Assessing Financial Performances in the Medicare Shared Savings Program: Past, Present, and Future

By

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A master's paper submitted to the faculty of The University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Public Health in the Department of Health Policy and Management, Gillings School of Global Public Health

Chapel Hill, NC

May 3, 2016

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EXECUTIVE SUMMARY

With over 400 participants to date, the Medicare Shared Savings Program (MSSP) is a popular option for many Accountable Care Organizations (ACOs) that seek incentives to reduce expenditures and improve the quality of the care that they deliver. However, there is much uncertainty as to whether ACOs will be able to reduce expenditures sufficiently to experience the rewards associated with the MSSP, continue reducing expenditures so that rewards can be maximized, and prevent increases in expenditures that could otherwise lead to penalties in the future. The objective of this study was to investigate these uncertainties by an evaluation of MSSP participants currently in their first three-year contracts over the range of several time periods: the years prior to, the years during, and the future years of the MSSP. I found that, on average, ACOs should expect to experience a reduction in per capita costs relative to projections made based on the years preceding MSSP participation. Further, they should expect that continuing to reduce expenditures will be a significant challenge. Ultimately, it is projected that about two-thirds of current participants will remain in the MSSP throughout the duration of their second contract period, with approximately one-third dropping out due to the high likelihood of being penalized.

INTRODUCTION

Healthcare Executives Pursuing the Formation of Accountable Care Organizations

Reducing costs and improving the quality of care delivery are the focal points of most healthcare system organizations. In 2015, a survey of 350 healthcare executives identified financial challenges and patient safety and quality as the top two issues confronting hospitals nationwide.[i] In an effort to tackle these issues, Accountable Care Organizations (ACO) are being formed in which multiple healthcare organizations join together to better coordinate and streamline care processes in order to reduce costs and improve quality outcomes. In general, ACOs contract with either a private payer or the government to meet specific financial and quality benchmarks. Meeting these benchmarks result in financial rewards for ACOs.

One of the most popular ACO contracts under consideration by many organizations today is the Centers for Medicare and Medicaid's (CMS) Medicare Shared Savings Program (MSSP), which began in 2012.[ii] The MSSP was originally designed to facilitate cooperation and coordination between healthcare providers through the formation of ACOs.[iii] Under MSSP regulations, organizations voluntarily operate under a Fee-for-Service (FFS) payment structure and are incentivized by potential financial rewards to reduce expenditures below annual benchmarks while improving 33 quality metrics.[iv] There are currently over 400 MSSP ACOs, almost triple the number formed in 2012. This trend suggests that the MSSP is viewed as an avenue to address organizations' key concerns outlined above.[v] Despite their growing popularity, it remains to be seen whether MSSP participation is the best option for organizations, considering the challenges that they face in sustainably reducing expenditures while meeting quality reporting standards.

MSSP Program Background & History

The MSSP was not the first ACO model designed by CMS. It was preceded by the Pioneer ACO model, which was designed for organizations that, unlike early MSSP participants, had experience with both care coordination and managing population health across care settings.[vi] The Pioneer program began in 2012 with 32 organizations; however, since then at least 40% have discontinued their participation in the program. Reasons for this included their inability to meet strict quality reporting measures and to reduce costs below continually declining annual expenditure benchmarks.[vii] The ACOs that left the Pioneer program either have since abandoned CMS-designed ACO models altogether or have elected to enter into an MSSP contract, which, by design, is a much simpler and significantly less risky option. To date, 69% of ACOs that have dropped out of the Pioneer program either have joined or are considering joining the MSSP.[viii]

When entering into a MSSP contract, ACOs must choose one of three tracks, each with a different risk-reward structure. A summary of differences in risk contracts can be found in **Table 1**. Track 1 contains the possibility of reward only. ACOs in this track that are able to: a) reduce their costs below a prescribed Minimum Savings Rate (MSR) – a metric that in Track 1 is variable and is based on the number of assigned Medicare beneficiaries the ACO treats; and b) meet quality reporting standards, will receive up to 50% of their total savings (called "shared savings") below their MSR. Tracks 2 and 3, on the other hand, include both risk and reward. ACOs in these tracks are penalized if expenditures are above annual Minimum Loss Rates (MLR) benchmark, a metric that is analogous to the MSR. ACOs in Tracks 2 and 3 can choose MSRs that range between 0.0% and 2.0% (in 0.5% increments) or a variable MSR similar to Track 1. However, because these ACOs have opted to take on risk, they are also able to receive a greater share of savings than Track 1 ACOs if they reduce their expenditures below their MSRs.[ix] Track 2 and Track 3 ACOs can receive up to 60% and 75%, respectively, of savings below their MSRs, but can pay CMS a penalty of up to 40% and 75% of expenditures above their respective MLRs. The total amount earned or penalized is dependent on quality scores; e.g., Track 3 ACOs that have high quality performance would only be penalized 40%.[x]

Track 1 was intended to be an "on-ramp" for ACOs to form and operate in low-cost environments. The original intent was for ACOs to graduate to Track 2 or Track 3 at the end of their first 3-year contract period, as the organizations take on more risk and move further away from the FFS payment model.[xi] However, in order to encourage ACOs to stay in MSSP contracts, and to provide a safeguard for organizations that may not be prepared to take on risk, CMS extended the time that organizations can remain in Track 1 to two contract periods.[xii] If an ACO remains in Track 1 for a second contract period, the maximum amount that it can earn in shared savings is reduced to 40%.[xiii] To date, 99% of MSSP ACOs have chosen Track 1.[xiv] CMS projects that approximately 90% of current MSSP participants will renew their contracts after the first three years, the majority of which will remain in Track 1.[xv]

Table 1: Differences in Medicare Shared Savings Program Tracks

	Track 1	Track 2	Track 3
Number of ACOs, Total	330	3	0
2013 Cohort (% Total)	211 (63.9%)	3 (100%)	N/A
2014 Cohort (% Total)	119 (36.1%)	0 (0.0%)	N/A
MSR Options			
First Contract Period	Variable only	2.0%	N/A
Second Contract Period	Variable only	Variable, or between 0.0% and 2.0% in 0.5% increments in second contract period	Variable, or between 0.0% and 2.0% in 0.5% increments
Contract Details			
Shared Savings Rate (maximum)	50% (40%) in first (second) contract period	Up to 60%	Up to 75%
Shared Loss Rate (maximum)	N/A	Up to 40%	Up to 75%
Beneficiary Attribution	Retrospective	Retrospective	Prospective

Note: *Table includes differences in MSSP Tracks, including the minimum savings rate (MSR) options available for each track, and the number of ACOs in selected tracks within the 2013 and 2014 Cohorts in the 2014 calendar year. Track 3 is only available to current MSSP participants in the second contract period. Variable MSRs are determined based on the number of assigned beneficiaries for the ACO in the performance year.*

Expenditure benchmarks are a core component of the MSSP. For the first contract period, MSSP benchmarks are calculated using the risk-adjusted, average per capita Medicare Parts A and B costs for four Medicare beneficiary types – end-stage renal disease (ESRD), disabled, aged/dual eligible (eligible for both Medicare and Medicaid), and aged/non-dual eligible beneficiaries – from the three years immediately preceding the start of the contract, or benchmark years (BY). Projected per capita expenditures for each beneficiary type are calculated by computing the costs from BYs 1, 2, and 3 as 60%, 30%, and 10%, respectively, of expenditures.[xvi] The benchmark is then calculated by multiplying projected expenditures by the proportion of total beneficiaries that each beneficiary type is expected to comprise for each individual ACO. In Track 1 and Track 2 contracts, beneficiaries are assigned to ACOs retrospectively, meaning that adjustments can be made if a particular beneficiary assigned to an ACO is reassigned to another ACO based on beneficiary choice. Track 3 contracts, on the other hand, use prospective assignment wherein beneficiaries cannot be reassigned after the benchmark has been set. Benchmarks are updated in subsequent years during a contract period by adding a fixed dollar amount to the aforementioned

projected per capita expenditures for each beneficiary type and multiplying the new per capita costs by the updated proportion of each beneficiary group that the ACO is expected to serve.[xvii] This fixed dollar amount is based on the expected national per capita expenditure growth rates of each beneficiary type.

In 2014, CMS changed its benchmark methodology to entice MSSP participants to remain in the program by weighting each of the three years prior to the second MSSP contract equally.[xviii] CMS proposed further modifications to its benchmarking methodology that would move from historical expenditures towards an entirely new approach that would calculate benchmarks relative to regional financial performances. This move would presumably make earning shared savings a more realistic and sustainable endeavor for many MSSPs.[xix] Despite this change, new and current MSSP participants still will be subject to the original methodology until a second 3-year contract is signed.

The primary incentive for ACOs to enter into an MSSP contract is to earn shared savings. ACOs that are optimistic about their ability to avoid risk could fare very well financially if the appropriate risk contract is chosen and financial projections are met. However, if ACOs enter a risk contract and have expenditures above their MLRs, they will both have relatively significant expenditures and pay CMS for their poor performances. To date, of the 1% of MSSP ACOs that chose Track 2 contracts in 2013 (with 2.0% MSRs, which is the current standard for Track 2), two have been penalized by CMS. Neither of these ACOs was found among the 2014 MSSP participants, implying that they have since dropped from the program. This suggests that not all ACOs are equipped to take on risk associated with participating in the MSSP. Therefore, the ability for ACOs to accurately project expenses and choose the risk contracts that are most realistic is vital to participation. Further, if earning shared savings is not a realistic endeavor – whether or not an ACO is penalized – it is unlikely that ACOs will remain in the program.

What are Realistic Expectations for MSSP Participation?

Although several organizations that have experience in the program have earned shared savings by reducing expenditures and improving quality, a few have been unsuccessful. When making decisions about participating in MSSP, ACOs must consider factors such as:

- Can they reduce their costs significantly enough to earn shared savings?
- Can lowered expenditures be maintained to continue to earn shared savings?
- Can lowered expenditures be maintained so that risker Tracks can be chosen in efforts to earn greater shared savings?
- Can they adhere to numerous quality measures while simultaneously reducing costs?

This analysis is focused on identifying trends in financial performance for current MSSP participants that provide answers to these questions. Ultimately the intent is to provide healthcare executives who are considering the MSSP insights into the most likely expectations associated with their decision about participating in the program, choosing the appropriate track, and continuing in the program in future contract periods.

Although quality reporting is a large component of MSSP participation and is required to earn shared savings, it is not taken into consideration in this analysis. This is because only 3.3% of MSSP ACOs in 2014 were ineligible to earn shared savings due to lack of quality performance reporting (1.8% would have earned shared savings otherwise). Therefore, I assumed that financial performance is the core driver of whether an ACO earns shared savings in a given year. Therefore, an ACO's projection of its likelihood to earn shared savings is evaluated independent of quality reporting.

In the context of this background, this paper has three independent specific aims. It seeks to assess the financial performances of MSSP participants: (1) during the years prior to MSSP participation, (2) during MSSP participation, and (3) in the imminent years of MSSP.

METHODS

DATA SOURCES

I used data from the 2013 and 2014 CMS MSSP Public Use Files (PUF), consisting of ACOs that started the MSSP in 2013 (2013 Cohort) and 2014 (2014 Cohort). These PUFs contained information on each MSSP ACO's annual expenditures across various dimensions including, but not limited to, total, per-beneficiary, per-beneficiary type, and Medicare Parts A and B category expenditures within each calendar year (CY). Benchmark values, track selections, number of beneficiaries, shared savings information, demographic information, and quality scores were also included in these data sets. Per-beneficiary benchmark year expenditures and beneficiary risk scores for both benchmark and calendar years were found in the 2014 PUF. Performances per calendar year – the specific year ACOs participated in the MSSP – and performance year (PY) – the year number corresponding to an ACO's year of involvement with the MSSP – were used to highlight specific time periods for each cohort. The 2013 Cohort ACOs participated in CY2013 and CY2014, which correspond to PY1 and PY2, respectively, for this cohort. All 2014 Cohort ACOs participated in CY2014, which corresponds to PY1 for this cohort. Financial data from benchmark years and the 2013 calendar year were adjusted to 2014 USD using the national growth rates in per capita spending for Medicare Parts A and B. All financial projections were also represented in 2014 USD.

MEASURES & SPECIFIC AIMS

I approached this analysis through the evaluation of three separate aims:

AIM 1: EVALUATION OF PERFORMANCES PRIOR TO MSSP PARTICIPATION

Comparison of Benchmark Years and Performance Year Financial Performances
The focus of this aim was to examine how financial performances changed between the years before and after MSSP participation. I compared the average ACO financial performances between benchmark year linear projections of future performances with actual performances in

MSSP for both Cohorts. Weighted average risk-adjusted expenditures per Medicare beneficiary group were used as a proxy for actual overall average per capita costs.

AIM 2: EVALUATION OF PERFORMANCES DURING MSSP PARTICIPATION

Sub-aim 2a: Comparison of Performance Year Financial Performances Between Cohorts
The focus of this sub-aim was to evaluate whether a greater duration of time spent in the MSSP is related to lower average expenditures by comparing the average per capita expenditures across both the 2013 and 2014 Cohorts during the 2014 calendar year.

Sub-aim 2b: Evaluation of Performance Year Financial Performances Within 2013 Cohort
The focus of this sub-aim was to evaluate where, if at all, expenditures changed after the first two years of MSSP participation. I compared the average per capita expenditures for the 2013 Cohort between both its first and second performance years.

AIM 3: ESTIMATION OF PERFORMANCES DURING THE FUTURE YEARS OF MSSP

Projection of Financial Performances for all Current MSSP Participants
The focus of this aim was to calculate the proportion of current MSSP participants that are likely, based on past financial performances, to earn shared savings or to be penalized in future contract periods.

ANALYSIS & PROJECTIONS

For Aim 1, I assessed the progression of risk-adjusted per capita expenditures for each Medicare beneficiary type across both Cohorts' benchmark and performance years and compare this to the projected linear trend for benchmark year risk-adjusted per capita expenditures.

For Aim 2, I performed tests of significance using a one-sided t-test with equal variances. For Sub-Aim 2a, ACOs that were present in CY2013 but not in CY2014 were excluded from the data set.

For Aim 3, I used benchmark and performance year data, as well as the most current approved CMS MSSP benchmark methodology to project benchmarks for each ACO's second contract period. I used each organization's compound annual growth rate (CAGR) as the key measure of its financial growth over time. Specifically, I used CAGRs between each ACO's first benchmark year (BY1) through its first performance year (PY1) to estimate the number of years that it will take them to earn shared savings or to be penalized under varying risk contracts (MSRs between 0.0% and 2.0% in 0.5% increments, as well as Variable MSRs, which are assumed to be equivalent to CY2014 MSRs) from each ACO's respective per capita CY2014 expenditures. The CAGR for the 2013 Cohort did not include its second performance year so as to compare 2013 and 2014 Cohort data to each other more accurately using CAGRs for an equal number of years. Then, I assessed whether an ACO will earn savings or be penalized before the end of or after the

second contract period. This assessment takes into consideration whether or not an ACO will earn shared savings or be penalized in their first contract periods.

RESULTS

AIM 1: EVALUATION OF PERFORMANCES PRIOR TO MSSP PARTICIPATION

Comparison of Benchmark Years and Performance Year Financial Performances

When I compared the average, risk-adjusted per capita expenditures for each Medicare beneficiary type across both Cohort's respective performance years to the linear trends for each ACO's benchmark years, the per capita expenditures for the Disabled and Aged/Non-Dual beneficiaries were observed to be well below their predicted linear trends (**Figure 1**). Additional analysis showed that these beneficiary types accounted for 73.8% and 17.6%, respectively, of average total expenditures for ACOs. Further, both Cohort's Aged/Dual expenditures and the 2013 Cohort's ESRD performance year data did not differ significantly from benchmark year-projected linear trends, while the 2014 Cohort ESRD performance year average expenditures were observed to be substantially lower. However, the Aged/Dual and ESRD beneficiary types account for only 7.3% and 1.1%, respectively, of average total expenditures. Thus, there is evidence that upon entering the MSSP, ACOs were substantially reducing their average per capita expenditures relative to those of their benchmark years.

AIM 2: EVALUATION OF PERFORMANCES DURING MSSP PARTICIPATION

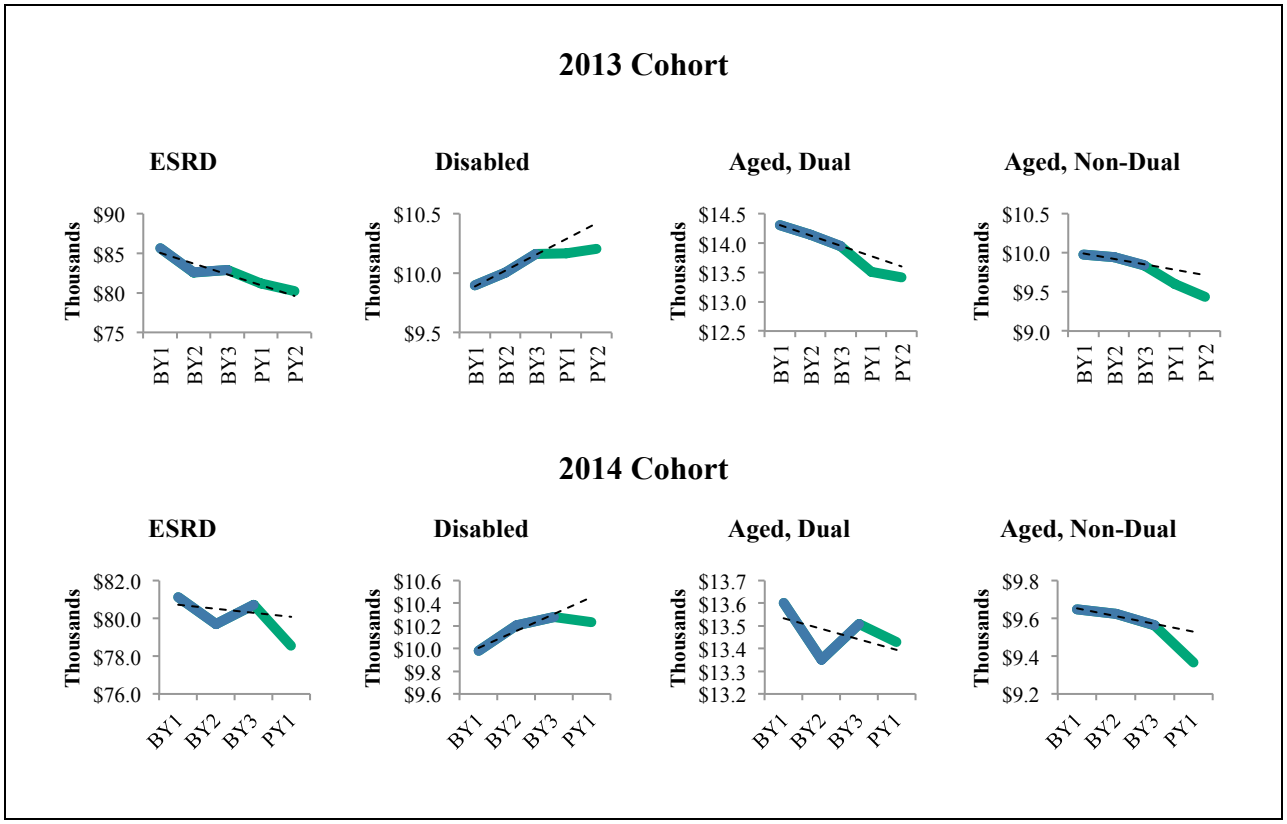
Sub-aim 2a: Comparison of Performance Year Financial Performances Between Cohorts

Our analysis of the financial performances in the first year of the MSSP shows that not all ACOs successfully reduced their expenditures and that the magnitude of these reductions varied by Cohort, and that in fact. Specifically, 30.4% of the 2013 Cohort (n=214) reduced their expenditures sufficiently to earn shared savings, while 57.9% of the Cohort had expenditures below their benchmarks in CY2014. Of the three 2013 Cohort ACOs that chose Track 2, none were penalized. For the same calendar year, 17.6% of the 2014 Cohort ACOs (n=119) earned shared savings while 47.9% were under their respective benchmarks. None of the 2014 Cohort ACOs chose Track 2, and consequently none were penalized. Hypothetically, had all ACOs across both Cohorts chosen Track 2 with a 2.0% MSR in CY2014, 35.5% of 2013 and 30.3% of 2014 Cohort ACOs would have had expenditures high enough to warrant penalties (**Figure 2**). Ultimately, in CY2014, the 2014 Cohort had fewer ACOs that were able to reduce their expenditures below their respective benchmarks or to earn shared savings compared to the 2013 Cohort. However, the 2013 Cohort had a greater number of ACOs with relatively high expenditures than the 2014 Cohort.

Gauging performance based on earned shared savings between Cohorts could be a misleading. Our analysis of the average per capita benchmarks for CY2014 shows that overall they were higher for ACOs that earned shared savings than for those that did not (**Table 2**). Further, when

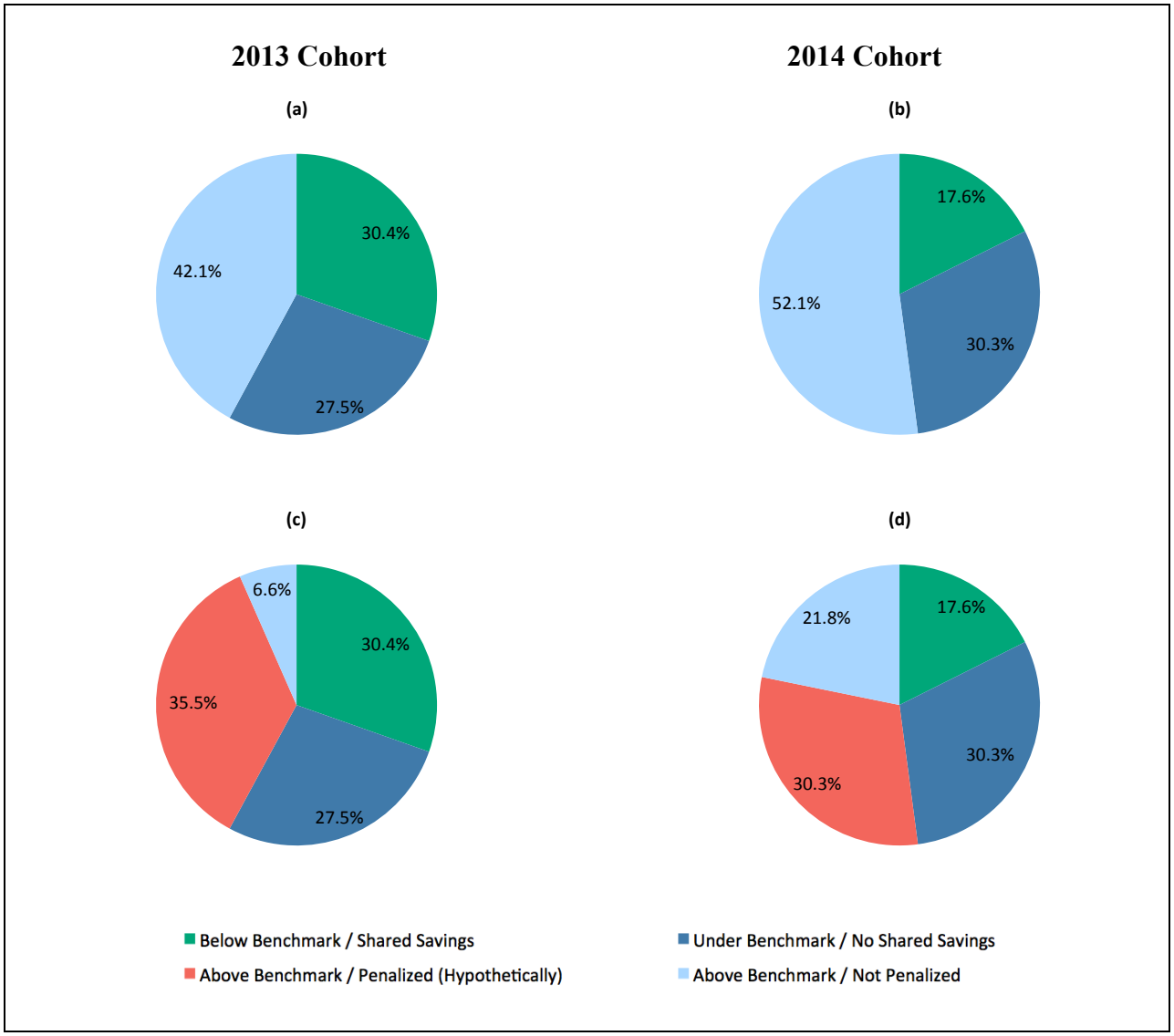
the data is broken down by Cohort, the average per capita benchmarks is observed to be significantly higher for 2013 Cohort ACOs that were both below their respective benchmarks and that earned shared savings, compared to those that were neither below their benchmarks nor that earned shared savings, respectively. This was not the case for 2014 Cohort ACOs. Therefore, benchmark setting may overshadow relative financial performances between Cohorts.

Figure 1: Risk-Adjusted Per Capita Expenditures by Medicare Beneficiary Type



Note: *Risk-adjusted per capita expenditures across the four Medicare beneficiary types: end stage renal disease (ESRD), disabled, aged/dual eligible, aged/non-dual eligible, for benchmark years one through three (blue) and performance year (green) for both the 2013 and 2014 Cohorts. 2013 Cohort data extends to two performance years (PY), corresponding to calendar years (CY) 2013 and 2014, while 2014 Cohort data extends one PY, which corresponds to CY2014. The dotted line represents the projected linear trend of benchmark year data for each Cohort's beneficiary risk-adjusted per capita expenditures. Disabled, aged/dual eligible, aged/non-dual eligible, and ESRD, on average, account for 73.8%, 17.6%, 7.3%, and 1.1% of overall average per capita expenditures.*

Figure 2: Hypothetical Scenario Assuming All MSSP ACOs Bear Risk



Note: *Percentage of 2013 and 2014 Cohort ACOs that would have earned shared savings, been penalized, and would neither have earned shared savings nor been penalized in calendar year 2014 (CY2014). Charts (a) and (b) are actual CY2014 results, and charts (c) and (d) are hypothetical results, assuming all ACOs had taken on risk and chosen Track 2 with a 2.0% minimum savings rate (MSR) in their first contract period.*

Table 2: Average Per Capita Benchmarks in 2014 Calendar Year

Calendar Year 2014	Earned Shared Savings	Did Not Earn Shared Savings
Number of ACOs, Overall (%)	86 (23.6%)	247 (76.4%)
Average Per Capita Benchmark	$11,232*	$10,400
Number of ACOs, 2013 Cohort (%)	65 (30.4%)	149 (69.9%)
Average Per Capita Benchmark	$11,284*	$10,395
Number of ACOs, 2014 Cohort (%)	21 (17.6%)	98 (82.4%)
Average Per Capita Benchmark	$11,074	$10,409

Table 2: *Average calendar year 2014 (CY2014) per capita benchmarks, overall, and for 2013 Cohort, and 2014 Cohorts specifically. * = Significantly different at 5.0% alpha level.*

To glean a more accurate assessment of relative financial performance between Cohorts, I considered the average per capita beneficiary and Medicare Parts A and B expenditures in CY2014 for both Cohorts. No significant difference was noted between Cohorts (**Table 3**), indicating that on average, across all financial dimensions, 2014 Cohort ACOs performed comparably to those of the 2013 Cohort in CY2014.

Sub-aim 2b: Evaluation of CY2013 and CY2014 Performances Within 2013 Cohort

Our analysis of 2013 Cohort data across both CY2013 and CY2014 shows that average per capita expenditures across beneficiary types and Medicare Parts A and B expenditures were significantly lower in CY2014 for only durable medical equipment (DME) (**Table 4**). According to CMS, DME only accounts for approximately 3.4% of overall Medicare Part B expenditures.[xx]

A closer look at 2013 Cohort data shows that 69.0% of ACOs that were above their benchmarks in CY2013 remained above them in CY2014 (**Table 5**), and 84.0% of those that did not earn shared savings in CY2013 also did not earn them in CY2014 (**Table 6**). Tables 2 and 3 show that while there are some 2013 Cohort ACOs that improved to either be below their benchmarks (31.0%) or to receive shared savings (16.0%) in CY2014, a similar proportion transitioned from below to above their respective benchmarks (18.4%) and from earning to not earning shared savings (23.5%). Overall, this data shows that average expenditures did not change between CY2013 and CY2014 for the 2013 Cohort, and that while there was improvement in performance for some ACOs, the majority did not show improvement when it came to reaching benchmarks or earning shared savings.

Table 3: Comparison of Average Per Capita Expenditures in the 2014 Calendar Year

Cohort	2013 Cohort	2014 Cohort
Number of ACOs	214	119
Average Benchmark (Per Beneficiary Person-Years)	$10,664 ($179)	$10,526 ($265)
Average Per Capita Expenditures		
Beneficiary Expenditures		
Total	$10,520 ($170)	$10,546 ($272)
ESRD	$80,188 ($993)	$78,555 ($1,347)
Disabled	$10,202 ($171)	$10,231 ($251)
Aged-Dual	$13,414 ($233)	$13,430 ($343)
Aged-Non Dual	$9,433 ($142)	$9,433 ($211)
Part A Expenditures		
Inpatient, total	$3,365 ($67)	$3,402 ($104)
Inpatient, Short Term Acute Care	$2,923 ($56)	$2,938 ($93)
Inpatient, Long Term Care	$152 ($14)	$137 ($14)
Inpatient, Rehabilitative Services	$229 ($11)	$263 ($18)
Inpatient, Psychiatric Services	$102 ($6)	$103 ($9)
Part B Expenditures		
Outpatient	$1,930 ($34)	$1,943 ($51)
Hospice Care	$262 ($10)	$271 ($17)
Skilled Nursing Facilities	$964 ($47)	$900 ($83)
Physician/ Supplier	$3,369 ($63)	$3,350 ($80)
Ambulance	$157 ($5)	$148 ($8)
Home Health	$621 ($31)	$662 ($49)
Durable Medical Equipment	$253 ($4)	$260 ($6)

Note: *A comparison of average per capita expenditures in calendar year 2014 (CY2014) for both 2013 and 2014 Cohort Accountable Care Organizations (ACO). ESRD = End Stage Renal Disease beneficiary group.*

Table 4: Average Per Capita Expenditures for CY2013 and CY2014 for the 2013 Cohort

2013 Cohort Performance Years	CY2013	CY2014
Number of ACOs	214	214
Beneficiary Expenditures		
Total	$10,277 ($171)	$10,520 ($170)
ESRD	$78,558 ($1,026)	$80,188 ($993)
Disabled	$9,811 ($174)	$10,202 ($171)
Aged-Dual	$13,046 ($226)	$13,414 ($233)
Aged-Non Dual	$9,281 ($149)	$9,433 ($142)
Part A Expenditures		
Inpatient, total	$3,379 ($71)	$3,365 ($67)
Inpatient, Short Term Acute Care	$2,935 ($60)	$2,923 ($56)
Inpatient, Long Term Care	$159 ($14)	$152 ($14)
Inpatient, Rehabilitative Services	$224 ($11)	$229 ($11)
Inpatient, Psychiatric Services	$105 ($6)	$102 ($6)
Part B Expenditures		
Outpatient	$1,906 (unknown)	$1,930 ($34)
Hospice	$276 ($10)	$262 ($10)
Skilled Nursing Facilities	$990 ($54)	$964 ($48)
Physician/ Supplier	$3,308 ($63)	$3,369 ($63)
Ambulance	$157 ($6)	$157 ($5)
Home Health	$633 ($33)	$621 ($31)
Durable Medical Equipment	$288 ($4)	$253 ($4)*

Note: *Average per capita expenditures for calendar year 2013 (CY2013) and calendar year 2014 (CY2014) for the 2013 Cohort. Per capita Outpatient expenditures were not available for 2013 Cohort CY2013. Therefore, a test of significance could not be performed; value shown is an estimate based on CY2014 data. * = Significantly different at 5.0% alpha level.*

Table 5: Changes in 2013 Cohort Positions Relative to Benchmarks – CY2013 to CY2014

Relative to Benchmark in CY2013	Relative to Benchmark in CY2014		
	Under (%)	Over (%)	Total
Under (%)	93 (81.6%)	21 (18.4%)	114
Over (%)	31 (31.0%)	69 (69.0%)	100
Total	124	90	214

Note: *Count of 2013 Cohort ACOs that were under and over their respective benchmarks in calendar year 2013 (CY2013) and that were under and over their respective benchmarks in calendar year 2014 (CY2014).*

Table 6: Changes in 2013 Cohort Positions Relative to their MSRs from CY2013 to CY2014

Earned Shared Savings in CY2013	Earned Shared Savings in CY2014		
	Yes (%)	No (%)	Total
Yes (%)	39 (76.5%)	12 (23.5%)	51
No (%)	26 (16.0%)	137 (84.0%)	163
Total	65	149	214

Note: *Count of 2013 Cohort ACOs that did and did not earn shared savings in calendar year 2013 (CY2013) and that did and did not earn shared savings in calendar year 2014 (CY2014). Earning shared savings corresponds to an organization being below its minimum savings rate (MSR).*

AIM 3: ESTIMATION OF PERFORMANCES DURING THE FUTURE YEARS OF MSSP

Projection of Financial Performances for all Current MSSP Participants

My projections show that up to 86.4% of the 2013 Cohort and 91.6% of the 2014 Cohort could earn shared savings at some point during the MSSP; the majority would earn shared savings before the end of their second contract periods. This assessment takes into consideration ACOs that are not at risk of being penalized at any point during the MSSP as well as those that are projected to both earn shared savings and be penalized across varying risk contracts.

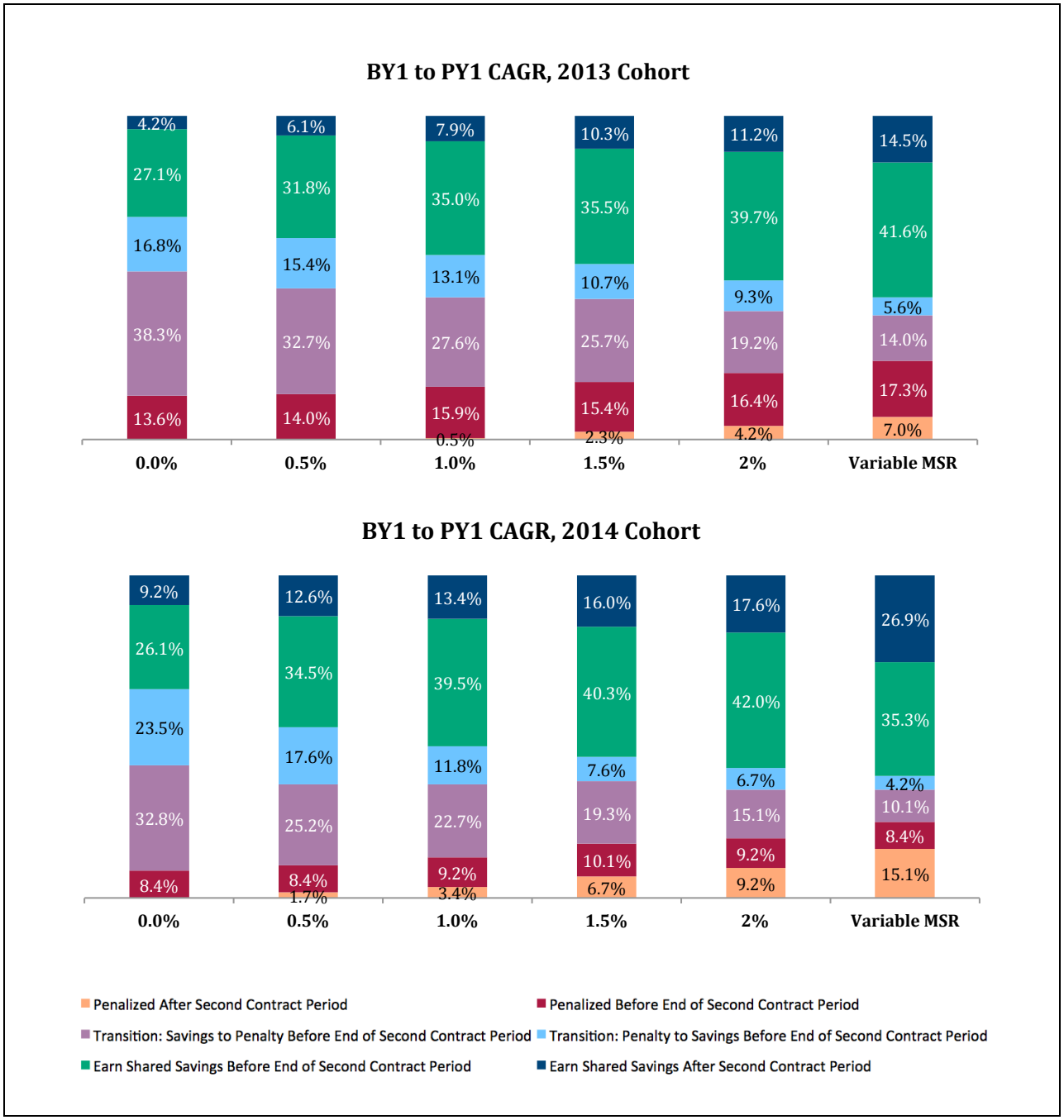
For ACOs not at risk of being penalized, the percentage that I project to earn shared savings before the end of their second contract period ranges from 27.1% (at 0.0% MSRs) to 41.6% (at variable MSRs) for the 2013 Cohort; for the 2014 Cohort, the percentage projected to earn shared savings ranges from 26.1% (at 0.0% MSRs) to 42.0% (at 2.0% MSRs) (**Figure 3**). Additionally, the percentage of ACOs projected to earn shared savings after their second contract period from 0.0% to variable MSRs, respectively, ranges from 4.2% and 14.5% for the 2013 Cohort, and 9.2% to 26.9% for the 2014 Cohort. Note that ACOs projected to earn savings after their second contract periods at a 0.0% MSR will technically be penalized during the second contract period if they are in Tracks 2 or 3.

There is also a large portion of ACOs at risk of only being penalized before the end of the second contract period, assuming contracts that bear risk. This group ranges from 13.6% to 17.3% of the 2013 Cohort, and 8.4% to 10.1% of the 2014 Cohort. The percentage of ACOs that will be penalized after their second contract periods is as high as 7.0% and 15.1% for the 2013 and 2014 Cohorts, respectively, at variable MSRs.

Many ACOs will experience both shared savings and penalties before the end of their second contract periods. At 0.0% MSRs, 38.3% of the 2013 Cohort are projected to transition from earning shared savings to being penalized, while 16.8% will transition from being penalized to earning shared savings. At variable MSRs, 14.0% and 5.6% of the 2013 Cohort are projected to make these respective transitions. Similar trends are observed in the 2014 Cohort. The reduction in these proportions as MSRs increased is to be expected as the likelihood of these ACOs to experience both shared savings and penalties is reduced, and only either shared savings or penalizations are observed. I estimate that between 31.3% and 56.1%, of the 2013 Cohort and between 35.5% and 62.2% of 2014 Cohort will earn shared savings without risk of penalty in subsequent contract periods.

Among ACOs that will earn shared savings without risk of penalty, 2013 and 2014 Cohort ACOs could increase the number of ACOs that earn shared savings before the end of their second contract periods by 10.2% and 24.4%, respectively, if variable and 2.0% MSRs are chosen, respectively. At variable MSRs, a large percentage of the 2014 Cohort is projected to earn shared savings during or after its third contract period. This is likely due to a large number of ACOs with variable MSRs significantly greater than 2.0%. Even at 0.0% MSRs, the percentage that will earn shared savings would increase by 8.5% for the 2014 Cohort. However, at this MSR level, the percentage of ACOs that will earn savings for the 2013 Cohort will be reduced by 3.3%. This is the only scenario between both Cohorts where a reduction in the percentage of ACOs earning shared savings compared to CY2014 values is observed. Taking into consideration ACOs that would earn shared savings after transitioning from risk, the percentage that would earn shared savings could conceivably increase by 18.6% and 31.1% for 2013 and 2014 Cohort ACOs, respectively, at MSRs of 2.0%, and increase by 13.3% and 32.0%, respectively, at MSRs of 0.0%, assuming that these ACOs are willing to risk paying unavoidable penalties.

Figure 3: Proportions of ACOs Projected to Earn Shared Savings or be Penalized



Note: *Percentages of ACOs that were projected to earn shared savings, be penalized before the end of second contract periods or after second contract periods, and those that either transition from being penalized to earning shared savings or from earning shared savings to being penalized before the end of the second contract period for the 2013 and 2014 Cohorts. Percent ratios were computed using compound annual growth rates (CAGR) between the first benchmark year (BY1) and the first performance year (PY1) for each cohort. PY1 corresponds to the calendar year 2013 (CY2013) for the 2013 Cohort and calendar year 2014 (CY2014) for the 2014 Cohort. Minimum savings rates (MSR) between 0.0% and 2.0% at 0.5% increments as well as Variable MSRs were considered.*

CONCLUSION

I found that that upon entering the MSSP, ACOs experienced a noticeable drop in average per capita expenditures relative to benchmark year trajectories. This drop is predominantly influenced by reduction in the per capita costs for Disabled and Aged/Non-Dual Medicare beneficiary types. At first glance, it may appear that 2013 Cohort reduced expenditures more than the 2014 Cohort, which led to shared savings; however, these achievements are overshadowed by the fact that, on average, 2013 Cohort ACOs had higher per capita benchmarks than those that did not earn shared savings. There was no significant difference in performance between Cohorts in CY2014 in per capita beneficiary and Medicare Parts A and B expenditures. This finding, coupled with the fact that average 2013 Cohort ACO per capita expenditures were only reduced significantly for DME between the Cohort's first and second performance years, and that the majority of ACOs did not improve their performances relative to benchmarks and MSRs, indicates that 1) a reduction in average per capita expenditures is both realistic and achievable, but that 2) a continued reduction of average per capita expenditures from benchmark years may be a serious challenge for most ACOs.

While the majority of 2013 Cohort ACOs did not show changes in their position relative to their benchmarks and MSRs, a handful either improved or worsened their positions. This suggests that the average expenditures across all ACOs in the cohort may not have changed, but individual ACOs' expenditures fluctuated at levels that impacted both their performances in that year as well as their ability to achieve shared savings (or be penalized) in the future. Therefore, my projections may provide important insights into how – assuming reduced expenditures – individual differences in performance can be used to identify ACOs that, upon entering the MSSP, are sustainable, and which are likely to observe increased or decreased per capita expenditures. It is these differences in performance that provide insight into predicting the percentages of ACOs that are likely to take on risk in their second contract periods, to remain in Track 1, or to drop out of the program altogether.

These predictions assume that ACOs that are projected to earn shared savings without risk of penalty before the end of their second contract periods are likely to choose Track 2 or 3 in their second contract period. The results of this analysis indicate a greater percentage of ACOs are projected to earn shared savings at higher than at lower MSRs. This may seem counterintuitive considering that the barrier to earning shared savings is lower with smaller MSRs; however, results indicate that the number of ACOs that will transition from earning savings to being penalized in their second contract period is much greater at lower than at higher MSRs, and that these ACOs will only earn shared savings at higher MSRs.

In addition, I assume ACOs projected to earn shared savings during or after their third contract periods will choose Track 2 or 3 in their second contract period, given that they are not projected to be penalized in the future. Taken together, I project that up to 56.1% and 62.2% of 2013 and 2014 Cohort ACOs, respectively, will choose Tracks 2 or 3 in their second contract period.

I also assume that all ACOs at risk of penalization before the end of their second contract periods will be likely to choose Track 1 in their second contract periods in order to avoid paying penalties. Additionally, these ACOs will be more likely to drop out of the MSSP altogether after

the second contract period than to assume risk. Assuming that ACOs at risk of penalization will be more inclined to choose risk contracts with large MSRs – thus decreasing the odds of penalization – and that ACOs at risk of penalization are likely to drop from the program, I project that no fewer than 38.3% of 2013 Cohort and 33.6% of 2014 Cohort ACOs will drop out of the MSSP by the end of their second contract periods after choosing Track 1 through their second contract periods.

While it is conceivable that all current MSSP ACOs will chose Track 1 during their second contract periods, it is realistic to assume that many will choose Tracks 2 or 3 in efforts to earn greater shared savings. A more appropriate estimate of ACOs that will choose Track 1 in their second contract periods includes both ACOs that are in a transitory state and those definitively at risk of penalization at a 0.0% MSR, including those expected to earn shared savings at a 0.0% MSR during or after the third contract period. Based on these assumptions, I predict that up to 72.9% of 2013 and 71.4% of 2014 Cohort ACOs will choose Track 1 in their second contract periods. Further, this implies that no fewer than 27.1% of 2013 and 28.6% of 2014 Cohort ACOs will choose Tracks 2 or 3 in their second contract periods. A summary of projected maximum and minimum Track selections is found in **Table 7**.

Table 7: Percentages of ACOs Expected to Choose Track 1, Assume Risk, and Drop out

Track Selections	2013 Cohort		2014 Cohort	
	Max	Min	Max	Min
Choose Track 1 in Second Contract Period	72.9%	43.9%	71.4%	37.8%
Choose Track 2 or 3 in Second Contract Period (assume risk)	56.1%	27.1%	62.2%	28.6%
Drop Out Prior to Third Contract Period	--	38.3%	--	33.6%

Note: *Maximum and minimum percentage of ACOs projected to choose Track 1 or Tracks 2 or 3 in the second contract period, as well as the minimum number of ACOs projected to drop out prior to the third contract period for the 2013 and 2014 Cohorts.*

The likelihood of ACOs choosing between Track 2 and Track 3 are beyond the scope of this analysis. Rather, I assumed that ACOs that are likely to select risk-baring tracks will simply choose between the two based on their risk-tolerance and beneficiary attribution preferences. An assessment of the likelihood of ACOs choosing among the various options for MSRs is also not taken into consideration. I assume that MSRs will be chosen that are most beneficial to each respective ACO, in turn, maximizing the odds of earning shared savings and minimizing the odds of penalties.

There are limitations to this analysis that must be noted. First, only two years of 2013 Cohort and one year of 2014 Cohort performance year data are used. While this is the only public information currently available, it does impact the strength of future projections. In particular, the CAGRs used include data from three benchmark years and only one performance year. The time period that this CAGR covers may not be sufficient to accurately predict future

expenditures in subsequent performance years. That is, it may not represent the true financial changes that organizations may experience in the upcoming years of MSSP participation. If this is true, then the number of ACOs projected to choose Tracks 2 or 3 may have been underestimated, and the number dropping out of the program may have been overestimated. Finally, the experiences in actively reducing expenditures may differ between ACOs that are currently in the MSSP and those that have yet to enter. Thus, our findings may not be generalizable to ACOs considering entering into the MSSP. Future studies should consider demographic, geographic, and organizational characteristic differences between MSSP ACOs so that organizations can individually identify with potential outcomes and better assess whether or not entering into the MSSP is a reasonable and realistic endeavor.

DISCUSSION & IMPLICATIONS

What does this mean for organizations considering entering the MSSP? First, they are very likely to choose Track 1 in their first contract period. While is it possible that ACOs entering the MSSP in the future will have greater experience in expenditure reduction, financial objectives in the program will be based on their respective MSSP-specific benchmarks. Therefore these organizations may not necessarily have an advantage over, or a greater likelihood of success than, current ACOs. Second, they should expect that, by virtue of entering into the program, efforts to meet MSSP standards are likely to lead to an observable reduction in per capita costs relative to projections made based on the benchmark year expenditure data. However, it may very well be that entering into any ACO program – such as those that are privately sponsored – that calls for drastic cost reductions will have a similar effect. Third, organizations can expect that a continued reduction in expenditures is likely to be a significant challenge to their organization. Lastly, ACOs should not necessarily expect to be in a position to take on risk in their second contract periods. Rather, there is a high likelihood that they will remain in Track 1. Ultimately, regardless of the Track that is chosen, only approximately two-thirds of organizations will remain in the MSSP through the end of their second contract periods, thereby facing another opportunity to alter their Track preferences in their third contract periods.

CMS estimated that 90% of current MSSP participants will renew their contracts, given the assumption that the prospect of earning shared savings is enough to continue participating in the MSSP. My findings support their estimate. Thus, as it currently stands, the MSSP could be a viable option for all executives looking to form ACOs in order to lower costs and improve quality care. Furthermore, considering that CMS is proposing a change to the benchmark methodology that would refer to regional rather than national expenditure fluctuations, MSSP ACOs may more easily earn shared savings because the benchmarks will better reflect their local cost environment. This would therefore increase the estimated percentage of ACOs projected to choose tracks baring risk, and reduce the percentage of ACOs projected to drop out of the program.

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