

# A prescription for change

How the 2025 Medicare Part D risk adjustment (RxHCC) model overhaul will affect risk scores

By [Michelle Klein](#), [Jason J. Petroske](#), and [Douglas I. Rodrigues](#)

26 April 2024

Following significant changes to the 2024 Part C risk adjustment model, Medicare Advantage organizations (MAOs) will experience another material model change in 2025—this time for Part D.

## Introduction

After proposing<sup>1</sup> major changes to the payment year 2025 (PY2025) Part D risk adjustment (RxHCC) model to align with benefit redesigns codified in the Inflation Reduction Act of 2022 (IRA), the Centers for Medicare and Medicaid Services (CMS) recently finalized<sup>2</sup> the updates, with the three most significant being:

- Model recalibrations using more recent data years
- Recalibrations reflecting the new PY2025 Part D defined standard benefit structure
- Separate normalization factors for Medicare Advantage prescription drug plans (MAPDs) and stand-alone Medicare Part D prescription drug plans (PDPs)

In this paper, we explain the key RxHCC model changes in more detail and discuss the implications for the broader Part D market.<sup>3</sup>

## Why is the RxHCC model important?

The RxHCC model attempts to predict the relative gross plan liability for prescription drugs covered under the Part D program using medical diagnosis codes incurred in the prior year and demographic information from the payment year. The calculated risk score adjusts Part D monthly revenue via direct subsidy payments, as follows:

$$\text{Basic Bid at 1.0} \times \text{Risk Score} - \text{Basic Member Premium} = \text{Direct Subsidy}^4$$

The redesigned benefit under the IRA significantly shifts drug cost responsibility among the various Part D stakeholders—beneficiaries, the federal government, pharmaceutical manufacturers, and plan sponsors. After pairing the RxHCC model changes with the benefit changes, the combined impact could meaningfully affect MAOs' decisions with respect to benefit design, formulary coverage and management, plan offerings, and possibly participation in the Part D program itself.

## So, what changed?

In the following sections, we summarize the three aforementioned model updates communicated in the 2025 Rate Announcement.

### Calibration updates

CMS calibrated the PY2025 RxHCC model using 2021 diagnosis data with 2022 expenditure data. While still a significant lag, the timing gap is narrower than prior years (now three years between the 2022 expenditure data and the 2025 application year), which can help capture more recent market events affecting plan liability, such as drug launches, expanded indications, significant price changes, patent losses, and regulatory changes. However, it also means this update will not include market changes subsequent to 2022, such as recent insulin and inhaler price changes.

CMS also re-adjudicated the 2022 expenditure data on a 2025 defined standard benefit structure<sup>5</sup> to bring the model-predicted 2025 plan liabilities more in line with actual plan liabilities. This portion of the model update is particularly impactful in light of the IRA benefit redesign. Most notably, the model now reflects the material increase in the plan's share of costs in the catastrophic phase.

## Normalization factor updates

For the first time, CMS developed separate normalization factors for MAPDs and PDPs, which reflects lower risk score trends for PDP beneficiaries relative to MAPD beneficiaries. This trend difference is partially driven by an MAPD's greater ability to influence risk scores and revenue through medical management and coding accuracy initiatives. This difference is amplified by beneficiaries with relatively higher risk scores switching from PDP to MAPD, which drives PDP risk scores down and MAPD risk scores up. CMS finalized the 2025 normalization factors for both individual plans and employer group waiver plans (EGWPs) as follows:

- MAPD: 1.073
- PDP: 0.955

CMS applies the factor such that a non-normalized 1.0 MAPD risk score would become a normalized risk score of 0.932 (i.e., 1.0 divided by 1.073). In 2025, the now separate normalization factors mean the same MAPD beneficiary would receive a 12.4% higher risk score in 2025 if they instead enrolled in a PDP. We display this dynamic in Figure 1.

**Figure 1: Normalization factors<sup>6</sup>**

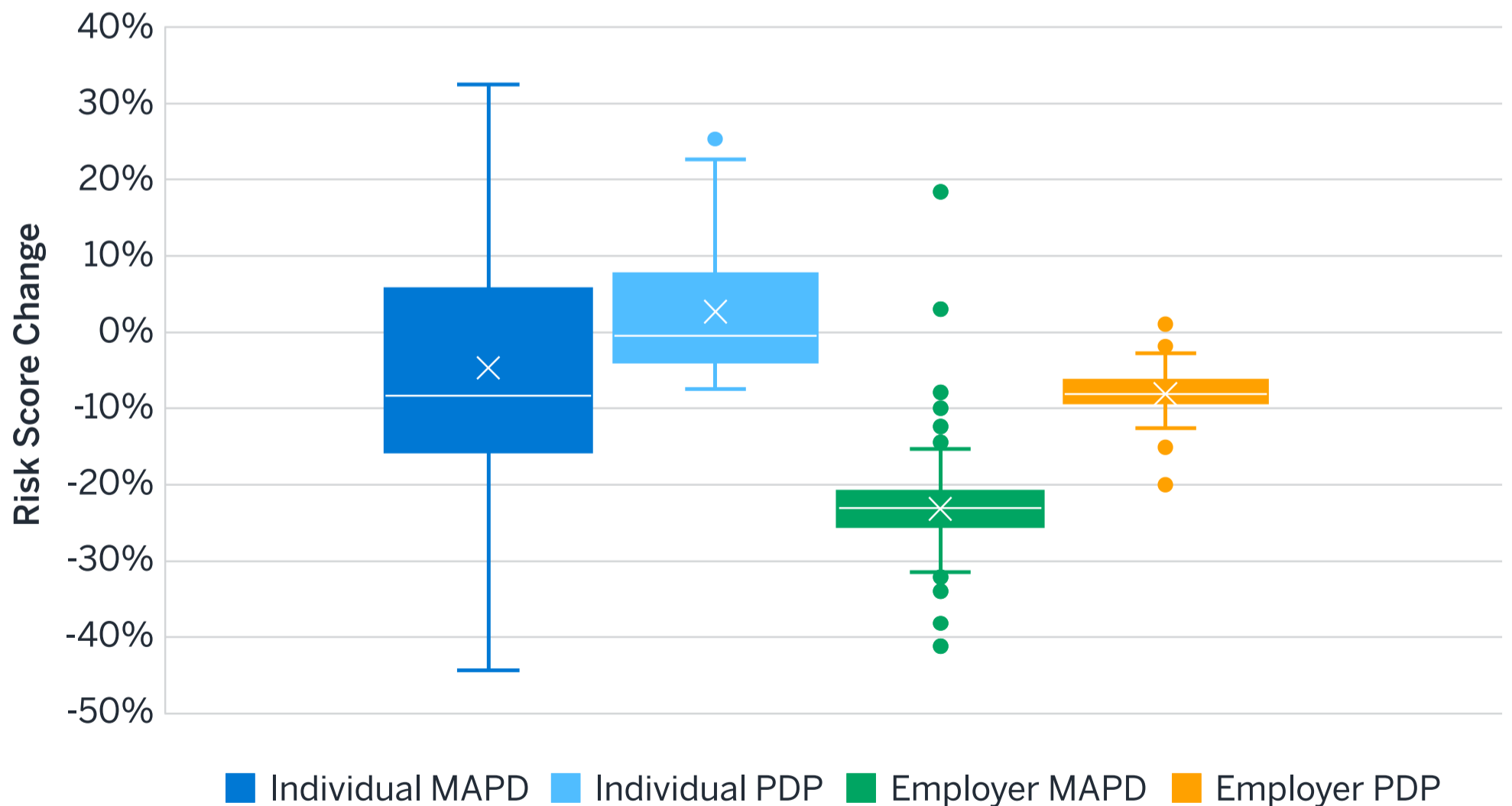
Metric	Plan Type	Normalization Factor	Difference from MAPD <sup>7</sup>
Factor	MAPD	1.073	
Factor	PDP	0.955	
1/Factor	MAPD	0.932	N/A
1/Factor	PDP	1.047	12.4%

The PDP risk score increase may help stabilize that market, which has already experienced significant disruption in PY2024.<sup>8</sup>

## What do these changes mean?

Together, the impacts of calibration and normalization have material, and varying, impacts on risk scores between PY2024 (using the 2023 RxHCC model) and PY2025 (using the 2025 RxHCC model). To highlight this, we estimated percentiles of risk score change by contract for Part D plans. Figure 2 displays the distribution of risk score changes by market and broad plan type.

**Figure 2: Risk score change percentiles by market and plan type**



The boxes represent the middle 50th percentiles of risk score change for each cohort, with the solid lines inside the boxes denoting the median changes and the bottoms and tops showing the 25th and 75th percentile changes, respectively. The lines extending outward from each box reflect the limits of typical variation in the results, while the solid dots indicate outlier data points. Taken together, the taller the box and the further the lines extend from the edges, the higher the variability of the risk score changes within each cohort.

We note the following observations from this figure:

- The median changes for individual plans reflect a mix of increasing risk scores for low-income (LI) members and decreasing risk scores for non-low-income (NLI) members.
- Median changes for EGWPs are negative and show impacts similar to the individual NLI members (as shown in the Figure 3). EGWPs primarily enroll NLI members.
- The smaller amount of variation among PDPs likely reflects a smaller number of participating contracts (each with a much larger average number of enrolled members) and the limited ability to influence risk scores compared with MAPD.
- There are generally more outliers in the employer market, which may be reflective of the wide variability among employer group populations.

We further summarize our results for individual MAPD and PDP populations and display the 25th, 50th, and 75th percentile risk score changes in Figure 3.

**Figure 3: 2025 individual market RxHCC model changes by plan type and population**

MAPD	25th Percentile	50th Percentile	75th Percentile
New to Medicare	-15%	-9%	5%
Institutional	-18%	-13%	-7%
Low Income	12%	15%	18%
Non-Low Income	-26%	-25%	-23%
PDP	25th Percentile	50th Percentile	75th Percentile
New to Medicare	-7%	-4%	11%
Institutional	-9%	-3%	2%
Low Income	39%	41%	47%
Non-Low Income	-7%	-6%	-5%

We note the following observations from this figure and the data underlying it:

- Due to the favorable change in the normalization factor, PDP risk score changes are, in all cases, more positive than MAPDs, and they switch to positive values at lower percentiles.
- Even though risk scores for those defined as "New to Medicare" are based on a single set of model coefficients (rather than having dependencies on population acuity), there is risk score variability in this population due to RxHCC model coefficients that differ by income and institutional status.
- Generally, NLI members experience a much higher unfavorable change than other populations, which reflects their lower expected increase in costs relative to the market average, consistent with initial CMS communications from last fall.<sup>9</sup>
- Conversely, the LI population experiences an increase at every percentile, which reflects their higher expected increase in costs relative to the market average.

## Conclusion

The RxHCC model remains a critical piece of the financial puzzle for Part D plans, with its importance only more pronounced in an age of direct subsidy increases. Risk scores factor into direct subsidy payments, which in turn impact financial decisions regarding what a plan can offer, including formulary, benefits, and networks.

Based on our modeling, plans enrolling a heavily LI population, such as dual-eligible special needs plans (D-SNPs) and basic PDPs, benefit from the greatest tailwinds from the RxHCC model changes, though these plans will have to balance significantly greater plan liability increases. On the other hand, heavily NLI plans face reduced risk scores and revenue payments but benefit from smaller expected plan liability increases.

While no risk adjustment model can be perfect, the changes to the 2025 RxHCC model reflect critical updates needed to accurately predict plan liability in the new IRA environment. Specific impacts to any one plan can only be understood with a targeted analysis of an organization's operational structure and its specific populations.

## Appendix A: Methodology

We developed the estimates in this paper by first calculating beneficiary level Part D risk scores under the 2023 and 2025 RxHCC models, using nationwide 2021 MA encounter and fee-for-service (FFS) claims data as well as 2022 MAPD and PDP eligibility data in the CMS research identifiable files (RIFs). We then summarized the data and created a comparison of the risk score changes among various cohorts.

We performed the following steps in the risk score calculation:

- Filtered claims consistent with the CMS Encounter Data System (EDS) logic.
- Assigned member status using CMS eligibility files.
- Ran each member through the CMS RxHCC 2023 and 2025 model software.
- Mapped the proper demographic and condition risk score to each member based on the RxHCC outputs and our member status mapping.
- Excluded the following plan types: Program of All-Inclusive Care for the Elderly (PACE), Cost, Private Fee-for-Service (PFFS), Limited Income Newly Eligible Transition (LI NET), and Direct Contract PDPs.

After the risk score calculations, we assigned plan and product to each contract or Plan Benefit Package (PBP) using published CMS information. For our numerical assessments, we compared calculated risk scores by the selected cohorts.

## Appendix B: Qualifications, caveats, and limitations

The authors are actuaries for Milliman and members of the American Academy of Actuaries. They meet the qualification standards of the Academy to render the actuarial opinion contained herein. To the best of their knowledge and belief, this paper is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

The material in this paper represents the opinion of the authors and is not representative of the views of Milliman. Milliman is not advocating for, or endorsing, any specific views related to the Medicare program.

Milliman developed certain models to estimate the values included in this analysis. The intent of the models is to estimate marketwide risk scores under the 2025 CMS RxHCC model. It may not be appropriate for any other purpose. We reviewed the models, including the inputs, calculations, and outputs. We believe they are consistent, reasonable, appropriate to the intended purpose, and compliant with generally accepted practice and relevant actuarial standards.

The models reflect data as inputs. We relied on the following information:

- 2021 diagnoses and 2022 eligibility CMS RIF data
- The CMS RxHCC model software for various benefit years
- Publicly available data and information on the Part D risk adjustment program from CMS
- CMS 2022 landscape source files
- CMS estimates of the 2022 normalization adjustments for the 2023 and 2025 RxHCC models

We accepted this information without audit but reviewed it for general reasonableness. Our results and conclusions may not be appropriate wherever information is not accurate.

Actual results will differ from those developed in the paper for a variety of reasons, and the following limitations should be considered when analyzing our results:

- The datasets used in the analysis represent historical data with its own mix of population types, plan selections, utilization, and acuity. This data may not reflect any one Medicare population in a given state or market, nor future claim patterns or cost levels in future periods (despite using the CMS risk adjustment model from future benefit years).
- The datasets used do not have the same information available to CMS to assign risk scores for revenue payments, including, but not limited to:
  - Imperfect mapping of member institutional status
  - Potentially incomplete retroactive data adjustments
- Composite results in a given cohort (e.g., market or plan type) reflect an average across many members, and any one member's experience will likely deviate from the average of the cohort.
- We applied the following hierarchy when assigning a member's population type: New Enrollee then Institutional, followed lastly by Income Status.
- We did not adjust for the potential impact of newly added ICD-10 diagnosis codes applicable in PY2024 and PY2025 that did not exist during the 2021 diagnosis period. This, generally, will cause our CMS model implementation to under-identify conditions.
- In future years, CMS could update or refine risk adjustment rules, guidance, and/or regulations such that the results presented in this analysis may no longer apply.

---

<sup>1</sup> CMS (January 31, 2024). Advance Notice of Methodological Changes for Calendar Year (CY) 2025 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies. Retrieved April 21, 2024, from <https://www.cms.gov/files/document/2025-advance-notice.pdf>.

<sup>2</sup> CMS (April 1, 2024). Announcement of Calendar Year (CY) 2025 Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies. Retrieved April 21, 2024, from <https://www.cms.gov/files/document/2025-announcement.pdf>.

<sup>3</sup> The model changes affect PACE and non-PACE organizations differently. Because we focus only on non-PACE organizations, all descriptions, analyses, and metrics will only reflect those populations.

<sup>4</sup> Ignoring the impact of sequestration.

<sup>5</sup> CMS (January 31, 2024), Advance Notice, op cit., Attachment III, Section G.2.

<sup>6</sup> The reported factors in Figure 1 are applicable to PY2025. The factors used in our analyses reflect the published values in the CMS memorandum published to the Health Plan Management System (HPMS) that are applicable when applied to PY2022 (diagnosis year 2021) data.

<sup>7</sup> Percent difference from MAPD calculated by taking the inverse of the PDP factor divided by the inverse of the MAPD factor minus 1.

<sup>8</sup> Cline, M. & Klaisner, J.K. (November 27, 2023). Low Income Disruption and the \$0 Premium Introduction: 2024 Individual Medicare PDP Market Turbulence. Milliman White Paper. Retrieved April 21, 2024, from <https://www.milliman.com/en/insight/low-income-disruption-0-dollar-premium-introduction-2024-individual-medicare-pdp-market>.

<sup>9</sup> CMS (September 14, 2023). 2025 Part D Risk Adjustment Model Update User Group. Retrieved April 21, 2024, from [https://www.csscooperations.com/internet/csscw3\\_files.nsf/F2/PtDUserGroupSlideDeck\\_20230914\\_508.pdf/\\$FILE/PtDUserGroupSlideDeck\\_20230914\\_508.pdf](https://www.csscooperations.com/internet/csscw3_files.nsf/F2/PtDUserGroupSlideDeck_20230914_508.pdf/$FILE/PtDUserGroupSlideDeck_20230914_508.pdf).

## About the Author(s)

### Michelle Klein

Milwaukee | Tel: Main +1 262 784 2250 | Office +1 262 796 3471

### Jason J. Petroske

Milwaukee | Tel: Main +1 262 784 2250 | Office +1 262 923 3692

### Douglas I. Rodrigues

Milwaukee | Tel: 1 262 784 2250 | Office +1 262 796 3461

For 75 years, we have combined technical expertise with business acumen to create elegant solutions for our clients.

Today, we are helping organizations take on some of the world's most critical and complex issues, including retirement funding and healthcare financing, risk management and regulatory compliance, data analytics and business transformation.