

Evaluating the financial cost of the asymmetry in the MSSP risk score growth cap

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CMS measures value in the MSSP using a total cost of care financial benchmark. Accountable care organizations (ACOs) serving regions with increasing morbidity face greater challenges under the current financial benchmark methodology.

The “Pathways to Success” Medicare Shared Savings Program (MSSP) regulations limit (or cap) an ACO’s cumulative risk score growth to 3% relative to the ACO’s third benchmark year when setting the financial benchmark for a given performance year. The Centers for Medicare and Medicaid Services (CMS) has publicly stated that it intends for this cap to “provide protection to the Medicare Trust Funds against unwarranted increases in CMS-HCC prospective risk scores that are due to increased coding intensity.”¹ However, CMS does not cap the risk score growth in an ACO’s region, which can result in an asymmetry where:

- The benchmark adjustment that accounts for the change in an ACO’s morbidity levels can be capped at 3%.
- The risk scores used to calculate the risk-adjusted regional benchmark trend are not capped, so regional risk score trend could reduce the financial benchmark by more than 3%.

Aledade engaged Milliman to evaluate the financial impact of three alternative financial benchmark adjustment methodologies they proposed. These methodologies aim to mitigate the adverse consequence to ACOs participating in regions with increasing CMS-Hierarchical Condition Categories (HCC) risk scores.² The purpose of this paper is to evaluate each of these methodologies. However, this is not an endorsement of these options by the authors of this paper.

The ACO risk score cap likely achieves CMS’ intended effect in certain instances. In other instances, the current rule may unintentionally have a negative impact on ACOs whose average risk score change is attributable to a significant population

change. For example, ACOs serving regions with increasing population health burden may be negatively impacted because the cap does not apply to the region or reflect the morbidity changes in the region. Based on a review of CMS’s MSSP Public Use Files (PUFs),³ our findings indicate that ACOs serving certain populations with higher morbidity like dual-eligible and disabled beneficiaries face similar challenges because risk score growth for these enrollment categories is more likely to exceed the 3% cap than risk score growth for other enrollment categories.

We have observed that some affected ACOs have limited their geographic growth or considered withdrawing from the MSSP altogether due to this risk score cap asymmetry. Our quantitative analysis indicates that this phenomenon will likely grow over time. The purpose of this paper is to discuss our analysis and findings.

Key findings

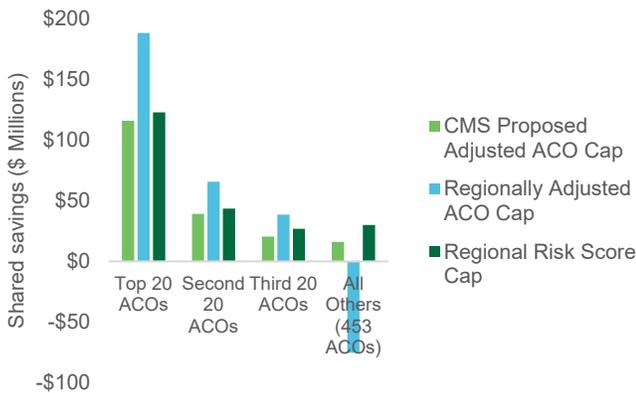
Our key findings are:

- Nearly 40% of ACOs participating in the MSSP in 2020 served regions where risk score trend exceeded 3% in at least one beneficiary category between 2014 and 2020.
- In 2020, 15% of MSSP assigned beneficiaries were assigned to an ACO whose benchmark year 3 to performance year risk score trend exceeded 3% in at least one beneficiary category by 2020. We expect this proportion to more than double between 2020 and 2024.
- We estimate that by 2024 one in four ACOs will serve regions where the average risk score across all four beneficiary categories is growing beyond 3% even after removing the ACO from the region.
- We estimate the alternative methodologies modeled in our analysis would mitigate a significant amount of the risk associated with this asymmetry: an increase from \$191.8 million to \$223.5 million in program-wide shared savings in 2024, all else being equal.

- Under each of Aledade’s proposed methodologies, the majority of the difference between the current policy and proposed alternatives is concentrated among 20 ACOs.

Figure 1 summarizes the projected 2024 change in nationwide shared savings of Aledade’s three proposed policy alternatives for the risk score cap compared to current CMS policy. We describe the alternatives in Figure 3. We segment results by the first, second, and third most impacted cohorts of ACOs.

FIGURE 1: CHANGE IN SHARED SAVINGS UNDER CURRENT CMS POLICY VS. ALEDADE PROPOSED POLICY ALTERNATIVES, 2024 PROJECTIONS



We also evaluated regionally adjusted risk cap methodologies by beneficiary category and found that certain populations with higher morbidity are disproportionately affected. Disabled and dual-eligible beneficiaries are more likely to live in counties exhibiting high risk score change than an aged beneficiary who is not dually eligible or disabled.

Background

THE MEDICARE RISK ADJUSTMENT PREDICAMENT

CMS measures value in the MSSP using a total cost of care financial benchmark. This financial benchmark is based on a blend of an ACO’s historical expenditures and regional average expenditures. CMS applies a risk adjustment factor to reflect the morbidity of an ACO’s assigned beneficiaries for a given performance year.

CMS stated in the proposed Pathways to Success methodology that it is “...concerned that adopting a higher cap, or allowing for full, uncapped risk adjustment would not provide sufficient protection against potential coding initiatives.”⁴ Currently, there is no reliable method to systematically decipher between risk score trend due to true shifts in population morbidity and risk score trend due to changes in diagnosis capture practices. As a result, CMS limits total risk score growth in the MSSP. In some cases, this likely restricts coding intensity initiatives; in others, it may

prevent the benchmark from reflecting the true morbidity change of the population and decrease the ACO’s savings or increase its losses.

CURRENT MSSP BENCHMARK MECHANICS

The Pathways to Success regulations became effective for MSSP ACO agreements starting July 2019 or later. Because Pathways to Success remains the prevailing set of rules, this paper focuses exclusively on those regulations.⁵

In Pathways to Success, an ACO enters a five-year agreement period with CMS. Shared savings are calculated annually for each performance year. An ACO’s financial benchmark is based on:

- Historical expenditures: Both the ACO’s expenditures in the three calendar years immediately preceding the start of the agreement period and the average expenditures in the ACO’s region
- Trend updates: For each performance year, the financial benchmark is updated to account for healthcare trend and the morbidity level of beneficiaries assigned to the ACO

The financial benchmark trend update factor is a blend of national and risk-adjusted regional expenditure trends, where the blend percentage for national trend represents the ACO’s market share (i.e., the proportion of beneficiaries in the ACO’s region that are assigned to the ACO). In 2020, 98% of ACOs had a market share under 50%. Therefore, the majority of the financial benchmark trend update factor is based on changes in risk-adjusted per capita costs in the ACO’s region for nearly all ACOs. The financial benchmark risk adjustment is based on the ACO populations’ risk score in the performance year relative to the risk score in the most recent benchmark year (benchmark year 3).

To protect against increases in diagnosis capture independent of true population morbidity changes, CMS imposes a cap of 3% on ACO risk score growth between benchmark year 3 and the performance year. CMS does not apply any limit to decreases in ACO risk scores. This cap remains constant for the entire five-year agreement period. In other words, the 3% cap applies to risk score growth from benchmark year 3 to both the first and last performance year.

CMS trends the benchmark to the performance year by partially relying on a *risk-adjusted* regional trend. Hence, a higher regional risk score causes an ACO’s benchmark to decrease, all else being equal. CMS does not apply any limit to the regional risk score growth. This often results in an asymmetry because while an ACO’s benchmark can be capped at 3%, its region’s risk scores could reduce the financial benchmark by more than 3%. Without programmatic changes, we expect the impact of this asymmetry to grow throughout the agreement period; each

performance year, more ACOs will hit the 3% cap, and the risk scores in regions trending higher than nationwide risk score growth will generally continue to grow.

ALTERNATIVE RISK SCORE CAP METHODOLOGIES

While the risk score cap may protect Medicare from paying out shared savings driven by increased coding in some cases, it may also have some unintended consequences. Such examples of when a capped financial benchmark may not be justified include the following:

- ACOs serving beneficiaries in regions with worsening morbidity levels. This is more likely to happen when an ACO has a higher percentage of dual-eligible and / or disabled beneficiaries (as shown in Figure 6 below).
- ACOs serving beneficiaries in regions with other ACOs that engage in coding intensity activities.

In both of these examples, the ACO has incentives to change their participation list to exit those counties or stop serving the affected subpopulations or to leave the MSSP altogether.

CMS appears to recognize stakeholders' concern with this asymmetric risk score growth cap as evidenced by the request for public comment on alternate approaches to the cap in the 2022 Proposed Physician Fee Schedule Rule.⁶ These alternative risk cap approaches would allow for additional ACO risk score growth in relation to risk score growth in the ACO's region. In the 2022 Proposed Physician Fee Schedule Rule, CMS explores an alternative risk score cap methodology: *"Allowing the ACO risk score growth cap to increase by a percentage of the difference between the current 3 percent cap and risk score growth in the ACO's regional service area. In this alternate approach, the percentage applied would be equal to 1 minus the ACO's regional market share. This approach would raise the existing cap while limiting the ability for ACOs with high penetration in their region to increase their cap by engaging in coding intensity initiatives that raises the regional risk score."*⁷ This proposal is one of the three alternative options Aledade proposed to be modeled in this paper.

The purpose of this paper is to quantify risk score growth cap alternatives that mitigate the risks associated with this asymmetry in risk adjustment between an ACO and its region. We review the effects across the entire MSSP and the extent to which this issue is concentrated among certain ACOs, regions, or beneficiary categories.

Results

SUMMARY

To evaluate the cost of the risk score growth cap asymmetry, we estimate the gross and shared savings⁸ for every ACO in the

MSSP under the current CMS policy and three risk score growth cap methodologies proposed by Aledade. We describe each methodology in Figure 3. We reviewed each proposed methodology to confirm they produce reasonable results, but we did not consider the practicality of each option.

FIGURE 3: RISK SCORE GROWTH CAP METHODOLOGIES

1. **Current MSSP Policy⁹:** CMS caps the ACO's risk score growth at 3% but does not apply any limit to the regional risk score growth.
2. **CMS Proposed Adjusted ACO Cap¹⁰:** CMS caps the ACO's risk score growth at 3% plus a percentage of the difference between the 3% cap and the ACO's regional risk score growth. The percentage equals 100% less the ACO's market share. The adjusted cap cannot fall below 3%.
3. **Regionally Adjusted ACO Cap:** CMS caps the ACO's risk score growth at 3% plus the ACO's regional risk score growth after removing the ACO from the region. The adjusted cap cannot fall below 0%.
4. **Regional Risk Score Cap:** CMS applies the 3% cap to both the ACO and the regional risk score growth.

The difference in an ACO's shared savings under the current CMS policy and any of the three proposed alternatives represents the cost of the current asymmetric risk score growth cap to the ACO.

PROGRAM-WIDE ESTIMATED AND PROJECTED IMPACT

We estimate the gross and shared savings for the 2019A¹¹ and 2020 performance years using each of the methodologies presented in Figure 3. While the COVID-19 pandemic heavily influenced 2020 expenditures, we do not expect it to have a significant effect on risk scores because 2020 CMS-HCC risk scores are based on 2019 diagnoses. We project risk scores and expenditures to 2024 to estimate the gross and shared savings for each methodology in the final year of the first Pathways to Success agreement period. This projection assumes that risk scores for each enrollment category within each ACO trend consistently with historical trends from each ACO's first benchmark year to 2020, and that all expenditures trend with CMS's United States Per Capita Cost (USPCC) estimates. The Methodology section of this paper provides more detail on this projection. Figure 4 summarizes the total shared savings under each option; Figure 5 summarizes the savings per beneficiary per year (PBPY).

FIGURE 4: MEDICARE SHARED SAVINGS PROGRAM-WIDE SHARED SAVINGS (\$ MILLIONS)

RISK SCORE GROWTH CAP METHOD	2019		2020		PROJECTED 2024	
	SHARED SAVINGS	DIFFERENCE	SHARED SAVINGS	DIFFERENCE	SHARED SAVINGS	DIFFERENCE
Current Policy	\$724.3		\$2,325.2		\$1,079.1	
CMS Proposed Adjusted ACO Cap	\$725.4	\$1.1	\$2,345.7	\$20.5	\$1,270.9	\$191.8
Regionally Adjusted ACO Cap	\$730.7	\$6.4	\$2,375.2	\$50.0	\$1,296.4	\$217.3
Regional Cap	\$726.3	\$2.0	\$2,351.7	\$26.5	\$1,302.6	\$223.5

Note: The 'difference' for each alternative cap represents the difference between that option and the current policy.

FIGURE 5: AVERAGE MEDICARE ACO PER BENEFICIARY PER YEAR (\$BPBY) SHARED SAVINGS

RISK SCORE GROWTH CAP METHOD	2019		2020		PROJECTED 2024	
	SHARED SAVINGS	DIFFERENCE	SHARED SAVINGS	DIFFERENCE	SHARED SAVINGS	DIFFERENCE
Current Policy	\$181.30		\$224.89		\$104.37	
CMS Proposed Adjusted ACO Cap	\$181.58	\$0.28	\$226.88	\$1.98	\$122.92	\$18.55
Regionally Adjusted ACO Cap	\$182.90	\$1.60	\$229.73	\$4.84	\$125.39	\$21.02
Regional Cap	\$181.80	\$0.50	\$227.46	\$2.56	\$125.99	\$21.62

Note: The difference for each alternative cap represents the difference between that option and the current policy.

The estimates included in Figures 4 and 5 show that the effect of this asymmetry grows throughout the agreement period. We estimate that 1.5 million assigned beneficiary person years would see a change in shared savings under one of the three alternatives in 2020. This increases to 3.7 million person years in our 2024 projections. The increased effect is consistent with results observed historically. Using CMS’s Public Use Files, we calculate that 6.6% of ACOs participating in the MSSP in 2020 served regions where risk score trend exceeded 3% between 2014 and 2015; this proportion of ACOs increases to 38.4% between 2014 and 2020.

We also project risk scores for the MSSP-assignable population in each county to 2024. Figure 6 lists the percentage of the nationwide MSSP-assignable beneficiaries who live in a county that we expect will reach the 3% risk score growth cap between 2018 and 2024.

FIGURE 6: PERCENTAGE OF THE NATIONWIDE ASSIGNABLE POPULATION PROJECTED TO MEET OR EXCEED THE RISK SCORE CAP IN 2024 ASSUMING A BENCHMARK YEAR 3 OF 2018

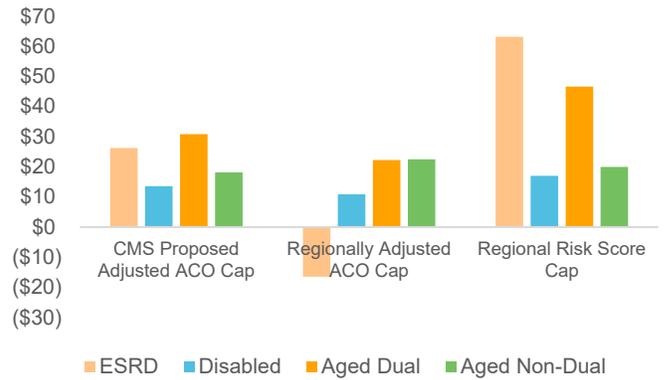
MSSP BENEFICIARY CATEGORY	PERCENTAGE OF ASSIGNABLE POPULATION
End-Stage Renal Disease (ESRD)	27.1%
Disabled	32.5%
Aged / Dual	33.3%
Aged / Non-Dual	27.9%

Note: Assumes a benchmark year 3 of 2018.

The two categories most impacted are disabled individuals and individuals dually eligible for Medicare and Medicaid coverage. Figure 7 shows that the disproportionate impact to the aged and dually eligible (aged / dual) population also exists in the total shared savings impact. Under two of the three alternative options, this population has a more significant shared savings

impact per beneficiary per year (PBPY) than the aged and not dually eligible (aged / non-dual) counterpart.

FIGURE 7: PROJECTED 2024 PBPY SHARED SAVINGS IMPACT BY BENEFICIARY CATEGORY



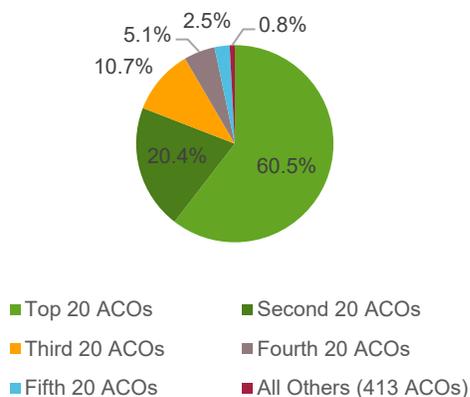
We have included a nationwide heat map of these results for the aged / non-dual beneficiary category in Appendix 1. We cap risk score trends that fall below -20% or above 20% to remove the effect of outliers (about 3% of all counties). Counties in blue have projected 2018 to 2024 risk score trends above 3%, with darker shading indicating a higher trend. These counties exist throughout the country but are generally concentrated in Western and Southeastern United States.

ACO-SPECIFIC IMPACT

While the program-wide metrics described in the previous section provide context for the magnitude of this issue, the reality is that most of the change in shared savings is concentrated among a handful of ACOs. We estimate that approximately 51% to 75% of ACOs will not see any change in shared savings under the alternative policy proposals we modeled in 2024. On the other end of the spectrum, we estimate that a significant proportion of the total shared savings impact is concentrated in a relatively small number of ACOs. As a result, these ACOs, particularly those in loss positions caused by the risk score asymmetry, may decide to limit growth in certain counties or subpopulations in the MSSP or leave the program altogether. The degree of concentration is generally consistent in all three alternative options, so we limit our detailed description to CMS’s proposed adjusted ACO cap.

The 20 ACOs most impacted by moving to CMS’s proposed adjusted ACO cap¹² represent 61% of the total program-wide shared savings impact.

FIGURE 8: PERCENTAGE OF PROJECTED 2024 TOTAL SHARED SAVINGS IMPACT BY COHORT



Note: Figure 8 is based on CMS's proposed adjusted ACO cap.

Collectively, we estimate that these 20 ACOs will have their shared savings reduced by 71% in 2024 as a result of the risk score cap asymmetry, relative to the CMS Proposed Adjusted ACO cap.¹³ Of the top 20 ACOs, all but three have a regional risk score growth of at least 3% even after removing the ACO from its region. For several ACOs, the regional risk score growth after removing the ACO exceeds 10%. Looking at this same cohort of ACOs historically, all but one serve regions where risk score trend exceeded 3% between 2014 and 2020. Appendix 2 provides a graphical summary of the ACO and regional risk score trends (with and without the ACO) for these top 20 ACOs.

The impact distribution is similar to those of the other two risk score growth cap methodologies. Figure 9 summarizes the percentage of the total impact listed in Figure 4 above that is concentrated in the top 20 most impacted ACOs.

FIGURE 9: PERCENTAGE OF TOTAL SHARED SAVINGS IMPACT CONCENTRATED IN TOP 20 IMPACTED ACOS

RISK SCORE GROWTH CAP METHOD	TOTAL IMPACT	IMPACT TO THE TOP 20 ACOS	PERCENTAGE OF TOTAL IMPACT
CMS Proposed Adjusted ACO Cap	\$191.8	\$116.0	60.5%
Regionally Adjusted ACO Cap	\$217.3	\$188.4	86.7%
Regional Cap	\$223.5	\$123.0	55.0%

To illustrate the mechanics of how this issue materially impacts a single ACO, we illustrate a hypothetical ACO looking to expand into a new region. We focus on the state of Florida since the

counties in this region of Florida exhibit high regional risk score trends. We assume this ACO started its agreement period on July 1, 2019, and therefore has benchmark years of 2016 through 2018. In 2020, we assume it is in the ENHANCED track with a 0% minimum savings rate (MSR). This hypothetical ACO currently exists in northeastern Florida and is looking to partner with a hypothetical hospital system in the central part of the state.

- Scenario 1: ACO exists in St. John's county.
- Scenario 2: ACO continues to operate in St. John's and also expands into Citrus and Sumter counties.

The results shown in Figure 10 show that, despite a decrease in the total cost of care, moving into these new counties would result in significant losses to the ACO. The new counties' population risk is increasing but the ACO's benchmark would not reflect that change. We estimate that this theoretical ACO would earn \$0.5 million in the MSSP in scenario 1 and lose \$0.2 million in scenario 2. We provide a simple example to clearly illustrate the mechanics of the issue. In reality, ACOs generally have a much larger assigned population and therefore see a more significant effect. Figure 10 summarizes key metrics for each scenario. This shows how, under the current rules, ACOs might be incentivized to avoid counties where health burden is increasing.

FIGURE 10: HYPOTHETICAL ACO PERFORMANCE METRICS

	SCENARIO 1: NO EXPANSION	SCENARIO 2: EXPANSION
ACO and Regional Uncapped Risk Ratio	1.018	1.054
ACO Capped Risk Ratio	1.018	1.030
Assigned Person Years	4,830	14,149
ACO Expenditure Trend	1.021	1.016
Uncapped Benchmark Trend	1.034	1.035
Capped Benchmark Trend	1.034	1.013
Total Gross Savings or Loss	\$707,754	-\$610,055
Total Settlement	\$514,891	-\$244,022

Note: We assume ACO expenditures and risk scores trend consistently with the region between benchmark year 3 (2018) and the performance year (2020). All risk ratios and trends included in Figure 10 represent changes between benchmark year 3 to the performance year (2018 to 2020).

Methodology and Data Sources

STUDY DESIGN

To estimate the financial impact of the alternate risk score growth cap methodologies outlined in Figure 3 above, we replicated CMS's methodology to calculate ACO-specific financial benchmarks in the 2019A and 2020 performance years. We relied exclusively on the MSSP PUFs to calculate these benchmarks. With regards to the financial benchmark under the

current Pathways to Success MSSP regulations, we recalculated, rather than the use the benchmark directly provided in the PUFs, to enable us to test and compare proposed policy alternatives, as well as evaluate the impact separately for each beneficiary category, i.e., end-stage renal disease (ESRD), disabled, aged / duals, aged / non-duals.

Using the current policy calculation as a baseline, we adjusted the benchmark calculation to reflect the alternatives outlined in Figure 3. We then compared ACO per capita expenditures to each of the four benchmarks to calculate total and PBPY gross savings or losses by beneficiary category. Finally, we applied the risk-sharing parameters of each ACO's track to calculate total and PBPY shared savings or losses by beneficiary category. While CMS calculates gross and shared savings or losses for all categories combined, we performed all calculations for each category separately in order to evaluate the impact to each category individually.

Under all scenarios, we did *not* apply the minimum savings rate (MSR) or minimum loss rate (MLR) corridor to any ACO. We wanted to reduce the sensitivity of the analysis to ACO-specific MSR / MLR corridor selections. As an example, an ACO may have gross savings rates of 1.9% and 2.1% of benchmark in the baseline and alternative scenarios, respectively, and an MSR of 2%. The actual impact of the methodology change on the savings rate is 0.2% but appears to be a 2.1% impact after applying the MSR. This assumption impacts the total shared savings but does not impact the total gross savings.

Lastly, we included the 159 ACOs still in Tracks 1, 1+, 2, or 3 in 2020 and recalculated their benchmarks under the Pathways to Success methodology. While these results do not match the impact the ACO would have actually seen in 2020, they add plausible data points to our study. All ACOs in the 2019A PUF are in Pathways to Success.

To estimate the impact in 2024, the final year of the first Pathways to Success agreement period, we project ACO and county risk scores by calculating the benchmark year 1 to 2020 risk score trend line for each beneficiary category within each ACO and county and then extrapolating trends through 2024. This implicitly assumes that the COVID-19 pandemic will not impact ACO and regional risk scores relative to nationwide averages over the long term. Results for individual ACOs may vary to the extent this assumption varies for that ACO. The estimated assignment and expenditures remain consistent between the four options, so we do not expect those estimates to have a significant impact on the key takeaways of this analysis.

KEY ASSUMPTIONS

Important assumptions for this study include:

- The historical risk score trend from benchmark year 1 to 2020 for each enrollment category within each ACO and county continues through 2024.
- ACO, regional, and national expenditures trend from benchmark year 3 to 2024 consistent with the USPC trend

estimates provided in CMS's Medicare Advantage 2023 Advanced Notice. Appendix 3 provides an example to illustrate why our results are not sensitive to the expenditure trend assumption.

- The size of an ACO's assigned and regional assignable populations does not change between 2020 and 2024.
- ACOs in a legacy (i.e., before Pathways to Success) track in 2020 would fall under the Pathways to Success track listed in Figure 11.

FIGURE 11: PATHWAYS TO SUCCESS TRACKS FOR LEGACY ACOS IN 2020

LEGACY TRACK	ASSUMED PATHWAYS TO SUCCESS TRACK
Track 1	BASIC B
Track 1+	BASIC E
Track 2	ENHANCED
Track 3	ENHANCED

HYPOTHETICAL EXAMPLE STUDY DESIGN AND ASSUMPTIONS

The example ACO expanding beyond St. John's county is entirely hypothetical and does not exist. However, we rely on actual 2017 through 2020 regional assignable data to model the benchmark year 1 through performance year regional risk-adjusted costs, respectively, for the two hypothetical ACO service areas. With regard to the ACO, we assume the following:

- The total population assigned to the ACO will grow in scenario 2 as the ACO enters new counties.
- The ACO's benchmark year risk scores will not change between the two scenarios. We adjust benchmark year ACO expenditures to target the same regional benchmark adjustment in the two scenarios. Holding this portion of the benchmark constant allows us to focus on the impact of the benchmark year 3 to 2020 regional risk score trend. In reality, county expansion would be accomplished by changes to the ACO's participant list, which would restate the historical benchmark.
- The ACO's per capita expenditures and risk scores trend consistently with the region between benchmark year 3 and 2020. These trends vary between the two scenarios, depending on the counties included in the ACO's region.
- The ACO represents 15% of its region in both scenarios.

LIMITATIONS

One key limitation of our work is that it relies on experience data overlapping with the COVID-19 pandemic. We expect the pandemic to have a material impact on ACOs' 2020

expenditures. The MSSP benchmarks generally control for this with the retrospective regional and national trend. However, atypical variation may exist at an ACO level to the extent ACO trend in 2020 varies from regional and national trend. We do not expect the pandemic to have a material impact on ACO or regional 2020 risk scores, because these risk scores rely on diagnoses captured in 2019. The COVID-19 impact on enrollment in 2020 does affect risk scores, but risk scores are also renormalized retrospectively in the MSSP, which controls for the nationwide enrollment impact. Because risk scores are the focus of these methodology changes, we are comfortable relying on 2020 data for this analysis.

Some limitations exist in the available data that prevent us from perfectly replicating the actual benchmarks. Please note that all limitations exist in all scenarios, so we do not expect the impact to be material when comparing the various methodologies. These limitations include the following:

1. **Suppressed data:** The CMS MSSP Public Use Files (PUFs) provide per capita expenditures and average risk scores for each county and beneficiary category. This information provides the basis for our regional trend and regional benchmark calculations for each ACO. However, CMS suppresses data cells with a limited number of beneficiaries. As a result, our regional trends and regional benchmarks will not perfectly align with actual results but are consistent.
2. **Benchmark year 3 market share:** We calculate the performance year market share for each ACO and apply it to both benchmark year 3 and the performance year. We do not expect the benchmark year 3 market share to vary significantly from the performance year market share in most cases.
3. **Revenue-based maximum loss limit:** The PUFs do not include the information required to calculate the revenue-based maximum loss limit, so we assume that every ACO falls under the benchmark-based limit. It is rare for ACOs to hit the loss limit.
4. **Regional adjustment weight:** The weight applied to the regional portion of the blended benchmark varies from 15% to 50% and depends on whether the adjustment is favorable to the ACO and how long the ACO has been subject to a regional benchmark adjustment (in number of agreement periods). It is not possible to perfectly identify the latter, but we estimated based on the ACO's current agreement period start date and how many agreement periods the ACO has been in the MSSP.

Despite these limitations in replicating ACO historical settlements, our calculated benchmark was within 1% of the actual benchmark for 97% and 95% of the ACOs in Pathways to Success in 2019A and 2020, respectively. In aggregate the results were within 6.1% in 2019A and 0.8% in 2020. As such, we feel comfortable that our models provide reasonable predictions of the policy alternatives examined.

The 2024 projected risk scores by ACO and county do not represent our best estimate for each ACO or county individually.

We apply a systematic approach to projecting risk scores and do not consider other ACO-specific or county-specific factors, such as variation in the 2016 through 2020 risk scores, impact of the COVID-19 pandemic, and ACO penetration. While not precise at the individual ACO level, we think this is a reasonable approach to better understand the future effects of the financial benchmark's 3 percent risk score growth cap.

DATA SOURCES

All of our analysis is based on the CMS PUFs.¹⁴ Figure 12 provides a description of each of the three files we used.

FIGURE 12: DESCRIPTION OF CMS PUBLIC USE FILES

Performance Year Financial and Quality Results: CMS provides key performance metrics for all MSSP ACOs, including ACO assignment, expenditures, and risk scores, for all three benchmark years and the performance year.

Number of ACO-Assigned Beneficiaries by County: CMS provides the number of beneficiaries assigned to each ACO in each county, split by beneficiary category.

County-Level Aggregate Expenditure and Risk Score Data on Assignable Beneficiaries: CMS provides the average risk score and per capita expenditures of the MSSP assignable population in every county, split by beneficiary category

Caveats and Qualifications

The information in this paper is intended to estimate the financial cost of the asymmetry in the MSSP's risk score growth cap. It may not be appropriate, and should not be used, for other purposes.

The material in this paper represents the opinion of the authors and is not representative of the views of Milliman. As such, Milliman is not advocating for, or endorsing, any specific policy changes to the Medicare Shared Savings Program regulations in this report.

In preparing this paper, we relied on data and information provided by CMS. We accepted this data and information without audit but reviewed it for general reasonableness when feasible. If this data and information is inaccurate or incomplete, our results and conclusions may likewise be inaccurate or incomplete.

The information in this paper is based upon CMS's MSSP rules and reports as of the time this paper was written. The paper will need to be updated if the program rules change.

Milliman has developed certain models to estimate the values included in this paper. The intent of the models is to estimate ACOs' financial benchmarks and financial performance and to project county-level risk scores. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose

and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

Differences between our projected and actual 2024 MSSP risk scores and gross and shared savings depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from estimated amounts to the extent that actual experience deviates from expected experience. Furthermore, these results should be considered general and not applicable to any individual ACO.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. The authors of this paper are members of the American Academy of Actuaries, and they meet the qualification standards to perform this analysis.

¹ The full text of the MSSP Pathways to Success proposed rule is available at <https://s3.amazonaws.com/public-inspection.federalregister.gov/2018-17101.pdf>.

² Throughout this paper, all risk scores refer to CMS-HCC renormalized risk scores.

³ Data.CMS.gov. Medicare Shared Savings Program. Retrieved August 25, 2021, from <https://data.cms.gov/medicare-shared-savings-program>.

⁴ MSSP Pathways to Success proposed rule, op cit.

⁵ The full text of the MSSP Pathways to Success final shared savings rule is available at <https://www.cms.gov/files/document/medicare-shared-savings-program-shared-savings-and-losses-and-assignment-methodology-specifications.pdf-1>.

⁶ The full text of the CY 2022 Physician Fee Schedule proposed rule is available at <https://www.federalregister.gov/documents/2021/07/23/2021-14973/medicare-program-cy-2022-payment-policies-under-the-physician-fee-schedule-and-other-changes-to-part>.

⁷ Ibid.

⁸ Gross savings represents the difference between an ACO's total benchmark and performance year expenditures. Shared savings represents the gross savings multiplied by the applied shared savings or loss rate, subject to the savings or loss limits. We do not apply the minimum savings or loss rate, for the reasons described in the Methodology section of this report.

⁹ MSSP Pathways to Success final rule, op cit.

¹⁰ CY 2022 Physician Fee Schedule proposed rule, op cit.

¹¹ The 2019A performance year represents the first Pathways to Success performance year, which began on July 1, 2019. MSSP Pathways to Success final rule, op cit.

¹² CY 2022 Physician Fee Schedule proposed rule, op cit.

¹³ Ibid.

¹⁴ Data.CMS.gov. Medicare Shared Savings Program, op cit.



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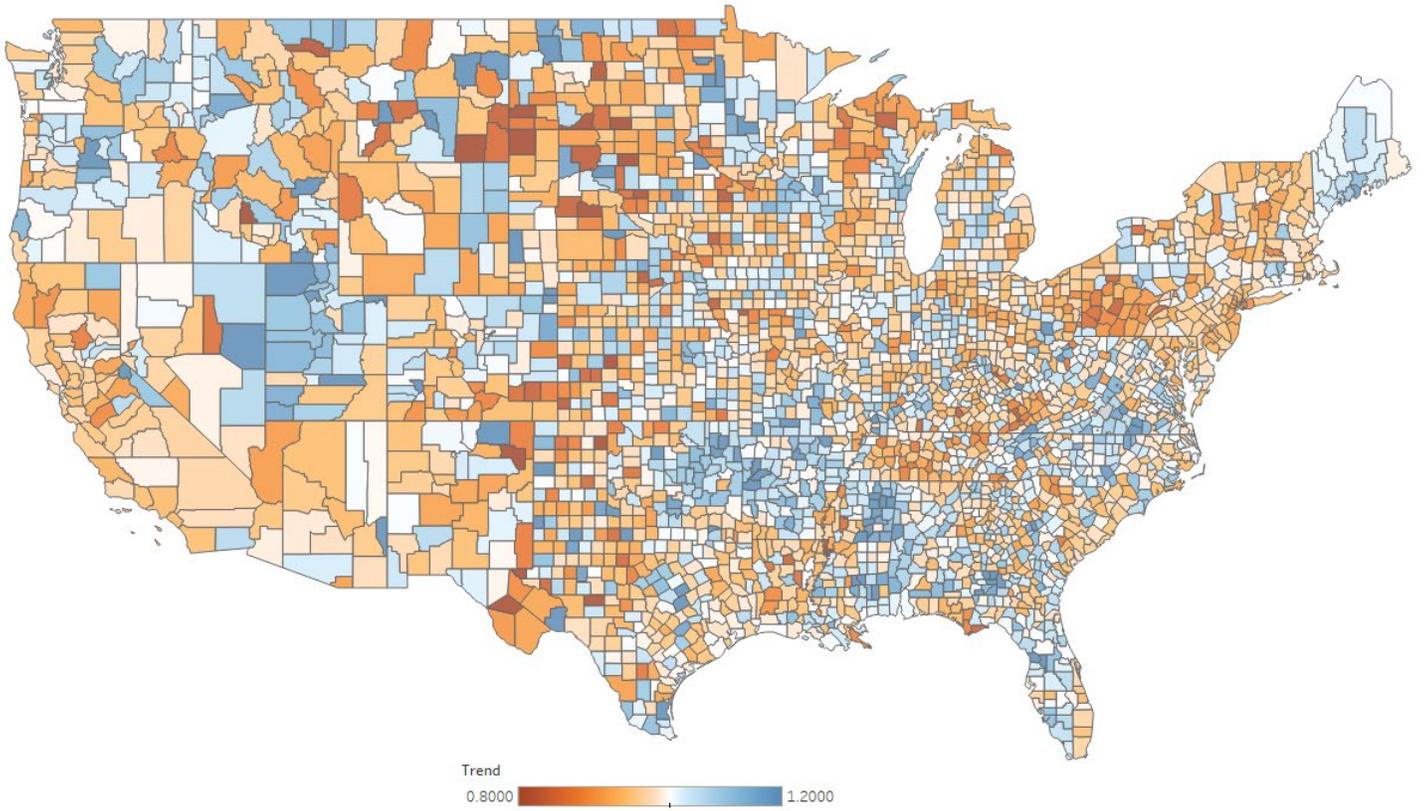
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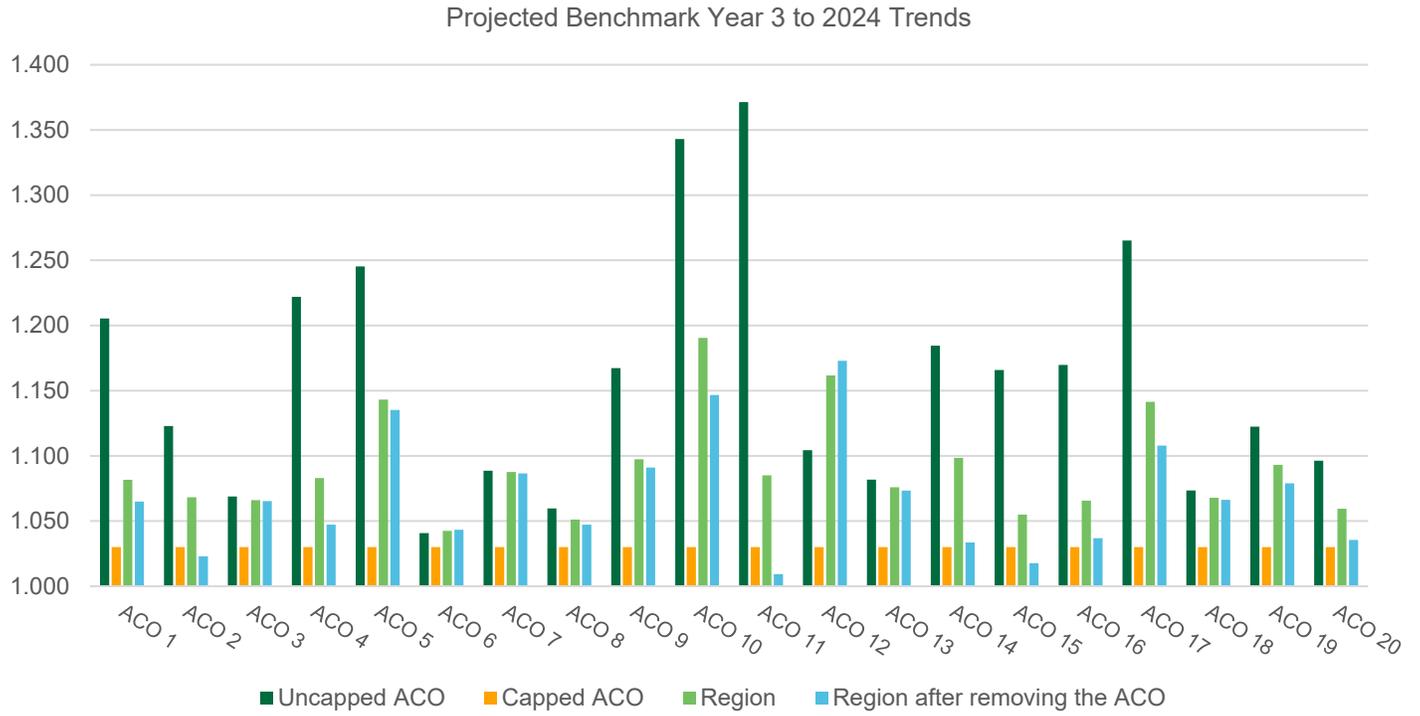
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Appendix 1 – Risk Score Trend Heat Map



Appendix 2 – Risk Score Trends for the Top 20 Impacted ACOs



Appendix 3 – Example to illustrate the sensitivity of the expenditure trend assumption

DESCRIPTION	ITEM NUMBER	SCENARIO 1:	SCENARIO 2:
		1% EXPENDITURE TREND	5% EXPENDITURE TREND
ACO Historical Expenditures	(1)	\$9,750	\$9,750
Historical Benchmark	(2)	\$10,000	\$10,000
Expenditure Trend	(3)	1.010	1.050
Regional Risk Score Trend	(4)	1.050	1.050
Regional Risk-Adjusted Trend	(5) = (3) / (4)	0.962	1.000
National Trend	(6) = (3)	1.010	1.050
Market Share	(7)	15%	15%
Benchmark Trend	(8) = (6) * (7) + {1 - (7)} * (5)	0.969	1.008
ACO Risk Score Trend	(9)	1.040	1.040
Updated Benchmark	(10) = (2) * (8) * (9)	\$10,079	\$10,478
Updated ACO Expenditures	(11) = (1) * (3)	\$9,848	\$10,238
Gross Savings Rate	(12) = {(10) - (11)} / (11)	2.3%	2.3%

Note: This example is entirely illustrative and is not based on real data. The gross savings rate remains constant between the two scenarios despite the change in expenditure trend, because the expenditure trend is consistent for the ACO, its region, and the nation.