In the 2024 Medicare Advantage (MA) Advance Notice released on February 1, 2023, CMS proposed a new Part C risk score model (CMS-HCC v28 or 2024 CMS-HCC model) for payment year (PY) 2024 and subsequently finalized the new risk score model in the 2024 MA Rate Announcement released on March 31, 2023. This report summarizes the impact of the new risk score model on SNP Alliance member organizations including the relative impact on different plan types and member cohorts. This is an update to a similar analysis performed in April 2023 with more recent data.

CMS periodically updates and revises the MA risk score model. The model proposed in the 2024 Advance Notice and later finalized in the 2024 Rate Announcement is structurally similar to the current Part C risk score model (CMS-HCC v24 or 2020 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 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 stated that the diagnoses or HCC differentiation are over-represented in MA data relative to FFS data.

CMS estimates that the risk score model revision would reduce payments to MA organizations by an average of 2.16% between 2023 and 2024. However, the CMS estimate includes the impact of the typical change in normalization from 2023 to 2024, which would reduce risk scores by 1.7% between 2023 and 2024 in the absence of the model change. The CMS estimate also reflects the CY 2024 blended risk score model impact (33% 2024 CMS-HCC model, 67% 2020 CMS-HCC model). Results of this analysis reflect a pure model change impact by measuring the full difference between the two models within a given year.

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Survey Results

Our analysis of SNP Alliance member organization risk scores relies on plan-level risk score files released by CMS through HPMS on April 12, 2023. Data was collected from 22 SNP Alliance member organizations ranging in size from local health plans with a single D-SNP to national carriers with MA plans across the country and included well over 150 dual eligible special needs plans (D-SNPs) and 750 non-SNPs. Risk scores were normalized and then summarized into plan type and member type cohort groupings. A more complete description of methodology and data sources is provided below.

PLAN TYPE

Our analysis of SNP Alliance member organization risk score data from CMS suggests that while the impact of the new risk score model will vary significantly by plan and by MA organization, it will generally have a less favorable impact on risk scores (i.e., decrease risk scores more or increase risk scores less) for D-SNPs compared to non-SNPs. The results of our analysis were less conclusive regarding the impact of the model change on risk scores for institutional special needs plans (I-SNPs) compared to non-SNPs due to a wide range in results for I-SNPs.

Figure 1 shows the impact of CY 2021 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 normalization adjustments to both the 2020 and 2024 CMS-HCC models. Chronic condition special needs plans (C-SNPs) are excluded from Figures 1 and 2 due to an insufficient number of contributors offering this plan type. Note that the data 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 and Methodology section below.

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 (including Medicare-Medicaid Plans, or MMPs) and I-SNPs is -0.3% and 2.6%, respectively, under the 2024 model whereas the median change to average risk score for non-SNPs is +2.1%. The impact for D-SNPs ranges from -2.6% at the 25th percentile to +1.2% at the 75th percentile of plans while the impact for I-SNPs ranges from -6.4% at the 25th percentile to +4.2% at the 75th percentile of plans. The impact for non-SNPs ranges from -0.5% at the 25th percentile to +3.9% 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. Figures 2A through 2C contain a more complete distribution of model change impacts for non-SNPs, D-SNPs, and I-SNPs, respectively.
As shown in Figures 2A through 2C, the range of impacts of the risk score model change for SNP Alliance member organization plans included in the analysis is wide for non-SNPs, D-SNPs, and I-SNPs. The calculated impact of the risk score model change is positive for a majority (weighted) of non-SNPs and I-SNPs and slightly under half (weighted) of D-SNPs. Figures 2A through 2C also show that the distribution of impacts by plan is negatively skewed. There are more plans with extreme negative impacts than plans with extreme positive impacts. As a result, the weighted average plan-level impact is 1.3%-3.3% lower than the median plan-level impact for each of the three plan types.

The impact of the risk score model change on non-SNPs relative to D-SNPs generally holds at the individual MA organization level as well as in aggregate. The risk score model change has a less favorable impact on D-SNP risk scores compared to non-SNP risk scores for nearly every organization included in this analysis that has at least one D-SNP and at least one non-SNP.

We also analyzed the impact of the risk score model change on the plans with the highest level of Medicare-Medicaid integration (FIDE SNPs and MMPs) and found inconclusive results. The median impact of the risk score model change is more favorable for FIDE SNPs and MMPs compared to other D-SNPs. However, among organizations with both types of D-SNPs, the impact of the risk score model change is generally less favorable for fully integrated D-SNPs compared to other D-SNPs.

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, partial dual eligible, institutional, and non-full dual eligible enrollees.

Our analysis of SNP Alliance member organization data suggests that the impact of the new risk model has the most positive impact on risk scores for new enrollees followed by institutionalized enrollees 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 full and partial dual eligible enrollees.

Figure 3 shows the impact of CY 2021 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 normalization adjustments to both the 2020 and 2024 CMS-HCC models.

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 non-institutionalized full dual and partial dual eligible beneficiaries is -1.5% and -2.5%, respectively, whereas the median change in plan-level average risk scores for non-institutionalized non-dual eligible beneficiaries is +0.8%. The median change in plan-level average risk scores for institutionalized beneficiaries is +4.5% and the median change in plan-
level risk scores for new enrollees is +18.4%. 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 partial 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.

Additionally, our analysis of the risk score changes under the 2024 model for the aged and disabled subsets of non-dual, partial dual, and full dual beneficiaries suggests that there is greater variation in the impact of the new risk score model for disabled beneficiaries compared to aged beneficiaries. The difference between the 25th and 75th percentiles of the model change impact is between +0.9% and +1.5% greater for disabled beneficiaries relative to aged beneficiaries.

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 13 of 15 organizations included in this analysis that have fully credible risk scores for both dual eligible and non-dual eligible beneficiaries.

**Data Sources, Methodology, and Other Considerations**

**DATA SOURCES**

We relied on plan-level risk score files released by CMS through HPMS on April 12, 2023, and provided by SNP Alliance member organizations. The data included well over 150 D-SNPs and 750 non-SNPs across 22 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 2021 diagnoses calculated under both the 2020 CMS-HCC model and the 2024 CMS-HCC model by model segment for each plan-segment combination.

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 capped at approximately 25%. 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 used in this analysis did not include a frailty adjustment, which impacts the final risk score for many FIDE SNPs.

**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) and then summarized into cohort groupings. Table 1 below contains the mapping of risk score model segment to cohort grouping included in this analysis.

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TABLE 1: MODEL SEGMENT GROUPING

<table>
<thead>
<tr>
<th>Risk Score Model Segment</th>
<th>Cohort Grouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Enrollee</td>
<td>New Enrollee</td>
</tr>
<tr>
<td>Institutional</td>
<td>Institutional</td>
</tr>
<tr>
<td>Full Dual Benefit Aged</td>
<td>Full Dual</td>
</tr>
<tr>
<td>Full Dual Benefit Disabled</td>
<td>Full Dual</td>
</tr>
<tr>
<td>Partial Dual Benefit Aged</td>
<td>Partial Dual</td>
</tr>
<tr>
<td>Partial Dual Benefit Disabled</td>
<td>Partial Dual</td>
</tr>
<tr>
<td>Non-Dual Benefit Aged</td>
<td>Non-Dual</td>
</tr>
<tr>
<td>Non-Dual Benefit Disabled</td>
<td>Non-Dual</td>
</tr>
</tbody>
</table>

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 at 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 a separate C-SNP type summary is not included in plan type results in Figures 2A through 2C due to an insufficient number of contributors with that plan type, 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

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Plan Type Grouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Enrollment</td>
<td>Non-SNP</td>
</tr>
<tr>
<td>Employer Group Waiver Plan</td>
<td>Non-SNP</td>
</tr>
<tr>
<td>D-SNP</td>
<td>D-SNP</td>
</tr>
<tr>
<td>MMP</td>
<td>D-SNP</td>
</tr>
<tr>
<td>I-SNP</td>
<td>I-SNP</td>
</tr>
<tr>
<td>C-SNP</td>
<td>C-SNP</td>
</tr>
</tbody>
</table>

NORMALIZATION FACTORS

The plan-segment level risk scores provided by CMS are raw non-normalized risk scores. CMS released PY 2024 normalization factors for both the 2020 and 2024 CMS-HCC models in the 2024 MA Rate Announcement which were used for the purpose of this analysis. The PY 2024 normalization factors were used to align with the actual value that will be applied to PY 2024 risk scores and payments.
under the 2020 and 2024 CMS-HCC models. CMS recently released proposed PY 2025 normalization factors in the 2025 Advance Notice. These have not yet been finalized and are not used in this analysis but are discussed further below.

Table 3 below summarizes recent normalization factors. Normalization factors used for this analysis are boxed with solid lines.

### TABLE 3: RISK SCORE NORMALIZATION FACTOR

<table>
<thead>
<tr>
<th>CMS-HCC MODEL</th>
<th>2024 V28</th>
<th>2020 V24</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY2023 PAYMENT</td>
<td>n/a</td>
<td>1.127</td>
</tr>
<tr>
<td>PY2024 PAYMENT</td>
<td>1.015</td>
<td>1.146</td>
</tr>
<tr>
<td>PY2025 PAYMENT (PROPOSED)</td>
<td>1.045</td>
<td>1.153</td>
</tr>
</tbody>
</table>

**Interpretation of results**

We have chosen to apply the actual PY 2024 normalization factors so that our calculation of model change impacts reflects the pure and full model change in a given year using finalized normalization factors. Based on footnote 3 in the 2024 Rate Announcement Fact Sheet, this is a different approach than CMS used to calculate its estimated model impact of -2.16%. To estimate the model impact CMS used the PY 2024 normalization factor for risk scores calculated under the 2024 CMS-HCC model and the PY 2023 normalization factor for risk scores calculated under the 2020 CMS-HCC model. In using the actual PY normalization factors CMS' estimated model impact measures the full and actual impact of the model change between PY 2023 and PY 2024 for a given set of diagnoses, which includes the impact of the normalization factor change. 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 2021 diagnosis period that the HPMS summaries were calculated from.

**CONSIDERATIONS**

CMS is phasing in the new 2024 CMS-HCC risk score model over the course of three years beginning in CY 2024. While the impact of blending the 2024 CMS-HCC and 2020 CMS-HCC model risk scores will vary by plan, plans may see smaller changes (both positive and negative) in risk scores due to the model blending compared to risk scores calculated under the 2024 CMS-HCC model. The impact on risk scores will change over the course of the three-year phase-in period as more weight is given to the 2024 CMS-HCC model risk scores.

Additionally, as diagnosis code to HCC mappings are changing in the 2024 CMS-HCC model, coding accuracy and completeness and provider practice patterns will impact the actual risk scores calculated under the 2024 model. Normalization factors for each model are also subject to change for each payment year. For these reasons, the impact of the new risk score model may change over time. The impact of potential changes in coding patterns and HCC assignments are not reflected in this analysis.

**2025 MA Advance Notice**

In the 2025 MA Advance Notice, CMS proposed PY2025 normalization factors of 1.045 and 1.153 for the 2024 and 2020 CMS-HCC models, respectively. Compared to actual PY 2024 normalization factors (1.015 and 1.146 for the 2024 and 2020 CMS-HCC models, respectively), the proposed normalization factors would reduce risk scores by 2.9% under the 2024 CMS-HCC model and 0.6% under the 2020 CMS-HCC model. Therefore, if we had applied the proposed PY 2025 normalization factors to risk scores for our analysis, the relative 2024 CMS-HCC model change impacts would have been approximately 2.3% lower.

In the 2025 MA Advance Notice, CMS estimated that MA risk score trend is 3.3% under the 2024 CMS-HCC model and 5.0% under the 2020 CMS-HCC model. Therefore, if we had applied one year of assumed coding trend to the underlying data used for this analysis to simulate the future impact of the model change, the relative impact of the 2024 CMS-HCC model change would have been approximately 1.6% lower.

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Table 4 illustrates the combined impact of the proposed PY 2025 normalization factors and assumed coding trend under the 2024 CMS-HCC and 2020 CMS-HCC model separately. The table also shows the relative impact of these changes on the 2024 CMS-HCC model impact. As shown in Table 4, the combined impact of the proposed PY 2025 normalization factors and one year of assumed coding trend reduces the relative 2024 CMS-HCC model change impact by 3.9% compared to the data and assumptions used in this report. In other words, under these assumptions, the impact of the model change is more unfavorable over time.

| TABLE 4: ILLUSTRATIVE IMPACT OF CODING TREND AND CHANGE IN NORMALIZATION FACTOR |
|-----------------------------------------------|----------------|----------------|----------------|
| CMS-HCC MODEL                               | 2024 V28 | 2020 V24 | DIFFERENCE (V28 VS. V24) |
| **(A)** PY2024 NORMALIZATION FACTOR         | 1.015    | 1.146    |                      |
| **(B)** PROPOSED PY2025 NORMALIZATION FACTOR| 1.045    | 1.153    |                      |
| **(C) = (A) / (B) - 1** CHANGE IN NORMALIZATION FACTOR | -2.9%  | -0.6%    | -2.3%              |
| **(D)** CMS ESTIMATED CODING TREND           | 3.3%     | 5.0%     | -1.6%              |
| **(E) = (1 + C) * (1 + D) - 1** TOTAL IMPACT OF CODING AND NORMALIZATION | 0.3%   | 4.4%     | -3.9%              |

**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 and later finalized in the 2024 MA Rate Announcement. 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 2021 diagnosis. The delivery of healthcare in CY 2021 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 two 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 entire MA market. It is likely that a different analysis with a different set of contributor data or a different diagnosis year 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 and finalized in the 2024 MA Rate Announcement. 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 Lauren Brening are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this report.