

# The future is now: 2024 Star Ratings release

## Decoding the Star Rating system evolution

Hayley Rogers, FSA, MAAA  
Matthew H. Smith, FSA, MAAA  
Philip Nelson, FSA, CERA, MAAA  
Mike Yurkovic, ASA, MAAA



In the constantly evolving Medicare Advantage landscape, the 2024 Star Ratings release marks the beginning of a transformative phase that is set to shape the system for years to come. As health plans integrate the latest Star Ratings into their financial outlooks, it is crucial to understand the broader consequences and refine strategies to not just adapt, but thrive in this new environment.

On October 13, 2023, the Centers for Medicare and Medicaid Services (CMS) released the 2024 Star Ratings for Medicare Advantage (MA) contracts, along with the detailed measure and methodology files supporting these ratings.<sup>1</sup> For the first time, these ratings incorporate Tukey outlier removals in the calculation of non-Consumer Assessment of Healthcare Providers and Systems (CAHPS) measure cut points. This adjustment is just one of the anticipated changes slated for the MA Star Ratings framework in the upcoming years. The 2024 Star Ratings will influence health plan revenues for payment year (PY) 2025 and play a pivotal role in shaping the 2025 MA bid submissions.

This white paper builds on our earlier publication titled “[Future of Medicare Star Ratings: The Reimagined CMS Bonus System](#),” released on October 6, 2023.<sup>2</sup> That paper provided an in-depth review of the proposed and finalized changes to the Star Rating system, as well as the financial implications forecasted by CMS. In this edition, we discuss the declining Star Ratings for MA and Medicare Advantage Prescription Drug (MA-PD) contracts<sup>3</sup> and the factors contributing to the lower ratings and revenue.

### Key observations and conclusions in this paper include:

- The 2024 Star Ratings continue a downward trend, with the national average rating now at the lowest overall point since 2017 for MA-PDs and since 2014 for Prescription Drug Plans (PDP).
- While 125 contracts saw at least a 0.5 Star Rating increase, almost twice the number of contracts (244) experienced a decrease in Star Ratings by at least 0.5 Stars.
- Almost a third of the contracts would have received a 2024 Star Rating at least 0.5 Stars higher than their actual rating, if CMS had applied the 5% guardrails against the actual prior cut points, rather than against simulated values.
- Smaller organizations have particularly felt the impact of this year's Star Ratings. Plans with fewer than 100,000 members now hold an average Star Rating of 3.95, a decrease of 0.23 from their 2023 Star Ratings.
- Additional reductions to plans' Star Ratings may be coming over the next few years, with new measures and weight changes impacting plans' 2026 ratings and a new rewards methodology — the Health Equity Index (HEI) — impacting plans' 2027 ratings.

<sup>1</sup> The full text of the 2024 Star Ratings Fact Sheet is available at <https://www.cms.gov/files/document/101323-fact-sheet-2024-medicare-advantage-and-part-d-ratings.pdf>.

<sup>2</sup> Rogers, H., Smith, M., & Yurkovic, M. (October 2023). Future of Medicare Star Ratings: The Reimagined CMS Bonus System. Milliman Research Report. Retrieved October 24, 2023, from [https://www.milliman.com/-/media/milliman/pdfs/2023-articles/10-6-23\\_medicare-star-ratings-white-paper\\_20231005.ashx](https://www.milliman.com/-/media/milliman/pdfs/2023-articles/10-6-23_medicare-star-ratings-white-paper_20231005.ashx).

<sup>3</sup> PDPs, dual demonstrations, National Program of All-Inclusive Care for the Elderly (PACE), 1833 Cost, and 1876 Cost contracts are not included in these estimates because their CMS revenue is not directly affected by changes to their Star Ratings.

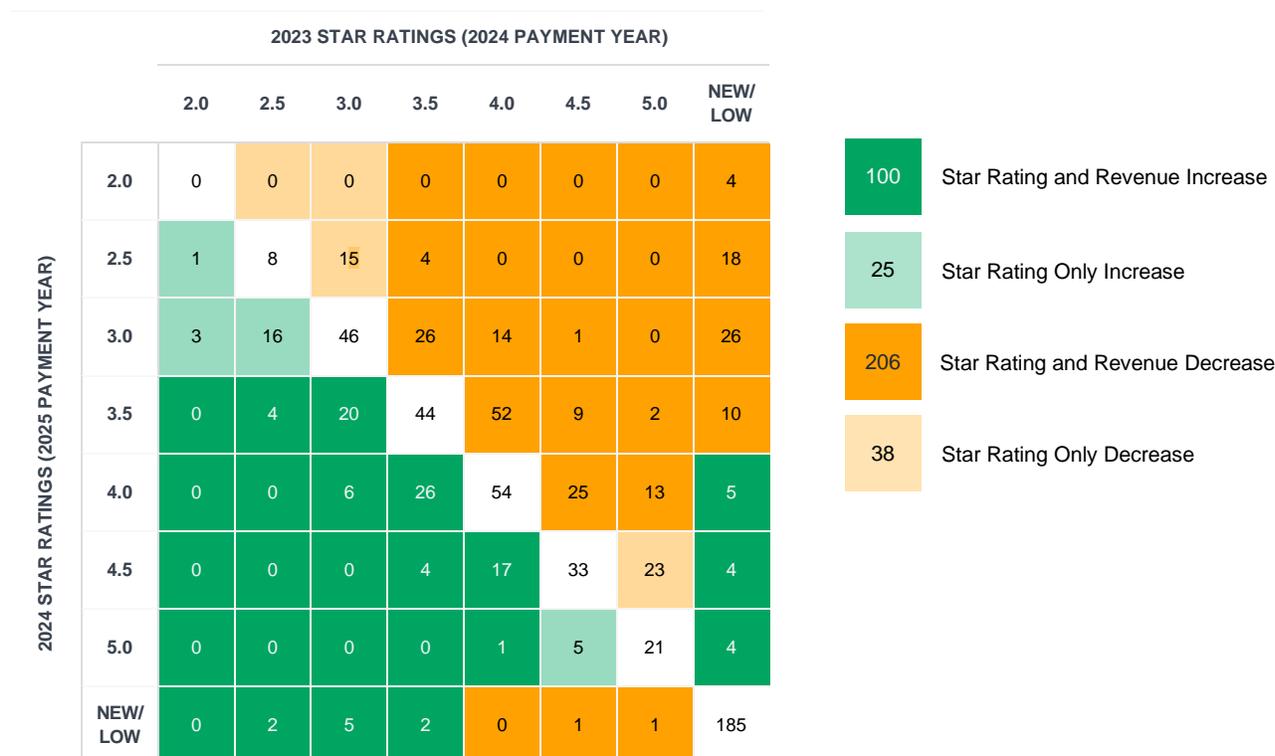
## 2023 to 2024 Star Rating shifts

The overall member-weighted average Star Rating for MA-PD contracts declined from 4.14 in the 2023 Star Ratings to 4.04 in the 2024 Star Ratings,<sup>4</sup> representing the lowest MA-PD average Star Rating since 2017.<sup>5</sup> For PDP contracts, the overall average Star Rating decreased from 3.25 to 3.11, the lowest average Star Rating for PDPs since 2014.<sup>6</sup> Unlike MA-PD contracts, Star Ratings do not directly impact revenue for PDPs.

Figure 1 illustrates the transition between the 2023 and 2024 Star Ratings for local Coordinated Care Plans (CCPs), medical savings accounts (MSAs), private fee-for-service (PFFS) plans, and regional CCP plans. These contract types can experience financial implications due to shifts in their Medicare Advantage Star Ratings. It is important to note that in this paper, we differentiate between Star Ratings year (SY) and payment year (PY). For example, a 2024 Star Rating (2024SY) influences the revenue in 2025 (2025PY). Plans also need to account for data collection timeframes, since Star Ratings are influenced by data from preceding years. For example, the ratings for 2024SY are affected by data from 2021 and 2022.

A total of 125 contracts received at least a 0.5 Star Rating increase, of which 100 contracts will also experience a revenue increase in 2025PY. Almost twice the number of contracts received at least a 0.5 Star Rating decrease (244 contracts), and 206 of those contracts will also receive a revenue decrease in 2025PY.

**FIGURE 1: 2023 TO 2024 STAR RATING CHANGES BY CONTRACT**



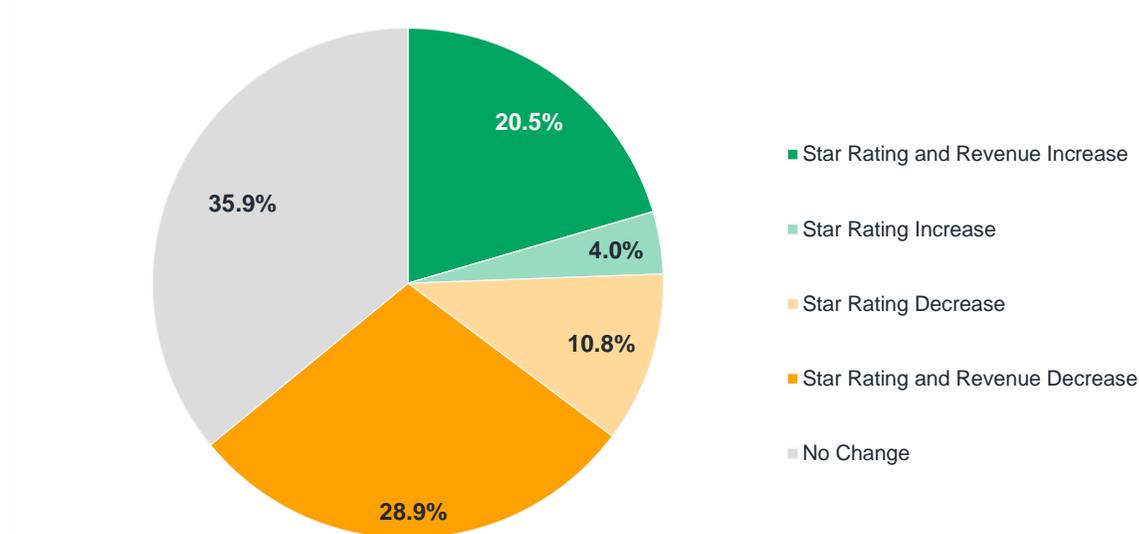
4 2024 Star Rating Fact Sheet, op cit.

5 The Star Ratings for 2017 through 2020 can be found in the 2020 Star Rating Fact Sheet. See <https://www.cms.gov/medicare/prescription-drug-coverage/prescriptiondrugcovgenin/downloads/2020-star-ratings-fact-sheet-.pdf>.

6 The Star Ratings for 2014 through 2017 can be found in the 2017 Star Rating Fact Sheet. See <https://www.cms.gov/newsroom/fact-sheets/2017-star-ratings>.

Figure 2 presents similar information but displays the Star Rating shifts based on the percentage of members enrolled in the contracts summarized in Figure 1. There is a consistent theme from both figures, with a net decline in Star Ratings both in terms of total contracts and in terms of members enrolled in those contracts.

**FIGURE 2: PERCENTAGE OF MEMBERS IMPACTED BY THE 2023 TO 2024 STAR RATING CHANGES**



Once MA plans reach a 4.0 Star Rating, they earn the 5% quality bonus payment (QBP) benchmark payment rates, the highest benchmark rates available. At 3.5 and again at 4.5 Stars, plans receive higher revenues from CMS due to enjoying higher rebate percentages. While MA plan revenue is the same whether the plan has 4.5 or 5.0 Star Rating, 5.0-Star plans enjoy additional marketing and enrollment privileges.

We reviewed the distribution of members across different Star Rating levels over recent years, using the fact sheets CMS releases annually with the Star Ratings. From the 2023 to 2024 Star Ratings, the proportion of members enrolled in 5.0-Star plans declined by 15 percentage points (22% to 7%), the lowest level since at least 2014SY.<sup>7</sup> Additionally, the share of members in 4.5- or 5.0-Star plans has declined (48% to 38%) and is now more in line with proportions from 2021SY and prior. The share of members in 4.0-Star or higher plans remained about the same as last year.

Much of this decline is due to the addition of Tukey outlier removal as well as the adjusted guardrail approach. We discuss additional details about Tukey outlier removal, guardrails, and their impacts later in this paper.

We also examined the average Star Ratings over the last three years and aggregated them at the parent organization (Parent Org) level. A "large" Parent Org is defined as one with over 1 million MA members (using the July 2023 CMS enrollment files), a "medium" Parent Org has membership ranging between 100,000 and 1 million members, and a "small" Parent Org consists of fewer than 100,000 members. Figure 3 summarizes the average Star Ratings for these classifications, with values weighted by enrollment.

<sup>7</sup> 2017, 2020, and 2024 Star Rating Fact Sheets, op cit.

**FIGURE 3: CHANGES IN AVERAGE MA-PD STAR RATING FROM 2023 TO 2024 BY PARENT ORGANIZATION SIZE<sup>8</sup>**

PARENT ORGANIZATION SIZE BY (MEMBERS)	AVERAGE OVERALL STAR RATINGS BY STAR RATING YEAR (SY)					
	AVERAGE STAR RATING			CHANGE IN AVERAGE STAR RATING*		
	2022SY	2023SY	2024SY	2023SY-2022SY	2024SY-2023SY	2024SY-2022SY
<b>LARGE (1 MILLION +)</b>	4.37	4.14	4.06	-0.23	-0.08	-0.31
<b>MEDIUM (100K TO 1 MILLION)</b>	4.42	4.28	4.06	-0.14	-0.22	-0.37
<b>SMALL (&lt; 100K)</b>	4.33	4.19	3.95	-0.15	-0.23	-0.38

\* Values in table may not add up due to rounding

In response to the significant disruptions caused by the COVID-19 pandemic and subsequent nationwide lockdowns during calendar year 2020, CMS revised the 2022 Star Rating methodology to apply a “hold harmless” provision for all Star Rating measures and contracts. This approach ensured contracts were not penalized due to the atypical challenges in 2020. CMS used the better measure-level outcome from either the 2021 or 2022 Star Ratings when calculating a contract’s overall Star Rating.<sup>9</sup> As a result, the average 2022 Star Ratings were elevated, reflecting the safeguards CMS implemented during the Public Health Emergency (PHE). When those safeguards were removed for the 2023 Star Ratings, the overall ratings decreased for most contracts as the rating returned toward the pre-pandemic levels.

In 2022SY, the difference in average Star Ratings among the three organization types was relatively small. However, there has been a general trend of decline in Star Ratings across all parent organization sizes between 2022SY and 2024SY, with the small and medium-sized organizations experiencing the highest overall decline (0.37 and 0.38 Stars lower, respectively). Despite the initial larger drop from 2022SY to 2023SY, large organizations experienced a smaller decline from 2023SY to 2024SY relative to small and medium-sized organizations.

Figure 4 provides additional insight into the shifting Star Ratings, summarizing the average Star Ratings by contract type. All contract types experienced a decline in their average Star Ratings between 2022SY and 2024SY, but “CCP with only institutional special needs plan (I-SNP)” contract types saw the largest decline in this time period.<sup>10</sup> Unlike other contract types where CAHPS measures mitigate the impact of Tukey outlier removals, I-SNP only contracts have all their Star measures exposed to these removals. This is because CAHPS measures do not undergo the Tukey outlier removal process and don’t influence the overall Star Rating for I-SNP only contracts.

**FIGURE 4: CHANGES IN AVERAGE OVERALL MA-PD STAR RATINGS FROM 2022SY TO 2024SY BY STAR RATING CONTRACT TYPE<sup>11</sup>**

STAR RATING CONTRACT TYPE	JULY 2023 ENROLLMENT	AVERAGE STAR RATING			CHANGE IN AVERAGE STAR RATING *		
		2022SY	2023SY	2024SY	2023SY – 2022SY	2024SY – 2023SY	2024SY – 2022SY
<b>CCP WITH ONLY I-SNP</b>	22.1k	5.00	4.64	4.25	-0.36	-0.40	-0.75
<b>CCP W/O SNP</b>	10.9m	4.48	4.20	4.01	-0.28	-0.19	-0.47
<b>CCP WITH SNP</b>	19.8m	4.32	4.15	4.08	-0.17	-0.07	-0.25
<b>PFFS</b>	34.3k	3.92	3.77	3.86	-0.15	0.09	-0.06

\* Values in table may not add up due to rounding.

8 CMS (July 2023). Monthly Enrollment by Plan. Retrieved October 24, 2023, from <https://www.cms.gov/https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/monthly-enrollment-plan-2023-07>.

9 The full text of the 2022 Star Rating Fact Sheet is available at <https://www.cms.gov/files/document/2022-star-ratings-fact-sheet1082021.pdf>.

10 CMS tracks contracts separately by type of Coordinated Care Plan (CCP) and applies different measures to different CCP types. See 2024 Star Rating Technical Notes, op cit.

11 CMS (July 2023), Monthly Enrollment by Plan, op cit.

## Overall star rating simulations

Starting with the 2024 Star Ratings, CMS is removing Tukey outliers from the calculation of all cut points, except those based on Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures. Please see the sidebar for additional information on CMS's approach as described in the 2021 Final Rule.<sup>12</sup>

The stated goal of this change is to stabilize cut points and prevent large year-to-year fluctuations in cut points caused by a few low-performing contracts. This goal aligns with the “guardrails” provision used when calculating final cut points. The current guardrails provision limits movement in the cut point thresholds for non-CAHPS measures to +/- 5% “from year-to-year,” as discussed in the 2023 Final Rule.<sup>13</sup>

For the 2024 Star Ratings, CMS recalculated the 2023 cut points by removing the Tukey outliers. When applying the 5% guardrails, CMS used these adjusted figures rather than the actual 2023 cut points. This approach resulted in major alterations in the cut points for most measures. Consequently, the effects of removing Tukey outliers are mostly realized in the 2024 Star Ratings, instead of a gradual introduction in 5% annual increments.

In Figure 5, we modeled several 2024 Star Ratings cut point scenarios to evaluate the national average impact of the Tukey outlier removal on the contract-level Star Ratings. These scenarios include:

**— No Guardrails; No Tukey Outliers Removed (2022 Star Rating methodology):** This represents the actual 2022 Star Rating cut points and the simulated 2023 and 2024 Star Rating cut points if no 5% guardrails were applied and no Tukey outliers were removed.

**— 5% Guardrails Against Actual Prior; No Tukey Outliers Removed (2023 Star Rating methodology):** This represents what the 2024 cut points would have looked like if CMS had not removed the Tukey outliers, including the 5% guardrail against the actual 2023 cut points.

**— 5% Guardrails Against Actual Prior; Tukey Outliers Removed (alternative 2024 Star Rating methodology):** This represents what the 2024 cut points would have looked like if CMS applied the 5% guardrails against the actual 2023 cut points.

**— 5% Guardrails Against Simulated Prior; Tukey Outliers Removed (2024 Star Rating methodology):** This represents the actual 2024 cut points, with the Tukey outliers removed and 5% guardrails applied to the recalculated 2023 cut points.

### SIDEBAR: 2021 FINAL RULE, PAGE 39

The first step in applying the Tukey outlier deletion method is calculating the first quartile (Q1) and third quartile (Q3) of the score distribution: 25% of scores fall below Q1, another 25% of scores fall above Q3, and the remaining 50% of scores fall between Q1 and Q3.

Next, we calculate the interquartile range (IQR), the difference between the third and first quartiles ( $IQR = Q3 - Q1$ ), which refers to the range of the middle 50% of all scores. The Tukey outlier fence method identifies extreme outliers as those that are below ( $Q1 - 3 \times IQR$ ) or above ( $Q3 + 3 \times IQR$ ).

<sup>12</sup> Statistician John Tukey proposed a test to define outliers based on comparing values to interquartile ranges. The CMS 2021 Final Rule discusses its approach to identify and remove Tukey outliers. See <https://www.federalregister.gov/documents/2020/06/02/2020-11342/medicare-program-contract-year-2021-policy-and-technical-changes-to-the-medicare-advantage-program>.

<sup>13</sup> The full text of CMS's 2023 Final Rule is available at <https://www.federalregister.gov/documents/2022/05/09/2022-09375/medicare-program-contract-year-2023-policy-and-technical-changes-to-the-medicare-advantage-and>.

FIGURE 5: WEIGHTED AVERAGE STAR RATING BY PAYMENT YEAR – ACTUAL AND SIMULATED SCENARIOS

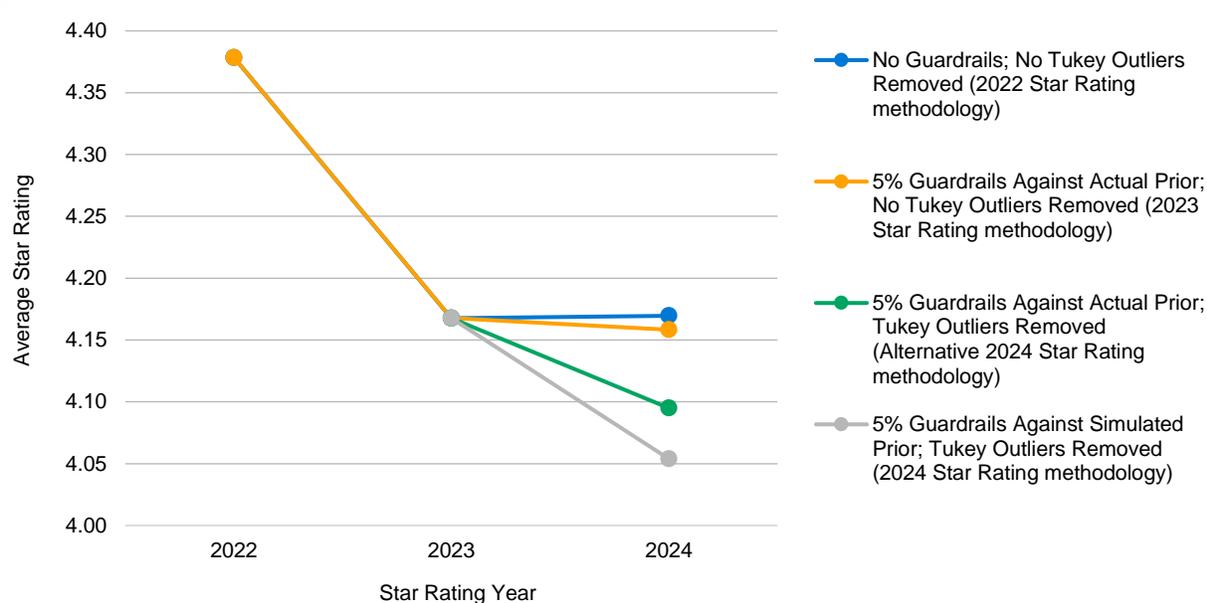


Figure 5 illustrates how the removal of Tukey outliers influenced the change in the national average 2024 Star Ratings. Without the removal of these outliers, as shown in the blue and orange scenarios, the national average 2024 Star Rating would be similar to the 2023 Star Rating average. The blue scenario, which lacks guardrails, is marginally higher than the orange scenario because it fully reflects the lower cut points that would have existed without the 5% guardrails.

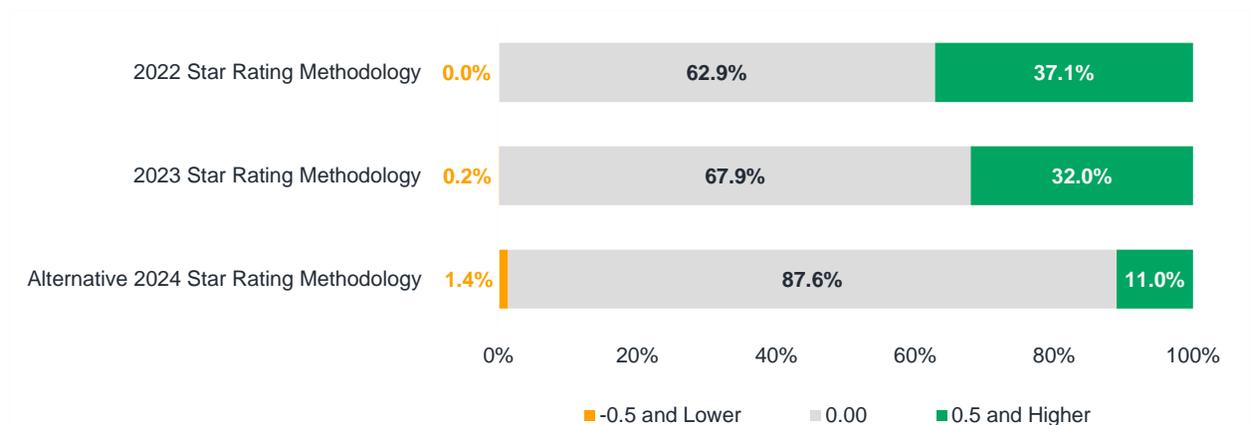
CMS's decision to apply the guardrails against simulated prior year values instead of actual prior year values also had a material impact on 2024 Star Ratings. Had CMS applied the actual prior year values for setting cut points (alternative 2024 Star Rating methodology), the Tukey impact would have been about a third less for 2024.

We also caution other future methodological changes by CMS may be subject to this adjusted guardrail approach, where CMS re-simulates prior year cut points rather than relying on actual cut points. Plans should therefore proactively consider their Star Ratings exposure by monitoring CMS communications for measures that may present material risks and developing plans to affect their measures while there is still time before methodological changes affect revenues. Plans receiving 5.0 Star Ratings on certain measures should not assume they will be immune to a decrease in their ratings, even if they currently have a ratings cushion of 5% or more.

In addition to analyzing the national average impact to Star Ratings under different scenarios, we also show in Figure 6 the percentage of individual contracts that would have gained at least half a star, lost at least half a star, or seen no impact under each scenario relative to their actual 2024 Star Rating. We note all but one of the modeled changes for individual contracts were +/- 0.5 stars.<sup>14</sup>

<sup>14</sup> In one scenario, a single contract's Star Rating moved by a full star.

**FIGURE 6: PERCENTAGE OF CONTRACTS WITH STAR RATING DIFFERENCES UNDER ALTERNATE SCENARIOS COMPARED TO 2024 ACTUALS**

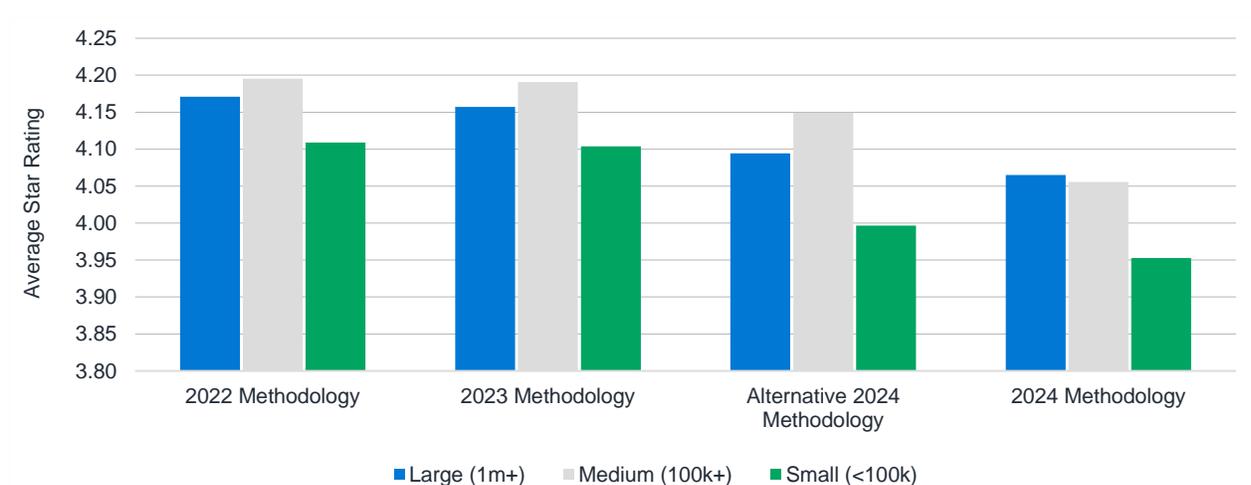


Under the actual methodology applied to 2024 Star Ratings, 32% of applicable contracts were rated lower than they would have been under the 2023 Star Ratings methodology (no Tukey outlier removal, guardrails applied against actual 2023 cut points). This gap is substantially larger than original CMS simulations where, in the 2021 Final Rule, CMS had originally projected that 16% of MA-PD contracts would decrease by half a star. In the 2021 Final Rule, CMS also had projected that 2% of contracts would increase by half a star due to Tukey;<sup>15</sup> instead, only 0.4% of contracts increased in the 2024 Star Ratings. We also note the guardrails are still having an impact on the cut points; once the impact of the guardrails erodes, the percentage of contracts impacted by Tukey (either increases or decreases) should grow further.

In Figure 3 above, we noted that large parent organizations had smaller declines in their overall Star Ratings between 2023SY and 2024SY relative to what medium or small parent organizations experienced. In Figure 7, we analyze the impacts of Tukey outlier removal and the adjusted guardrail approach by parent organization size.

Figure 7 illustrates that large organizations were not as impacted by the Tukey outlier removals (0.09 lower Star Ratings) and guardrail changes compared to medium and small organizations (0.14 and 0.15 Star Rating decreases, respectively). Not all of the shifts in Star Ratings were due to Tukey and guardrails; additional factors drove the rest of the difference in Star Ratings between the groupings of parent organizations.

**FIGURE 7: AVERAGE 2024 MA-PD STAR RATING BY PARENT ORGANIZATION SIZE AND METHODOLOGY**



<sup>15</sup> The full text of CMS's 2021 Final Rule is available at <https://www.federalregister.gov/documents/2020/06/02/2020-11342/medicare-program-contract-year-2021-policy-and-technical-changes-to-the-medicare-advantage-program>.

A key part of our analysis was validating our calculations as compared to the Star Ratings data published by CMS. In our summaries, we calculated the average Star Rating across each contract as 4.05 Stars. Additionally, we replicated each individual contract’s calculated Star Rating for each individual measure and compared that to each contract’s overall Star Rating. By doing so, we matched all but two contracts among the contracts rated by CMS.

We relied on published measure results, measure weights, measure cut points, Categorical Adjustment Index (CAI) values, disaster percentages, reward system logic, hold harmless provisions, and Puerto Rico adjustments. The Star Rating scenarios presented in this white paper recalculate the contract-level Star Ratings using the standard CMS methodology, incorporating the alternative cut point scenarios discussed in this paper.

## Simulated cut points

We validated the accuracy of our alternative cut point scenarios by first implementing the logic CMS used to develop the 2022, 2023, and 2024 Star Rating cut points for non-CAHPS measures. We then compared our results against the actual cut points to confirm we could accurately reproduce the CMS clustering methodology, Tukey outlier removal, and the 5% guardrail logic.

Figure 8 illustrates this validation for the 2.0-Star threshold (cut point) for the “Care for Older Adults – Pain Assessment” measure. For this cut point, there were important methodological changes made in both 2023 and 2024. In 2023, CMS implemented the guardrails; by doing so, the difference between 2022 and 2023 was restricted to about 5%, whereas, under the old methodology, the cut point would have changed by about 25% (note while this example shows a decline in measures from 2022 to 2023, many other cut points would have increased between the two years).

Meanwhile, in 2024, CMS introduced Tukey outlier removal. This methodological change brought the new cut point to 74%, well above even the 2022 cut point threshold. Had CMS instead used guardrails based on actual 2023 values, the cut point would have only climbed to 55%, roughly equal to the original 2022 value.

While this example had a relatively large shift between individual year’s methodologies, not all measures were impacted by Tukey outlier removals, and many measures that were impacted by this change had smaller impacts. The aggregate nationwide average impact of all changes was shown in Figure 5 above.

**FIGURE 8: 2.0 CUT POINT THRESHOLD SCENARIOS FOR CARE FOR OLDER ADULTS – PAIN ASSESSMENT MEASURE, BY STAR RATING YEAR**

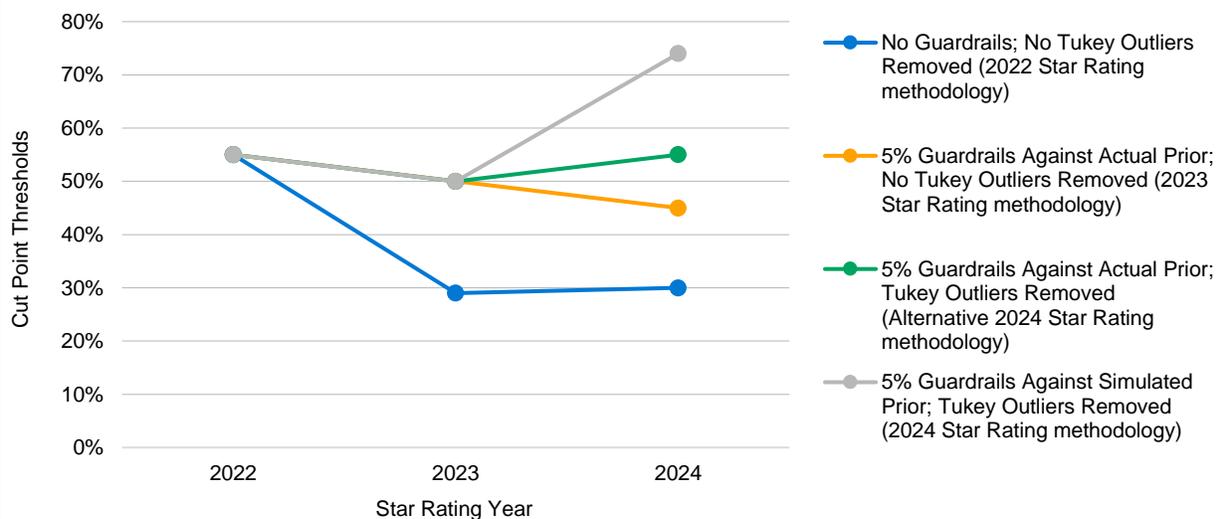


Figure 9 illustrates the top 10 Star Rating measures where the 2.0-Star cut point was most affected by the Tukey outlier removals. In the Figure, we show the difference between the actual 2024 Star Rating cut points (gray line in Figure 8) and the simulated 2024 Star Rating cut points using the 2023 Star Ratings methodology (orange line in Figure 8).<sup>16</sup>

For example, the impact of Tukey outlier removals on the 2.0-Star threshold for the "Care for Older Adults – Pain Assessment" measure is 29%. This 29% represents the difference between the actual 2024 cut point (74%, black in Figure 8) and the simulated 2023 Star Rating methodology applied to the 2024 Star Ratings (45%, orange in Figure 8).

Six of the top 10 measures affected by Tukey outlier removals were not based on claims data, which may suggest operations-based measures are more susceptible to outliers in the results. Larger insurance companies may have their own call centers, managed and operated internally, allowing for greater control over training, quality, foreign language interpreter, and teletypewriter (TTY) availability. However, small, medium, and some large organizations may have to outsource to third-party vendors and/or pharmacy benefit managers (PBMs) for their call center operations, giving them less ability to directly manage their call center quality measures.

The "Medication Therapy Management (MTM) Program completion rate for comprehensive medication review (CMR)" measure results are generally managed by an organization's chosen PBM. Similarly, the "Medicare Plan Finder (MPF) Price Accuracy" measure often requires close communication between an organization and its PBM. Therefore, coordinating quality measures across separate entities may present challenges some organizations may not be able to effectively overcome.

The precision and promptness of reviewing appeals decisions can also reflect an organization's resource capacity, which dictates its ability to manage appeals efficiently. Additionally, there are potential operational issues influencing the "Care for Older Adults" (COA) measures. For instance, if a special needs plan (SNP) operates without an integrated care framework, there may be gaps in care management between different providers, which can lead to a lack of coordination in medication review and pain assessment. Providing comprehensive medication reviews and pain assessments can also be resource intensive. Some SNPs may not have the specialized personnel resources to consistently perform these tasks for all beneficiaries annually.

**FIGURE 9: CHANGES IN AVERAGE MA-PD STAR RATING FROM 2023 TO 2024 BY STAR RATING CONTRACT TYPE**

PART C/D	DESCRIPTION	2.0-STAR	3.0-STAR	4.0-STAR	5.0-STAR
Part D	Call Center - Foreign Language Interpreter	38%	24%	11%	3%
Part C	Care for Older Adults - Medication Review	34%	14%	8%	4%
Part C	Call Center - Foreign Language Interpreter	31%	19%	5%	3%
Part C	Care for Older Adults - Pain Assessment	29%	12%	6%	1%
Part C	Plan Makes Timely Decisions about Appeals	25%	14%	8%	3%
Part C	Reviewing Appeals Decisions	24%	10%	5%	3%
Part C	Diabetes Care – Blood Sugar Controlled	24%	11%	5%	3%
Part D	MTM Program Completion Rate for CMR	17%	7%	5%	3%
Part C	Controlling Blood Pressure	15%	3%	1%	1%
Part D	MPF Price Accuracy	14%	6%	3%	1%

<sup>16</sup> Note that even 4-star and higher plans can be impacted by 2-star measures, as contract ratings are weighted averages of individual measure ratings.

## Impact of area and savings levels

It is also important for plans to consider their individual service areas when it comes to projecting Star Rating impacts. In some double-bonus counties, for instance, the difference in county-level benchmarks between a 3.5 and a 4.0 Star Rating can be up to 10% instead of 5%. In other counties that are capped by values predating the Affordable Care Act (ACA), there is little or even zero difference in the county-level benchmarks between a 3.5 and a 4.0 Star Rating.

Additionally, Medicare Advantage organizations (MAOs) with relatively low savings values and relatively low resulting rebates will see relatively minor impacts from moving between 3.0 and 3.5 Stars or between 4.0 and 4.5 Stars. Conversely, MAOs with high savings and high resulting rebates will be very sensitive to changes in their rebate percentage due to changes in Star Rating. We illustrate this in Figure 10, showing the revenue impact on plans' Star Ratings based on their bid-to-benchmark ratios (the inverse of their savings as a percentage of the benchmark). The main takeaway from Figure 10 is that changes in MA revenue are highly dependent on a plan's mix of counties, its bid-to-benchmark ratio, its Star Rating, and how big a Star Rating change it experiences.

FIGURE 10: % CHANGE IN CMS REVENUE BY BID-TO-BENCHMARK RATIO AND 2023 TO 2024 STAR RATING CHANGE

BID-TO-BENCHMARK RATIO	3.5 TO < 3.5	4.0 TO 3.5	4.5+ TO 4.0	NEW/LOW TO 3.5	NEW/LOW TO 4.0
0.60	-7.0%	-4.8%	-2.3%	-3.4%	1.4%
0.65	-6.0%	-4.8%	-2.0%	-3.4%	1.4%
0.70	-5.0%	-4.8%	-1.6%	-3.4%	1.4%
0.75	-4.1%	-4.8%	-1.4%	-3.4%	1.4%
0.80	-3.2%	-4.8%	-1.1%	-3.4%	1.4%
0.85	-2.4%	-4.8%	-0.8%	-3.4%	1.4%
0.90	-1.6%	-4.8%	-0.5%	-3.4%	1.4%
0.95	-0.8%	-4.8%	-0.3%	-3.4%	1.4%
1.00	0.0%	-4.8%	0.0%	-3.4%	1.4%

To estimate the financial implications of Star Rating shifts for CMS 2025 payment year revenue using the table in Figure 10:

- **Bid-to-benchmark calculation:** Calculate the expected ratio between the Part A/B bid (Wkst 5, II.7.) and the Part A/B Benchmark (Wkst 5, II.6) that will be included in the 2025 Medicare Advantage bids for an individual plan. Use this ratio and the 2023 to 2024 Star Rating shift to estimate the impact of Star Rating changes on the 2025 revenue.
- **Example scenario:** If the estimated bid-to-benchmark ratio is 0.80 and there is a Star Rating decrease from 4.5 to 4.0, a plan could anticipate an approximately 1.1% decrease in 2025 revenue due to this Star Rating change.
- **Compound adjustment for larger rating changes:** If the change in Star Ratings surpasses the incremental changes shown in Figure 1 above, utilize a compound adjustment. For instance, if the rating fell from 4.5 to 3.5, calculate the projected 2025 revenue decrease as  $(1 - 1.1\%) \times (1 - 4.8\%) - 1 = -5.8\%$ .
- **Adjustment for Star Rating increase:** Similarly, for a Star Rating increase from 3.5 Stars to 4.5 Stars, use the inverse of the above adjustments:  $1 / (1 - 5.8\%) - 1 = 6.1\%$ .

## Other Star Rating methodology changes for 2024 and beyond

While the Tukey outliers and guardrails had the most significant impact on 2024 Star Ratings, there were other less impactful changes introduced this year, which we describe in this section.

Two existing measures changed their weight or were retired:

- The weight for the Part C "Controlling Blood Pressure" measure was increased from 1.0 to 3.0, which is now consistent with the other intermediate outcomes measures.
- The Part C "Diabetes Care – Kidney Disease Monitoring" measure was retired; the measure's weight had been 1.0 in the 2023 Star Ratings.

The following three Star Rating measures are new in the 2024 Star Ratings:

- Part C All-Cause Readmissions measure, weight of 1.0 in its first year and 3.0 for future years as an intermediate outcomes measure
- Part C Transitions of Care measure, weight of 1.0.
- Part C Follow-up Emergency Department Visit for People With Multiple High-Risk Chronic Conditions measure, weight of 1.0.

There are four Part C Star Rating measures that no longer apply to "CCP with only I-SNP" contracts, now making it easier for these types of contracts to receive an overall rating. They are:

- Monitoring Physical Activity
- Reducing the Risk of Falling
- Improving Bladder Control
- Statin Therapy for Patients With Cardiovascular Disease

CMS has announced several other finalized, and unfinalized, rule changes that will affect the 2025, 2026, and 2027 Star Ratings. The most influential include:

- **Weight changes (*finalized*):** Starting in the 2026 Star Ratings (2027PY), the member experience measures will return to a weight of 2.0 after being a 4.0 weight for three years. This change will cause claim-based measures to shift from approximately 30% of the total non-improvement weight for the 2023 Star Ratings to 53% for the 2026 Star Ratings.<sup>17</sup>
- **Health Equity Index (HEI) rewards (*finalized*):** The 2027 Star Ratings (2028PY) will include the HEI reward factor, replacing the current reward factor, which solely focuses on overall performance and consistency between individual measures. The new HEI factor will reward contracts that have meaningful low-income, dual-eligible, and disabled populations with higher Star Rating measure results for this population compared to their peers.
- **4.0-Star to 5.0-Star hold harmless provision (*unfinalized*):** Current Star Ratings are calculated for each contract both with and without the Part C and D improvement measures included in its overall score. Because continually improving measure results for contracts with high Star Ratings is difficult, CMS will take the maximum final score if the Star Rating without the improvement measures is over 4.0 Stars. CMS indicated in the Proposed Rule released in December 2022 that contracts with 4.0 or 4.5 Stars still have room for improvement.<sup>18</sup> Therefore, CMS proposed to increase the threshold from 4.0 Stars to 5.0 Stars. This was not finalized in the Final Rule that was released in April 2023, but CMS stated its intention to improve this proposed change in the future.<sup>19</sup>

---

<sup>17</sup> Claim-based measures include HEDIS, HEDIS-HOS, PDE, PDE/MPF, and Part C/D Plan reporting data types. Non-claim-based measures include CAHPS, HOS, CTM, MBDSS, IRE, and call center data types.

<sup>18</sup> The full text of the Proposed Rule is available at <https://www.govinfo.gov/content/pkg/FR-2022-12-27/pdf/2022-26956.pdf>.

<sup>19</sup> The full text of the Final Rule is available at <https://www.govinfo.gov/content/pkg/FR-2023-04-12/pdf/2023-07115.pdf>.

While this paper does not review the specific impact of future rule changes, we mention them to highlight their potential future significance. For a more detailed analysis of the expected impact of these rule changes, please refer to the “[Future of Medicare Star Ratings: The Reimagined CMS Bonus System](#)” paper, published on October 6.<sup>20</sup>

## Closing remarks

The 2024 Star Ratings present new challenges for many plans, driven primarily by the new Tukey outlier deletion process; additional changes planned by CMS may present further challenges in the coming years.

Health plans should proactively consider how to adjust processes to best be prepared for Star Rating changes, both now and in the future. The information contained in this report should be considered a starting point for developing an in-depth understanding of the new Star Ratings environment, and plans should consider their own specific situations to estimate their potential exposure and seek expert advice to consider how to manage their Star Rating risks most effectively.

## Limitations and data reliance

We primarily relied on information and data provided by CMS, including both publicly released membership data and projections for model impacts. We also relied on other information provided by additional sources, primarily relating to policy analysis. Throughout this analysis, Milliman relied on data and other information provided by publicly available data sources. The estimates included in this paper are not predictions of the future; they are estimates based on the assumptions and data analyzed at a point in time. If the underlying data or other listings are inaccurate or incomplete, then the results may also be inaccurate or incomplete. Milliman has not audited or verified this data and other information but has reviewed it for reasonableness.

This report is intended for informational purposes only. Milliman makes no representation or warranties regarding the contents of this report. Likewise, readers of this report are instructed that they are to place no reliance upon this report that would result in the creation of any duty or liability under any theory of law by Milliman or its employees to third parties.

We have developed certain models to estimate the values included in this white paper. The intent of the models was to estimate the impact of the 2024 Star Rating methodology changes to contract-level Star Ratings. 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). The models, including all input, calculations, and output may not be appropriate for any other purpose.

The views expressed in this research paper are made by the authors and do not represent the opinions of Milliman, Inc. Other Milliman consultants may hold alternative views and reach different conclusions from those shown.

### QUALIFICATIONS

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Hayley Rogers, Matthew Smith, Philip Nelson, and Mike Yurkovic are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this paper.

### ACKNOWLEDGMENTS

The authors further acknowledge Matthew Hayes, FSA, MAAA, Principal and Consulting Actuary, for his peer review during the writing of this report.

---

20 Rogers, H., Smith, M., & Yurkovic, M. (October 2023). Future of Medicare Star Ratings: The Reimagined CMS Bonus System, op cit.



Milliman is among the world's largest providers of actuarial, risk management, and technology solutions. Our consulting and advanced analytics capabilities encompass healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

[milliman.com](https://milliman.com)

**CONTACT**

Hayley Rogers  
[hayley.rogers@milliman.com](mailto:hayley.rogers@milliman.com)

Matthew H. Smith  
[matthew.smith@milliman.com](mailto:matthew.smith@milliman.com)

Philip Nelson  
[philip.nelson@milliman.com](mailto:philip.nelson@milliman.com)

Mike Yurkovic  
[mike.yurkovic@milliman.com](mailto:mike.yurkovic@milliman.com)

© 2023 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.