored into CMS payment to ACOs (percentage)	n/a <sup>a</sup>	71.5 - 94.1
<b>ACOs with shared losses</b>		
Number of ACOs with shared losses	1	6 <sup>b</sup>
Total amount of shared losses (dollars in millions)	5.1	22.7 <sup>c</sup>
Average amount of shared losses (dollars in millions)	n/a <sup>a</sup>	3.8 <sup>c</sup>
Range of amount of shared losses (dollars in millions)	n/a <sup>a</sup>	2.2 – 6.3 <sup>c</sup>
Total amount of losses ACOs paid to CMS (dollars in millions)	2.5	10.9 <sup>d</sup>
Average amount of losses ACOs paid to CMS (dollars in millions)	n/a <sup>a</sup>	1.8 <sup>d</sup>
Range of losses ACOs paid to CMS (dollars in millions)	n/a <sup>a</sup>	1.0 – 2.9 <sup>d</sup>
Average total quality score factored into ACO payment to CMS (percentage)	n/a <sup>a</sup>	87.8
Range of total quality scores factored into ACO payment to CMS (percentage)	n/a <sup>a</sup>	81.1 - 91.2
<b>ACOs with neither shared savings nor shared losses</b>		
Number of ACOs with no shared savings or losses <sup>e</sup>	18	6

Source: GAO analysis of CMS data. | GAO-15-401

<sup>a</sup>For ACOs with shared savings, the range of total quality scores for 2012 is not applicable because all ACOs received a quality score of 100 percent for the purpose of calculating sharing savings. For ACOs with shared losses, the averages and ranges for shared losses, amount of losses ACOs paid to CMS, and total quality scores in 2012 are not applicable because only one ACO had shared losses.

<sup>b</sup>Three ACOs deferred reconciliation for their second year results until the third year and will owe CMS for losses after CMS reconciles their second and third year results. We included these three ACOs in the shared losses group because they produced shared losses in the second year, according to CMS officials.

<sup>c</sup>We included the amount of expected shared losses for the three ACOs that deferred reconciliation until the third year.

<sup>d</sup>We included the amount of expected payments for the three ACOs that deferred reconciliation until the third year.

<sup>e</sup>The expenditures for these ACOs were not below or above their spending benchmarks by the minimum amount that CMS required to receive or owe a payment.

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Overall, the Pioneer ACO Model produced net shared savings in each year when comparing the total amount of shared savings to the total amount of shared losses. Pioneer ACOs produced net shared savings of about \$134 million in 2012 and this amount reflects about 2 percent of the total expenditures for all 32 ACOs that participated in 2012.<sup>27</sup> In 2013, the ACOs produced a net shared savings of about \$99 million, and this amount reflects about 1.4 percent of the total expenditures for the 23 ACOs that participated in 2013.<sup>28</sup>

ACOs with higher levels of prior spending likely had more capacity for achieving cost savings in the first two years of the model, for example, by reducing unnecessary services. As part of our analysis, we compared the average expected expenditures—that is, the spending benchmarks—for the Pioneer ACOs that achieved shared savings to the average expected expenditures for those ACOs that did not produce shared savings. As stated earlier, each ACO's spending benchmark in the model is partially based on the ACO's historical spending. In each year, we observed that the ACOs with shared savings had average expected expenditures that were about \$1,100 higher, per beneficiary, compared to those ACOs that did not generate shared savings, absent other differences. For example, in 2013 the average expected expenditures for the 11 ACOs with shared savings (\$12,426) was \$1,160 higher, per beneficiary, than the average expected expenditures for the 12 ACOs without savings (\$11,266). (See fig. 2). The Medicare Payment Advisory Commission (MedPAC) noted that basing ACO spending benchmarks on historical spending allows ACOs with higher spending to achieve savings early in an ACO program

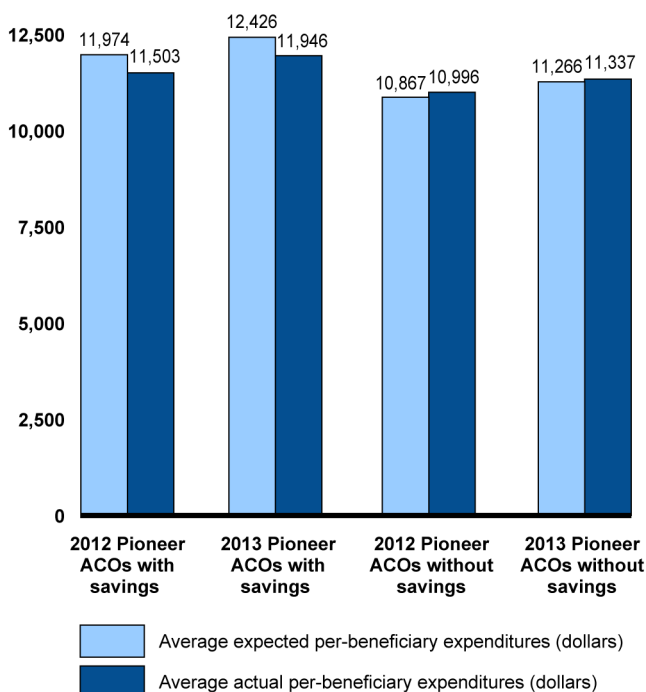
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<sup>27</sup>To calculate net shared savings in 2012, we subtracted the total amount of shared losses (\$5.1 million) from the total amount of shared savings (\$138.8 million).

<sup>28</sup>To calculate net shared savings in 2013, we subtracted the total amount of shared losses (\$22.7 million) from the total amount of shared savings (\$121.3 million).

but places lower-spending ACOs at a relative disadvantage because they are less likely to achieve savings.<sup>29</sup>

**Figure 2: Expected and Actual Expenditures (per Beneficiary) for Pioneer Accountable Care Organizations (ACO) with and without Shared Savings, in First and Second Years**



Source: GAO analysis of CMS data. | GAO-15-401

Notes: Pioneer ACOs with shared savings include ACOs that generated enough savings to receive payment from CMS. Pioneer ACOs without shared savings include ACOs that generated shared losses and paid CMS for part of their losses, deferred reconciliation to the third year, or did not generate the minimum amount of savings or losses required to receive payment from CMS or pay CMS.

<sup>29</sup>See MedPAC, *Report to the Congress: Medicare and the Health Care Delivery System* (Washington, D.C.: June 2014). Similar to the benchmark calculation for the Pioneer ACO Model, the MSSP benchmark is based on ACOs' historical spending and the national Medicare growth rate. CMS is currently seeking comments on alternative methodologies for calculating the MSSP benchmark. For example, CMS seeks comment on transitioning to the use of regional spending data to make ACO benchmarks gradually more independent of an ACO's past performance and more dependent on an ACO's success in being more cost efficient relative to its local market. See Medicare Shared Savings Program: Accountable Care Organizations (proposed rule, preamble, II.F.6.b.), 79 Fed. Reg. 72760, 72836 (Dec. 8, 2014).

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In addition to having higher spending benchmarks, Pioneer ACOs that achieved shared savings had somewhat higher actual expenditures in 2012 and in 2013 when compared to the ACOs that did not produce shared savings. For example, in 2013 the average actual expenditures, per beneficiary, for the 11 ACOs with shared savings (\$11,946) was approximately \$600 higher than the average expenditures for the 12 ACOs without shared savings (\$11,337), absent other differences. (See fig. 2.)

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### ACOs Had Significantly Higher Quality Scores in the Second Year for Two-Thirds of the Quality Measures

The 23 ACOs that participated in the Pioneer ACO Model in both 2012 and 2013 had significantly higher quality scores in the second year than in the first year for two-thirds of the quality measures (22 of the 33, or 67 percent) that they reported to CMS.<sup>30</sup> We observed significantly higher scores for measures in each of the four quality domains: (1) patient experiences of care; (2) care coordination and patient safety; (3) preventive health care; and (4) disease management for at-risk populations. ACOs demonstrated the most improvement in the disease management for at-risk populations' domain. That is, we found that the ACOs had higher scores in 2013 than in 2012 for 83 percent of the measures (10 of the 12) in this domain.<sup>31</sup> For example, ACOs increased the percentage of beneficiaries with a diagnosis of hypertension whose blood pressure was adequately controlled, from about 65 percent in 2012 to 74 percent in 2013. We observed no significant differences between ACOs' scores in 2012 and 2013 for 10 of the 33 quality measures (30 percent), but we found a statistically significant decline in quality for one measure. Specifically, the rate of hospital admissions for beneficiaries with congestive heart failure was higher in 2013 than in 2012.<sup>32</sup> Table 3 shows the average quality scores in 2012 and 2013 and the quality measures for which we observed significant differences in

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<sup>30</sup>We excluded from our comparison the 2012 quality scores for the nine ACOs that did not participate in the model in 2013.

<sup>31</sup>Five of the 12 individual measures in the at-risk populations' domain make up a composite measure for diabetes, and 2 of the 12 individual measures make up a composite measure for coronary artery disease.

<sup>32</sup>The 9 ACOs that did not participate in the model both years had statistically similar quality scores in 2012 for most of the quality measures (25 of 33) compared to the 23 ACOs that participated both years. The quality scores were not used to calculate final payment in 2012.

scores from 2012 to 2013. (See app. I for a summary of the distribution of quality scores in 2012 and 2013.)

**Table 3: Average Scores for Individual Quality Measures among the 23 Pioneer Accountable Care Organizations (ACO) That Participated in 2012 and 2013, by Quality Domain**

Description of measure	Average score in first year (2012)	Average score in second year (2013)	Difference between 2013 and 2012
<b>Patient experiences of care<sup>a</sup></b>			
Patient ratings about getting timely care, appointments, and answers to medical questions from providers (scored from 0 to 100)	81.5	81.6	0.1
Patient ratings about how well providers communicate (scored from 0 to 100)	92.9	93.0	0.1
Patient overall ratings of providers (scored from 0 to 100)	91.8	92.5	0.7*
Patient ratings about their access to specialists (scored from 0 to 100)	84.9	84.9	0
Patient ratings about providers promoting and educating about general and mental health (scored from 0 to 100)	57.6	59.6	2*
Patient ratings on whether providers discussed decisions about medications, surgery, and sharing personal health information with others (scored from 0 to 100)	74.3	74.0	-0.3
Patients' self-rated health and functional status (e.g., difficulty with walking) (scored from 0 to 100)	70.9	71.6	0.7*
<b>Care coordination and patient safety</b>			
Percentage of hospitalized patients readmitted within 30 days of discharge <sup>b</sup>	15.4	15.0	-0.4*
Rate of hospital admissions for patients with chronic obstructive pulmonary disease or asthma <sup>c</sup>	1.1	1.1	0
Rate of hospital admissions for patients with congestive heart failure <sup>d</sup>	1.0	1.2	0.2*
Percentage of primary care physicians who qualified for electronic health record incentive payment	70.4	77.0	6.6*
Percentage of patients whose providers reconciled their discharge medications with their current medication list	59.6	70.4	10.8
Percentage of patients screened for future fall risk	37.8	59.5	21.7*
<b>Preventive health care</b>			
Percentage of patients who received an influenza immunization	58.2	69.0	10.8*
Percentage of patients who have ever received a pneumococcal vaccine	63.2	72.1	8.9*
Percentage of patients who received a body mass index screening and follow-up plan, if required	54.0	65.1	11.1*
Percentage of patients screened for tobacco use and who received cessation intervention, if required	81.1	90.1	9*
Percentage of patients screened for depression and provided a follow-up plan, if required	25.9	49.8	23.9*

Description of measure	Average score in first year (2012)	Average score in second year (2013)	Difference between 2013 and 2012
Percentage of patients who received a colorectal cancer screening	61.5	72.0	10.5*
Percentage of female patients who had a mammogram within 24 months	68.7	71.7	3
Percentage of patients screened for high blood pressure	58.3	61.8	3.5
<b>Disease management for at-risk populations</b>			
Percentage of diabetes patients with adequately controlled blood glucose level	66.0	75.4	9.4*
Percentage of diabetes patients with adequately controlled cholesterol level	56.4	63.8	7.4*
Percentage of diabetes patients with adequately controlled blood pressure	68.4	77.2	8.8*
Percentage of diabetes patients not using tobacco	69.1	75.4	6.3*
Percentage of patients with diabetes and ischemic vascular disease using aspirin daily	78.0	83.9	5.9*
Percentage of diabetes patients with poorly controlled blood glucose level <sup>e</sup>	25.7	16.1	-9.6*
Percentage of hypertension patients with adequately controlled blood pressure	65.1	74.2	9.1*
Percentage of ischemic vascular disease patients with adequately controlled cholesterol level	55.3	62.5	7.2*
Percentage of ischemic vascular disease patients using aspirin or other antithrombotic	77.5	84.3	6.8*
Percentage of patients with heart failure and ventricular dysfunction with a prescribed beta-blocker therapy	83.1	85.1	2
Percentage of coronary artery disease patients with plan to control cholesterol, including a statin prescription	71.7	76.5	4.8*
Percentage of coronary artery disease patients who also have diabetes or ventricular dysfunction and are prescribed a cardio-protective medication	74.1	74.9	0.8

Legend: An asterisk (\*) indicates that the difference in scores is statistically significant at the 5 percent level.

Source: GAO analysis of CMS data. | GAO-15-401

Note: We used the Wilcoxon signed-rank test, a nonparametric statistical test, to determine whether the differences in quality scores from 2012 to 2013 were significantly different.

<sup>a</sup>Higher scores indicate more positive ratings of providers and better patient health status.

<sup>b</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement. This measure reflects the risk-adjusted percentage of ACO-aligned beneficiaries who were hospitalized and readmitted to a hospital within 30 days following discharge from the hospital.

<sup>c</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement. This rate reflects risk-adjusted discharges from an acute care hospital among patients with a diagnosis of chronic obstructive pulmonary disease or asthma (aged 40 years and older) per 1,000 ACO-aligned beneficiaries (aged 40 years and older).

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<sup>d</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement. This rate reflects risk-adjusted discharges from an acute care hospital among patients with a diagnosis of congestive heart failure (aged 18 years and older) per 1,000 ACO-aligned beneficiaries (aged 18 years and older).

<sup>e</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement.

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## CMS Oversees Beneficiary Service Use and Quality, and Has Reported Some of Its Evaluation Findings Publicly

CMS oversees Pioneer ACOs by monitoring the service use of their aligned beneficiaries and the quality of care provided by the ACOs, and by investigating provider and beneficiary complaints about ACOs. As provided for by law, CMS has reported its evaluation findings publicly for the first year of the Pioneer ACO Model in 2013, and these findings addressed two of the eight research areas that CMS established for the evaluation.

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## CMS Oversees Pioneer ACOs by Monitoring Beneficiary Service Use and Quality of Care, and Investigates Complaints about Them

CMS oversees Pioneer ACOs by monitoring the service use of their aligned beneficiaries, pursuant to the contract between CMS and ACOs and CMS regulation. CMS monitors beneficiaries' use of services quarterly by reviewing the expenditure and utilization reports that a CMS contractor produces for each ACO, according to CMS officials. The reports include the baseline expenditures for each ACO and expenditures by the type of services that the ACO's aligned beneficiaries have received, such as physician and SNF services. As of February 2015, CMS officials indicated that they had examined two reports about potentially discrepant trends in beneficiaries' use of services. In one case, an ACO raised a concern with CMS that its negative financial performance in the first year did not reflect the actual service use of its aligned beneficiaries. CMS investigated the service use for the beneficiaries aligned to this ACO and observed a sharp increase in expenditures during one time period. CMS officials consulted with the agency's Office of the Actuary to further investigate this trend and determined that a national claims processing error had occurred, but that the correction had not been implemented properly in the affected ACO's geographic region. CMS officials and its contractors corrected the error, and determined that the error did not affect other ACOs in the region. In the second case, an ACO stated that the service use data included in an expenditure and utilization report for the first year of the model could be inaccurate. The ACO believed the data were inaccurate because the service use in the report was higher than the service use of aligned beneficiaries as tracked by the ACO. CMS officials investigated expenditures over time and by service type for the ACO's beneficiaries,

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compared its expenditures to state and national populations, and determined that the ACO's beneficiaries had a significant increase in SNF service use. The analysis the ACO had presented to CMS included inpatient service use but not SNF use, according to CMS officials.

CMS also oversees Pioneer ACOs by monitoring their compliance with the model's quality performance standards, consistent with the contract between CMS and the ACOs and CMS regulation. CMS officials review the annual quality reports that a CMS contractor produces for each ACO, according to agency officials. The quality reports include information about the ACO's performance for each of the 33 quality measures and state whether the ACO achieved the minimum performance standard in each of the four quality domains. CMS determined that one ACO did not meet the quality performance standards in the second year of the model, because it did not meet the minimum standard in the care coordination and patient safety domain. The ACO achieved a score of 40 percent for this quality domain instead of the required minimum score of 70 percent. As a result, CMS required the ACO to submit a corrective action plan to CMS. The plan, provided to CMS in October 2014, outlines steps the ACO will take to ensure future compliance with the quality standards, according to CMS officials. CMS and the ACO discussed and reviewed the submitted corrective action plan in November 2014. CMS officials told us they also review the performance levels for the quality measures to assess whether ACOs may have compromised beneficiary care. That is, they compare the ACOs' scores to the benchmarks for each of the individual quality measures to evaluate the ACOs' performance. For example, each ACO scored over 80 out of 100 in 2013 for the measure reflecting access to specialists—such as surgeons and cardiologists. Further, each ACO's quality score fell into the two highest performance levels, according to CMS's benchmarks.

CMS also investigates complaints about Pioneer ACOs that the agency receives from Medicare beneficiaries and providers as part of its monitoring efforts. As of February 2015, CMS officials indicated that it had completed or had begun investigating three complaints. CMS has completed its investigation of a provider complaint that it received from the Department of Health and Human Services' Office of Inspector General in March 2014. In this case, according to CMS officials, a provider alleged that an ACO was inhibiting beneficiaries' choice of home health providers. CMS officials spoke with the ACO in June 2014 and determined that the complaint was unsubstantiated. CMS made this determination after the ACO demonstrated that it had comprehensive procedures in place to avoid restricting beneficiaries' choice of home



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health providers. CMS is currently investigating two other complaints, one from a beneficiary and the other from a provider. In the first case, CMS received a beneficiary complaint in August 2014 in which the beneficiary alleged that an ACO stunted on care and provided inadequate medical care. CMS officials stated that they are coordinating with representatives from a CMS regional Quality Improvement Organization and CMS's Center for Program Integrity to investigate this complaint, including conducting a full medical chart review.<sup>33</sup> In the second case, CMS is investigating a provider complaint from a SNF alleging that an ACO had placed undue pressure on the SNF to participate in the ACO. CMS officials met with the trade association that submitted the complaint on behalf of the SNF in September 2014, and a CMS contractor has initiated discussions with other SNFs that are affiliated with the ACO under investigation. Through these discussions, CMS officials indicated that they plan to determine whether the ACO misrepresented any information about the Pioneer ACO Model. CMS officials told us that they occasionally receive general queries related to Pioneer ACOs from their regional offices and have asked staff in the regional offices to investigate the queries.

Based on its monitoring efforts, CMS has no substantiated evidence suggesting that beneficiary care has been compromised, as of February 2015. For example, CMS has not determined that ACOs have stunted on the care that they provide to beneficiaries or have avoided providing care to at-risk beneficiaries.

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<sup>33</sup>CMS contracts with Quality Improvement Organizations to improve the quality of care for Medicare beneficiaries, including an appropriate review of all written quality of care concerns from beneficiaries. CMS's Center for Program Integrity serves as the focal point for fraud and abuse issues.

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## CMS Has Reported Evaluation Findings Publicly for the Pioneer ACO Model on Medicare Service Use and Expenditures and ACO Characteristics

As provided for by law, CMS has reported its evaluation findings publicly for the first year of the Pioneer ACO Model. The reported findings addressed two of the eight research areas that CMS established for the evaluation—Medicare service use and expenditures and ACO characteristics. CMS issued a public report in November 2013 that included findings related to these two research areas.<sup>34</sup> For example, CMS reported that none of the ACO characteristics it tested, such as organization type, was significantly related to an ACO's ability to reduce expenditures in the first year of the model, and that most of the ACOs that reduced expenditures had higher Medicare expenditures than their comparison groups prior to the start of the Pioneer ACO Model.<sup>35</sup> CMS planned to issue the report in the summer of 2013, and intended to include results for more of the research areas, according to agency officials. However, the release of the report was delayed until November 2013 because of delays in securing the CMS contractor's access to Medicare claims data. The delay also limited the scope of the findings for which CMS could report, according to CMS officials, and these data access issues have since been resolved.<sup>36</sup>

CMS has shared its preliminary first year findings within the agency for five of the six remaining research areas—beneficiary access to care, care coordination activities, beneficiary quality of care, health care markets, and ACO attrition—through internal reports and briefings. CMS has not reported any second year findings publicly but plans to do so in 2015.<sup>37</sup> Specifically, CMS plans to report on findings for the second year in five research areas: (1) Medicare service use and expenditures among

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<sup>34</sup>See L&M Policy Research (prepared for CMS), *Evaluation of CMMI Accountable Care Organization Initiatives: Effect of Pioneer ACOs on Medicare Spending in the First Year* (Washington, D.C.: Nov. 3, 2013).

<sup>35</sup>CMS compared the ACOs' 2011 expenditures to expenditures for the comparison groups that it established for the evaluation. The comparison groups include similar beneficiaries in the Pioneer's local market area that are not aligned. In contrast, CMS compares the expenditures of aligned beneficiaries for each Pioneer ACO to expenditures for a matched group of beneficiaries nationally to calculate shared savings and losses.

<sup>36</sup>CMS officials told us that data lags associated with the quality measures also inhibited their ability to report on first year findings related to quality. That is, CMS made the quality measures available for the evaluation after CMS factored the scores into final payments for shared savings or losses.

<sup>37</sup>In 2015, CMS also plans to report additional findings for the first year of the model. For example, CMS plans to report findings related to quality of care.

beneficiaries, (2) access to care, (3) beneficiary quality of care, (4) health care markets, and (5) ACO characteristics. CMS officials added that although they have not made such findings public, they have shared preliminary second year findings internally for five of the eight research areas and their analysis is ongoing for the other three research areas. (See table 4.)

**Table 4: Status of CMS’s Public Reporting of First and Second Year Findings of Pioneer Accountable Care Organization (ACO) Model Evaluation, by Research Area**

Research area	Description	First year findings	Second year findings
Medicare expenditures and service use	Determine whether ACOs reduce Medicare expenditures and service use for their aligned beneficiaries compared to similar beneficiaries in the ACOs’ local markets that are not aligned. If ACOs reduce expenditures and service use, examine the types of services where reductions occurred.	●	◐
Unintended consequences	Investigate whether service use patterns and quality performance indicate unintended consequences such as stinting of necessary care and avoiding at-risk beneficiaries by ACOs.	○	○
Access to care	Evaluate whether ACOs improve or enhance access to care among aligned beneficiaries, for example, with information collected from ACO site visits and surveys of beneficiaries and physicians.	◐	◐
Care coordination activities	Characterize ACO care coordination activities and compare beneficiary experiences of care coordination between ACO-aligned and non-ACO-aligned beneficiaries.	◐	○
Quality of care	Assess whether ACOs provide better quality of care, health outcomes, and patient experiences than other Medicare providers. Evaluate ACO characteristics that may facilitate better quality, such as ACOs with affiliated post-acute care providers (e.g., skilled nursing facilities).	◐	◐
Health care markets	Describe the characteristics of the health care markets in which ACOs are located and evaluate the impact of ACOs on their markets. For example, assess whether ACOs increase their market share by increasing the number of their affiliated physicians.	◐	◐
ACO characteristics	Assess the relationship between characteristics of ACOs, such as their organizational structure and strategies to achieve cost savings, and their financial and quality performance results.	●	◐
ACO attrition	Describe the characteristics of the ACOs that have left the model and their reasons for leaving. Examine the reasons why physicians end their affiliation with ACOs and why beneficiaries have left their primary care physicians and thus the ACO to which they were aligned.	◐	○

Legend: ● = CMS publicly reported, ◐ = CMS shared preliminary findings internally, ○ = analysis is ongoing.

Source: GAO analysis of CMS data. | GAO-15-401

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## Agency Comments

The Department of Health and Human Services (HHS) reviewed a draft of this report and provided written comments, which are reprinted in appendix II. In its comments HHS emphasized the Pioneer ACO Model's goal to reduce Medicare costs while providing beneficiaries better care through greater care coordination. HHS also provided technical comments, which we incorporated as appropriate.

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As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Secretary of Health and Human Services and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or [KingK@gao.gov](mailto:KingK@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix III.

Sincerely yours,



Kathleen M. King  
Director, Health Care

# Appendix I: Quality Scores for Pioneer Accountable Care Organizations (ACO) in 2012 and 2013

This appendix presents information on the distribution of scores for the 33 quality measures that 23 Pioneer ACOs reported to CMS in 2012 and 2013. (See table 5.) We used the Wilcoxon signed-rank test, a nonparametric test, to analyze the differences in ACOs' quality scores from 2012 to 2013. The signed-rank test determines whether the differences between the median scores for the 2 years are statistically significant.

**Table 5: Mean, Median, and Range of Scores for Individual Quality Measures among the 23 Pioneer Accountable Care Organizations That Participated in 2012 and 2013, by Quality Domain**

Measure	2012			2013		
	Mean score	Median score	Range of scores (minimum to maximum)	Mean score	Median score	Range of scores (minimum to maximum)
<b>Patient experiences of care<sup>a</sup></b>						
Patient ratings about getting timely care, appointments, and answers to medical questions from providers (scored from 0 to 100)	81.5	81.7	10.9	81.6	81.1	10.0
Patient ratings about how well providers communicate (scored from 0 to 100)	92.9	93.0	3.9	93.0	93.0	3.6
Patient overall ratings of providers (scored from 0 to 100)	91.8	91.9	3.4	92.5	92.4	4.0
Patient ratings about their access to specialists (scored from 0 to 100)	84.9	84.9	7.1	84.9	85.0	8.9
Patient ratings about providers promoting and educating about general and mental health (scored from 0 to 100)	57.6	58.3	16.1	59.6	60.1	12.6
Patient ratings on whether providers discussed decisions about medications, surgery, and sharing personal health information with others (scored from 0 to 100)	74.3	74.6	10.3	74.0	73.8	8.2
Patients' self-rated health and functional status (e.g., difficulty with walking) (scored from 0 to 100)	70.9	71.1	9.8	71.6	72.2	10.1
<b>Care coordination and patient safety</b>						
Percentage of hospitalized patients readmitted within 30 days of discharge <sup>b</sup>	15.4	15.3	3.5	15.0	14.8	2.4
Rate of hospital admissions for patients with chronic obstructive pulmonary disease or asthma <sup>c</sup>	1.1	1.1	.87	1.1	1.1	1.1
Rate of hospital admissions for patients with congestive heart failure <sup>d</sup>	1.0	1.0	.50	1.2	1.2	.57
Percentage of primary care physicians who qualified for electronic health record incentive payment	70.4	74.6	60.7	77.0	84.2	52.9

**Appendix I: Quality Scores for Pioneer  
Accountable Care Organizations (ACO) in 2012  
and 2013**

Measure	2012			2013		
	Mean score	Median score	Range of scores (minimum to maximum)	Mean score	Median score	Range of scores (minimum to maximum)
Percentage of patients whose providers reconciled their discharge medications with their current medication list	59.6	63.3	100.0	70.4	77.1	84.8
Percentage of patients screened for future fall risk	37.8	35.8	75.4	59.5	58.1	75.2
<b>Preventive health care</b>						
Percentage of patients who received an influenza immunization	58.2	61.9	50.5	69.0	72.0	66.0
Percentage of patients who have ever received a pneumococcal vaccine	63.2	65.7	82.9	72.1	75.5	64.1
Percentage of patients who received a body mass index screening and follow-up plan, if required	54.0	55.7	42.8	65.1	64.4	40.3
Percentage of patients screened for tobacco use and who received cessation intervention, if required	81.1	86.9	66.1	90.1	94.9	48.3
Percentage of patients screened for depression and provided a follow-up plan, if required	25.9	20.8	79.1	49.8	45.9	88.2
Percentage of patients who received a colorectal cancer screening	61.5	65.2	50.6	72.0	75.0	42.2
Percentage of female patients who had a mammogram within 24 months	68.7	71.0	50.4	71.7	71.5	56.7
Percentage of patients screened for high blood pressure	58.3	67.6	94.7	61.8	58.1	54.8
<b>Disease management for at-risk populations</b>						
Percentage of diabetes patients with adequately controlled blood glucose level	66.0	70.4	59.1	75.4	79.2	33.1
Percentage of diabetes patients with adequately controlled cholesterol level	56.4	59.6	55.1	63.8	64.1	37.1
Percentage of diabetes patients with adequately controlled blood pressure	68.4	70.4	48.5	77.2	78.5	27.9
Percentage of diabetes patients not using tobacco	69.1	73.0	86.0	75.4	82.7	81.4
Percentage of patients with diabetes and ischemic vascular disease using aspirin daily	78.0	84.4	80.0	83.9	89.1	45.7
Percentage of diabetes patients with poorly controlled blood glucose level <sup>f</sup>	25.7	21.1	59.5	16.1	13.0	31.3
Percentage of hypertension patients with adequately controlled blood pressure	65.1	63.8	36.3	74.2	74.7	28.4
Percentage of ischemic vascular disease patients with adequately controlled cholesterol level	55.3	58.5	53.4	62.5	64.2	41.1
Percentage of ischemic vascular disease patients using aspirin or other antithrombotic	77.5	87.2	70.1	84.3	88.7	47.5

**Appendix I: Quality Scores for Pioneer  
Accountable Care Organizations (ACO) in 2012  
and 2013**

Measure	2012			2013		
	Mean score	Median score	Range of scores (minimum to maximum)	Mean score	Median score	Range of scores (minimum to maximum)
Percentage of patients with heart failure and ventricular dysfunction with a prescribed beta-blocker therapy	83.1	88.0	48.9	85.1	87.3	39.3
Percentage of coronary artery disease patients with plan to control cholesterol, including a statin prescription	71.7	78.1	66.1	76.5	79.9	62.1
Percentage of coronary artery disease patients who also have diabetes or ventricular dysfunction and are prescribed a cardio-protective medication	74.1	75.7	64.1	74.9	77.4	47.2

Source: GAO analysis of CMS data. | GAO-15-401

<sup>a</sup>Higher scores indicate more positive ratings of providers and better patient health status.

<sup>b</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement. This measure reflects the risk-adjusted percentage of ACO-aligned beneficiaries who were hospitalized and readmitted to a hospital within 30 days following discharge from the hospital.

<sup>c</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement. This rate reflects risk-adjusted discharges from an acute care hospital among patients with a diagnosis of chronic obstructive pulmonary disease or asthma (aged 40 years and older) per 1,000 ACO-aligned beneficiaries (aged 40 years and older).

<sup>d</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement. This rate reflects risk-adjusted discharges from an acute care hospital among patients with a diagnosis of congestive heart failure (aged 18 years and older) per 1,000 ACO-aligned beneficiaries (aged 18 years and older).

<sup>e</sup>This quality measure is reverse-scored, meaning that a lower score in 2013 than 2012 reflects improvement.

# Appendix II: Comments from the Department of Health and Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation  
Washington, DC 20201

APR 1 - 2015

Kathleen M. King  
Director, Health Care  
U.S. Government Accountability Office  
441 G Street NW  
Washington, DC 20548

Dear Ms. King:

Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "*MEDICARE: Results from the First Two Years of the Pioneer Accountable Care Organization Model*" (GAO-15-401).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

A handwritten signature in cursive script that reads "Jim R. Esquea".

Jim R. Esquea  
Assistant Secretary for Legislation

Attachment



**GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED: MEDICARE: RESULTS FROM THE FIRST TWO YEARS OF THE PIONEER ACCOUNTABLE CARE ORGANIZATION MODEL (GAO-15-401)**

The U.S. Department of Health and Human Services (HHS) appreciates the Government Accountability Office (GAO) for the opportunity to review and comment on this draft report. HHS is committed to improving quality of care for patients and being a good steward of taxpayer dollars.

The Pioneer Accountable Care Organizations (ACO) Model is an innovative initiative that is being used to test the impact of different payment arrangements in helping organizations who already have experience operating in ACO-like arrangements achieve the goals of providing better care to patients, and reducing Medicare costs. The Model works in concert with the Shared Savings Program as an alternative coordinated care model that allows provider groups to move more rapidly from a shared savings payment model to a population-based payment model. Through the use of the Pioneer ACO Model, CMS seeks to support organizations in transforming their business and care delivery models to ones more focused on quality, rather than the quantity of care they give beneficiaries.

A central focus of the Pioneer ACO Model is providing the beneficiary with a better care experience through greater care coordination and engagement with beneficiaries as compared with Medicare FFS. ACOs that participated in the Pioneer Model for 2012 and 2013 had significantly higher quality scores for a majority of the measures in the second year. The greatest improvement in quality was seen in the disease management for at-risk populations' domain. Significant improvements were also seen in the preventative health care domain, including the percentage of patients who received an influenza immunization.

In the first two performance years of the Pioneer ACO Model, Pioneers produced net shared savings of \$134 million in 2012 and an estimated \$99 million in 2013. ACOs with shared savings above the minimum savings threshold received a portion of the amount saved, incentivizing ACOs to improve over time and create additional savings. Those ACOs that had shared losses greater than the minimum loss threshold were held accountable to pay a portion of the losses, reducing the total cost to Medicare and in turn taxpayers. The Pioneer ACO Model is allowing CMS the opportunity to test a new payment model that incentivizes providers to improve patient care and lower costs.

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# Appendix III: GAO Contact and Staff Acknowledgments

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## GAO Contact

Kathleen M. King, (202) 512-7114 or [KingK@gao.gov](mailto:KingK@gao.gov)

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## Staff Acknowledgments

In addition to the contact named above, Martin T. Gahart, Assistant Director; Yesook Merrill, Assistant Director; George Bogart; Pamela Dooley; Toni Harrison; and Roseanne Price made key contributions to this report.

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