

Impact of Medicare Advantage Part C Risk Score Model Change on 2024 Risk Scores

SNP Alliance Member Organization Survey

Commissioned by The SNP Alliance

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In the 2024 Medicare Advantage (MA) Advance Notice¹ released on February 1, 2023, CMS proposed a new Part C risk score model for payment year (PY) 2024. CMS subsequently provided each MA organization with files containing plan-level risk scores calculated under both the current (CMS-HCC v24, or 2020 model) and proposed (CMS-HCC v28, or 2024 model) risk score models. The SNP Alliance commissioned Milliman to summarize the impact of the new risk score model on its member organizations using the files provided by CMS.

CMS periodically updates and revises the MA risk score model. The model proposed in the 2024 Advance Notice is structurally similar to the current 2020 CMS-HCC model but contains several significant changes that may impact risk scores, including the following:

- 2024 CMS-HCC model is calibrated on ICD-10 diagnoses rather than ICD-9 diagnoses.
- 2024 CMS-HCC model is calibrated using 2018 diagnoses and 2019 expenditures rather than 2014 diagnoses and 2015 expenditures.
- 2024 CMS-HCC model contains 115 HCCs compared to 86 in the prior model.
- Some diagnoses were remapped to align with the new HCCs.
- Certain diagnoses and HCCs were removed and other HCCs were collapsed in cases where CMS believes the diagnoses or HCC differentiation are over-represented in MA data relative to FFS data.

CMS estimates that the new risk score model would reduce payments to MA organizations by an average of 3.12%² based on an analysis of 2020 diagnoses.

¹ Advance Notice of Methodological Changes for Calendar Year (CY) 2024 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies. Available at <https://www.cms.gov/files/document/2024-advance-notice.pdf>.

² 2024 Medicare Advantage and Part D Advance Notice Fact Sheet. Available at <https://www.cms.gov/newsroom/fact-sheets/2024-medicare-advantage-and-part-d-advance-notice-fact-sheet>.

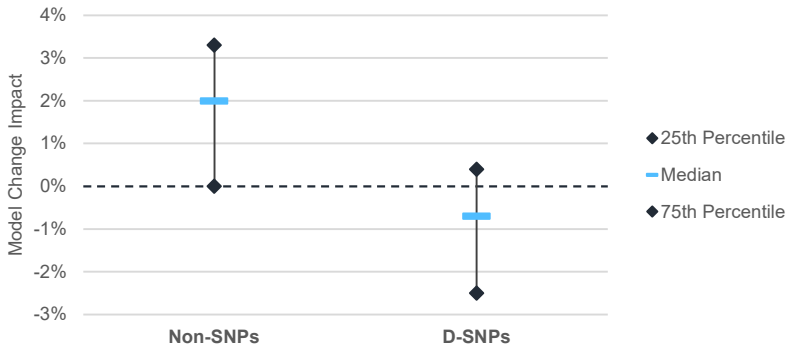
Survey Results

PLAN TYPE

Our analysis of SNP Alliance member organization risk score data from CMS suggests that while the impact of the new 2024 risk score model will vary significantly by plan and by MA organization, it will generally decrease risk scores more (or increase risk scores less) for dual eligible special needs plans (D-SNPs) compared to non-SNP plans.

Figure 1 shows the impact of CY 2020 diagnoses calculated under the 2024 CMS-HCC model relative to the 2020 CMS-HCC model by plan type for SNP Alliance member organizations that contributed to this study, after applying PY2024 (2024 CMS-HCC) and PY2023 (2020 CMS-HCC model) normalization adjustments to the respective models. Figure 1 and subsequent exhibits reflect results from over 100 D-SNP and 500 non-SNP (general enrollment and employer group) plans across 16 MA organizations. C-SNPs and I-SNPs are excluded from Figures 1 and 2 due to an insufficient number of contributors offering these plan types. The results from the MA organizations with the most plans were given a smaller weight in this analysis than their raw plan count would suggest to prevent results from being heavily influenced by the largest health plans. More details on the weighting methodology are provided in the Data Sources section below.

FIGURE 1: 2024 RISK SCORE MODEL CHANGE IMPACT BY PLAN TYPE (NON-ESRD / NON-HOSPICE BENEFICIARIES)

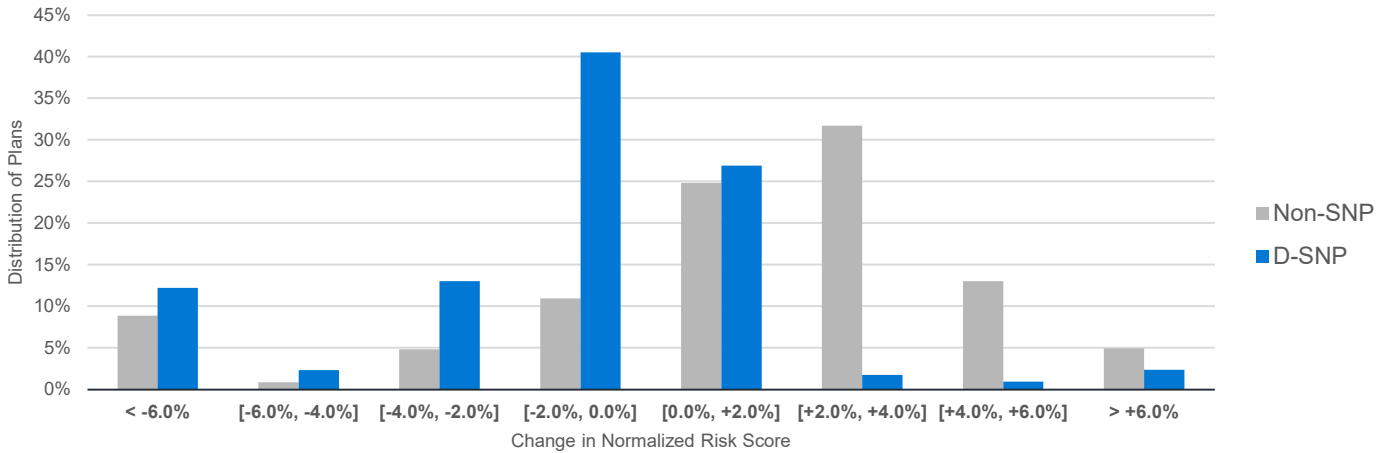


As shown in Figure 1, for SNP Alliance member organization plans included in the analysis, the median change to average risk scores for D-SNPs is -0.7% under the 2024 model whereas the median change to average risk score for non-SNPs is +2.0%. The impact for D-SNPs ranges from a -2.5% at the 25th percentile to +0.4% at the 75th percentile of plans. The impact for non-SNPs ranges from 0.0% at the 25th percentile to +3.3% at the 75th percentile of plans.

The full range of model change results is much wider than the 25th to 75th percentile ranges shown in Figure 1. Figure 2 contains a more complete distribution of model change impacts for non-SNPs and D-SNPs.

Note that the weights of the largest contributors were reduced in an effort to minimize the extent to which results of any individual contributor influenced aggregate results. See the methodology section below for further discussion of weighting methodology.

FIGURE 2: DISTRIBUTION OF PLAN-LEVEL 2024 RISK SCORE MODEL CHANGE IMPACTS BY PLAN TYPE



As shown in Figure 2, the range of impacts of the risk score model change for SNP Alliance member organization plans included in the analysis is wide for both non-SNPs and D-SNPs. The calculated impact of the risk score model change is positive for a majority (weighted) of non-SNPs and negative for a majority (weighted) of D-SNPs.

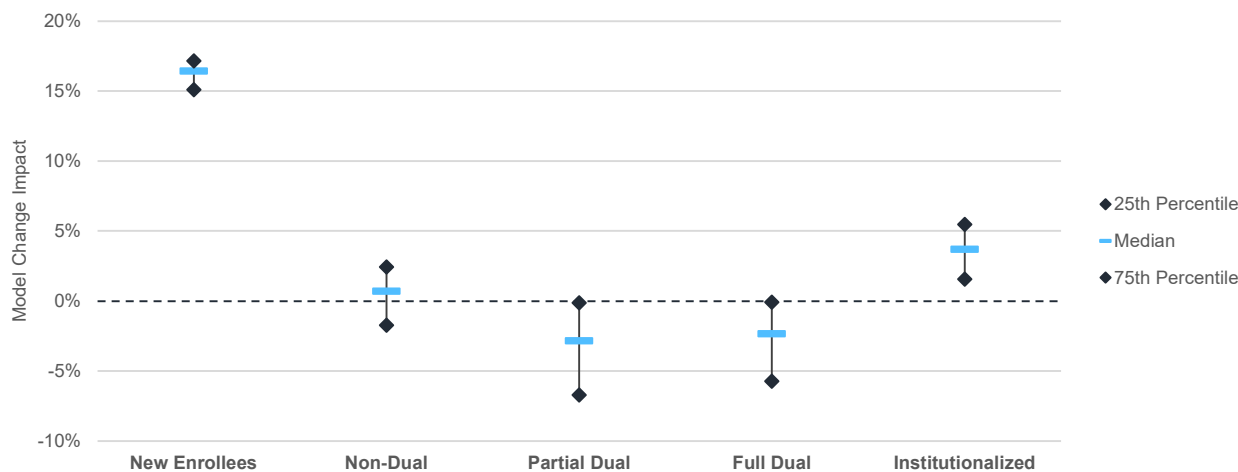
The impact of the risk score model change on non-SNPs relative to D-SNPs holds at the individual MA organization level as well as in aggregate. The risk score model change decreases D-SNP risk scores more (or increases risk scores less) than non-SNP risk scores for every organization included in this analysis that has at least one D-SNP and at least one non-SNP MA plan.

RISK SCORE MODEL COHORT

The 2024 CMS-HCC model and 2020 CMS-HCC model are structurally similar and contain separate segments for new enrollees (beneficiaries with less than 12 months of Medicare Part B enrollment in the diagnosis year) and continuing enrollees. Within the continuing enrollee segments, risk scores are calculated separately for full dual eligible enrollees, partial dual eligible, institutional enrollees, and non-full dual eligible enrollees.

Our analysis of SNP Alliance member organization data suggests that the impact of the proposed 2024 risk model has the most positive impact on risk scores for new enrollees followed by institutionalized beneficiaries and non-dual/non-institutionalized continuing enrollees. The impact of the new 2024 risk model has the most negative (or least positive) impact on risk scores for dual eligible beneficiaries.

Figure 3 shows the impact of CY 2020 diagnoses calculated under the 2024 CMS-HCC model relative to the 2020 CMS-HCC model by risk score model cohort for SNP Alliance member organizations that contributed to this study, after applying PY2024 (2024 CMS-HCC) and PY2023 (2020 CMS-HCC model) normalization adjustments to the respective models.

FIGURE 3: 2024 RISK SCORE MODEL CHANGE IMPACT BY MEMBER COHORT (BY PLAN)

As shown in Figure 3, for SNP Alliance member organization plans included in the analysis, the median change in plan-level average risk scores under the 2024 model for full and partial dual eligible beneficiaries is -2.3% and -2.8%, respectively, whereas the median change in plan-level average risk scores for non-dual eligible beneficiaries is +0.7%. The median change in plan-level average risk scores for institutionalized beneficiaries is +3.7% and the median change in plan-level risk scores for new enrollees is +16.4%. Individuals new to Medicare (new enrollees) receive a demographic-only risk score until they have a full calendar year of diagnoses. The more significant positive change in new enrollee risk scores is partially driven by a change in the normalization factor between the two models.

Figure 3 also shows the 25th and 75th percentiles of plan-level average risk score changes under the 2024 model for each member cohort. In general, the range of impacts for new enrollee risk scores is the smallest whereas the range of impacts for dual eligible beneficiary risk scores is the largest. The full range of plan-level model change results by member cohort is much wider than the 25th to 75th percentile ranges shown in Figure 3.

Similar to the results by plan type, the relative impact of the risk score model change on risk scores by member cohort is fairly consistent across all contributors. For example, the risk score model change increases new enrollee risk scores more than any other member cohort for every organization included in this analysis. The risk score model change decreases risk scores more (or increases risk scores less) for dual eligible beneficiaries compared to non-dual eligible beneficiaries for 12 of 13 organizations included in this analysis that have fully credible risk scores for both dual eligible and non-dual eligible beneficiaries³.

Data Sources and Methodology

DATA SOURCES

We relied on plan-level risk score files released by CMS through HPMS on February 3, 2023 and provided by SNP Alliance member organizations. The data included well over 100 D-SNP plans and 500 non-SNP plans across 16 MA organizations ranging in size from local health plans with a single D-SNP to national carriers with MA plans across the country.

Files provided by CMS and included in this analysis contained average raw risk scores using CY 2020 diagnoses calculated under both the 2020 CMS-HCC model and the 2024 CMS-HCC model by model segment for each plan-segment combination. One contributor grouped all plans of given plan type (e.g., general enrollment, D-SNP, etc.), but all other contributors provided plan-segment level data.

³ CMS Office of the Actuary Medicare Advantage Risk Score Credibility Guidelines. Available at <https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/RiskScoreCredibilityGuidelines.pdf>

For all but the largest MA organizations, plans were weighted individually (i.e., each given a weight of 1.0) regardless of the number of beneficiaries in the plan. Plans from the largest organizations were given a fractional weight (i.e., between 0 and 1.0) such that the total weight for the largest carriers for a given plan type is approximately 20% of the total weight for that plan type. While the use of weighting impacts the percentiles and distributions above, the relative comparisons between plan types and between model segments is not materially affected by the weighting.

Hospice and ESRD members were not included in this analysis. Risk scores for beneficiaries with Medicare as secondary payer (MSP) were reduced to 13.6% of the calculated value under both risk score models. Risk scores did not include a frailty adjustment.

METHODOLOGY

Risk scores were collected at the plan-segment (“plan”) level of detail by risk score model segment and CMS-HCC model. Risk scores were normalized (as discussed below), then summarized to cohort grouping. Table 1 below contains the mapping of risk score model segment to cohort grouping included in this analysis.

TABLE 1: MODEL SEGMENT GROUPING

| Risk Score Model Segment | Cohort Grouping |
|---------------------------------|------------------------|
| New Enrollee | New Enrollee |
| C-SNP New Enrollee | New Enrollee |
| Institutional | Institutional |
| Full Dual Benefit Aged | Full Dual |
| Full Dual Benefit Disabled | Full Dual |
| Partial Dual Benefit Aged | Partial Dual |
| Partial Dual Benefit Disables | Partial Dual |
| Non-Dual Benefit Aged | Non-Dual |
| Non-Dual Benefit Disabled | Non-Dual |

To calculate cohort level grouping within a plan, risk scores were weighted with the number of beneficiaries within each risk score model segment.

Normalized risk scores were then summarized to the plan and cohort grouping of detail and compared for each of the provided CMS-HCC models.

Plans with less than 50 beneficiaries and plan-cohort grouping combinations with less than 10 beneficiaries were excluded. Each included plan-cohort grouping combination was weighted individually for the percentile calculations, regardless of the number of beneficiaries in the plan.

Model impacts were summarized separately by plan type. Table 2 below contains the mapping of plan type to plan type grouping. Note that while separate I-SNPs and C-SNP plan type summaries are not included in plan-type results in Figure 2 due to an insufficient number of contributors with those plan types, I-SNPs and C-SNP results are included in Figure 3 summaries to the extent that they contain cohort groupings with more than 10 beneficiaries.

TABLE 2: PLAN TYPE GROUPING

| Plan Type | Plan Type Grouping |
|----------------------------|--------------------|
| General Enrollment | Non-SNP |
| Employer Group Waiver Plan | Non-SNP |
| D-SNP | D-SNP |
| MMP | D-SNP |
| I-SNP | I-SNP |
| C-SNP | C-SNP |

NORMALIZATION FACTORS

The plan-segment level risk scores provided by CMS are raw non-normalized risk scores. CMS released technical notes with suggested adjustments needed to the risk scores to make them comparable. For the purpose of this analysis, we did not use the normalization factors suggested by CMS in the technical notes for reasons described below.

Table 3 below summarizes various normalization factors that could be used for this analysis. Normalization factors recommended by CMS for the purpose of calculating model impacts are boxed with dashed lines. Normalization factors used for this analysis are boxed with solid lines.

TABLE 3: RISK SCORE NORMALIZATION FACTOR

| SOURCE | CMS-HCC Model | |
|----------------|---------------|----------|
| | 2024 V28 | 2020 V24 |
| PY2021 PAYMENT | n/a | 1.097 |
| PY2021 ACTUAL | 0.968 | 1.048 |
| PY2023 PAYMENT | n/a | 1.127 |
| PY2024 PAYMENT | 1.015 | 1.146 |

2024 CMS-HCC model

CMS suggested applying a normalization adjustment factor of 0.968 to the 2021 risk scores calculated under the 2024 CMS-HCC model. This factor represents the actual calculated risk score for Medicare fee for service (FFS) members in 2021 (with diagnoses in 2020) calculated under the 2024 model. This value can be found in Table II-7 on page 65 of the 2024 MA Advance Notice.

For this analysis, we used a factor of 1.015 to normalize the 2021 risk scores calculated under the 2024 CMS-HCC model to align with the actual value that will be applied to PY 2024 risk scores and payments under the 2024 CMS-HCC model.

2020 CMS-HCC model

CMS suggested applying an adjustment factor of 1.097 to the 2021 risk scores calculated under the 2020 CMS-HCC model, which was the normalization factor used for PY 2021. For this analysis, we used a factor of 1.127 to normalize the 2021 risk scores calculated under the 2020 CMS-HCC model to align with the actual value that was applied to PY 2023 risk scores and payments under the 2020 CMS-HCC model.

Interpretation of results

We have chosen to apply the actual PY normalization factors so that our calculation of model change impact most directly measures the full and actual impact of the model change between PY2023 and PY2024 for a given set of diagnoses. Therefore, the model change impacts in this report include both the model change itself as well as the impact of the change in normalization factor from PY2023 to

PY2024. Based on remarks provided by CMS on the February 23, 2023, Actuarial User Group Call, this is the same approach CMS used to calculate its estimated model impact of -3.12%. The CMS estimate and the results of our analysis do not reflect any coding improvement that may occur between 2023 and 2024. They also do not reflect any coding improvement that may have occurred since the 2020 diagnosis period that the HPMS summaries were calculated from.

Other approaches to incorporating normalization factors may be appropriate, particularly for analyses that intend to measure a theoretical rather than a practical model change impact. For example, using the PY2021 actual normalization factors (0.968 for the 2024 CMS-HCC model and 1.048 2020 CMS-HCC model) would put the normalized risk scores from both models on the payment year basis that aligns with the diagnosis period. The resulting factors would capture a point-in-time pure model change impact for re-calibrated PY2021 risk scores.

While the choice of normalization factor impacts the calculated model impacts, it does not change the relative comparisons between plan types and between model segments. For example, if we applied a different set of normalization factors for this analysis, it would still be the case that calculated impacts for D-SNPs would be more negative (or less positive) than calculated impacts of non-SNPs.

Variability of Results

This report is designed to help The SNP Alliance understand the range of risk score impacts and relative differences in risk score impacts by plan type and beneficiary type observed by its member organizations from CMS implementing the new 2024 CMS-HCC risk model proposed in the 2024 MA Advance Notice. The actual impacts of the new risk score model on CY 2024 risk scores and payments may vary from these results for various reasons including, but not limited to reasons outlined below.

The analysis relied on information provided by CMS to MA organizations that uses CY 2020 diagnosis. The delivery of healthcare in CY 2020 was significantly impacted by the COVID-19 pandemic and associated public health emergency. Even in absence of COVID-19, the member cohort used for this analysis is three years removed from the member cohort that will be used to calculate CY 2024 payments. For these reasons, it is likely that the actual impact of the new risk score model will differ, potentially materially, from the CMS estimate and the results of this paper. Likewise, estimates of model impacts that rely on a different member cohort and/or diagnosis year will likely differ from the results of this analysis.

This analysis relies on data from a subset of SNP Alliance member organizations which collectively represent a small and potentially non-representative subset of MA organizations nationwide. Interpretation of the results of any survey is limited by the composition of the survey contributors. We have not attempted to adjust or reweight the contributor data in this analysis to reflect the entire SNP Alliance membership or the MA market as a whole. Rather, we have reweighted contributor data in some cases to reduce the extent to which the largest contributors influence results. Therefore, it would not be appropriate to extrapolate these results to the MA market as a whole. It is likely that a different analysis with a different set of contributor data or a different diagnosis year would produce different results.

As discussed above, our choice of normalization factors was intended to most directly measure the full and actual impact of the model change between PY2023 and PY2024 for a given set of diagnoses. Alternative approaches to normalizing raw risk scores would produce different results.

Qualifications and Caveats

This analysis and the attached information are intended for the internal use of The SNP Alliance. We do not intend this information to benefit any third party. Actual impacts will vary from the results of this analysis for many reasons, including sample selection, change in population, change in coding, impact of deferred care due to COVID-19, as well as other random and non-random factors.

This report is designed to help The SNP Alliance understand the range of risk score impacts and relative differences in risk score impacts by plan type and beneficiary type observed by its member organizations from CMS implementing the new 2024 CMS-HCC risk model proposed in the 2024 MA Advance Notice. This information may not be appropriate, and should not be used, for other purposes. Any user of the data must possess a certain level of expertise in actuarial science and health care modeling so as not to misinterpret the data presented.

In completing our analysis, we relied upon the accuracy of data and information provided to us by CMS, The SNP Alliance, and SNP Alliance member organizations. We have not audited this data, information, or documentation, although we have reviewed it for reasonableness. If the underlying components are inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

Models used in the preparation of our analysis were applied consistently with their intended use. The models, including all input, calculations, and output may not be appropriate for any other purpose. Where we relied on models developed by others, we have made a reasonable effort to understand the intended purpose, general operation, dependencies and sensitivities of those models. We relied on input, review, and validation by other experts in the development of our models. These models have been reviewed, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose in order to be in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Nick Johnson, David Koenig, and Rebecca Gergen are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this report.



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