Proposed 2023 HHS HCC Risk Adjustment Model Impact Estimates

Chia Yi Chin, ASA, MAAA
720.226.9819 • chiayi.chin@wakely.com

Maris Hayes, ASA, MAAA
720.531.7030 • maris.hayes@wakely.com

Executive Summary

Wakely provides participating issuers with risk adjustment (RA) estimates for the Affordable Care Act's (ACA) individual and small group markets under the Wakely National Risk Adjustment Reporting (WNRAR) project. We collected[1] WNRAR participants' 2021 data incurred and paid through December 31st, 2021 scored with the 2021 Department of Health and Human Services (HHS) Hierarchical Condition Category (HCC) model as well as the final 2022 and proposed 2023[2] HHS HCC models. We compared results from the final 2022 and proposed 2023 models and found the following:

- From the 2022 model to the 2023 proposed model, we estimate a decrease of 2.8% and 3.3% in estimated absolute transfer dollars for the individual and small group markets respectively. Issuer's relative risk generally moved towards 1.0 (or the market average). That is, many issuers estimated[3] to be payers in the 2022 model are estimated to pay less in the 2023 proposed model. Likewise, many issuers estimated[4] to be receivers in the 2022 model are estimated to receive less in the 2023 proposed model.

- Results were different in the individual market compared to small group market.

    - Individual market observations:

        - Of all issuers estimated to be payers in the individual market in the 2022 final model, 74.0% are estimated to pay less under the 2023 proposed model. On average, payers had a 0.4% increase in relative risk between the 2022 final and 2023 proposed model.

        - Of all issuers estimated to be receivers in the individual market in the 2022 final model, 75.6% are estimated to receive less under the 2023 proposed model. On average, receivers had a 0.5% decrease in relative risk between the 2022 final and 2023 proposed model.

    - Small group market observations:

        - Of all issuers estimated to be payers in the small group market in the 2022 final model, 54.5% are estimated to pay less under the 2023 proposed model. On average, payers had a 0.2% increase in relative risk between the 2022 final and 2023 proposed model.

        - Of all issuers estimated to be receivers in the small group market in the 2021 final model, 63.7% are estimated to receive less under the 2023 proposed model. On

[1] We employ a distributed data approach to collect summarized information.

[3] As estimated through our WNRAR 202112 reporting run, with enrollment and claims data through December 31, 2021, paid through December 31, 2021

average, receivers had a 0.3% decrease in relative risk between the 2021 final and 2023 proposed model.

- Based on our analysis of risk score components, we observed that the 2023 proposed risk adjustment model moves significant risk coefficients towards demographic component of risk scores. Consequently, risk score components for medical condition categories (HCC), prescription drug condition categories (RXC), and enrollment duration factors (EDF) decreased.

Background and Methodology

Each year, proposed changes to the HHS HCC risk adjustment model are summarized by Centers for Medicare and Medicaid Services (CMS) in its annual Proposed Notice of Benefit and Payment Parameters (NBPP). In the final 2023 Proposed NBPP released on January 5th, 2022, CMS proposed significant changes to the 2023 HHS HCC risk adjustment model, including but not limited to:

- Adding a two-stage model specification to the risk adjustment model.
- Updating enrollment duration factor to a HCC-contingent enrollment duration factor and limiting to 6 months of total adjustment.
- Including HCC-count variables based on HCC with severe illness indicator or organ transplant status.

More information on the proposed 2023 HHS HCC risk adjustment model can be found in the proposed 2023 NBPP.[4] The proposed changes were also discussed as a possibility in the technical paper "HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes" released on October 26, 2021. Wakely has previously released a whitepaper[5] summarizing these possible changes and an analysis of potential impact based on WNRAR 2020 benefit year data.

Wakely provided participants of the WNRAR project with proposed 2023 risk adjustment model results in the 202112 reporting run. Each 202112 WNRAR participant received their estimate of risk transfers and risk scores based on the proposed 2023 model, with data incurred and paid from January 2021 through December 2021. Wakely collected the needed information in the distributed project codes based on the model changes proposed in the 2023 proposed payment notice. It is important to note that Wakely did not make adjustments to the results collected, so the analysis and its accompanying estimates did not consider year-over-year changes in demographics, morbidity, coding improvement, or changes in laws and regulations after 2021. In addition, we did not adjust the data to reflect any potential differences due to the COVID-19 pandemic or any change in enrollment patterns. The membership distribution and diagnosis codes were held constant year-over-year in this analysis.

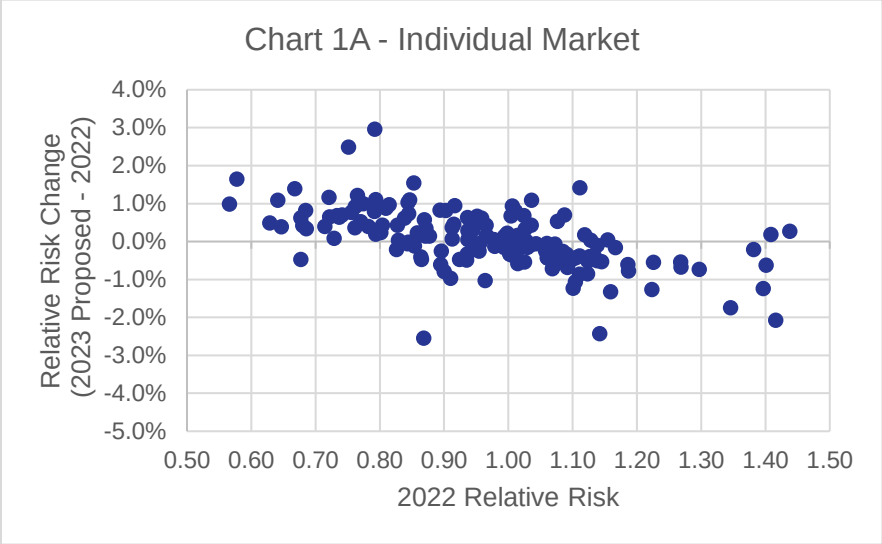
Observations

[4] https://www.federalregister.gov/documents/2022/01/05/2021-28317/patient-protection-and-affordable-care-act-hhs-notice-of-benefit-and-payment-parameters-for-2023

[5] https://www.wakely.com/blog/summary-and-analysis-hhs-risk-adjustment-technical-paper-possible-model-changes

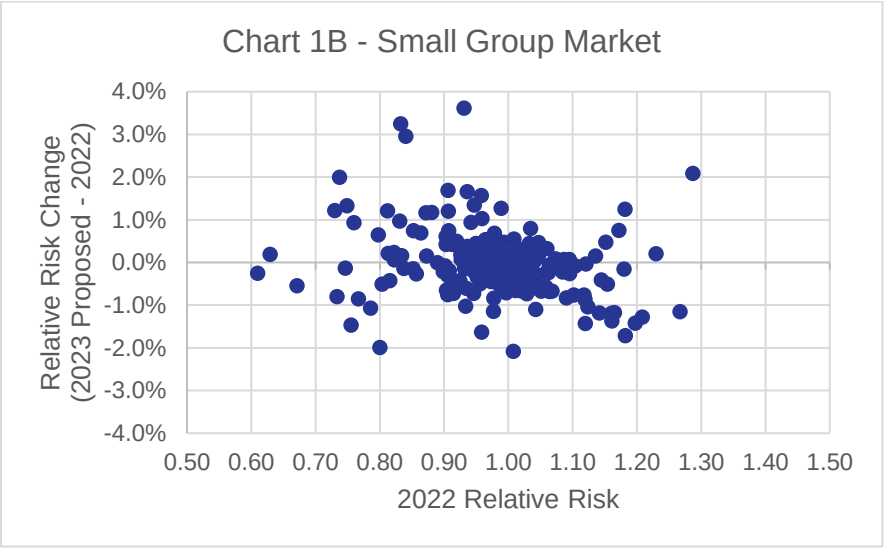
First, we examined the relative risk[6] change for issuers nationally from the 2022 final model to the 2023 proposed model. Charts 1A and 1B below show the relative risk change for issuers in the individual and small group markets respectively. Each observation (dots) in the charts below represents a unique HIOS ID in our WNRAR data.

Chart 1A-B: Issuer Relative Risk Change (2023 Proposed-2022) Based on 2022 Relative Risk



As shown in Chart 1A above, the relative risk of individual issuers in the 2022 final risk adjustment model moves closer to 1.0 when data is rescored on the 2023 proposed risk adjustment model. We also observed that issuers with higher than market average relative risk (i.e. risk transfer receivers based on the 2022 final risk adjustment model) tends to have a decrease in relative risk, while issuers with lower than market average relative risk (i.e. risk transfer payers), tend to have an increase in relative risk when we rescored issuers using the 2023 proposed risk adjustment model. In other words, the proposed model appears to move most individual issuers closer to the market average.

[6] Since the risk adjustment program ultimately transfers premiums from issuers with higher risk to issuers with lower risk within a given market, we are using "relative risk" to determine the impact of these model changes. Market average relative risk is always 1.0 for each specific state-market combination. To elaborate, issuer with a relative risk that is higher than 1.0 is considered riskier than market average, and will receive risk transfer payments, and vice versa. Relative risk includes other risk adjustment factors such as allowable rating factors, induced demand factors and geographic cost factors.



In Chart 1B, the results for small group market does not appear to follow the trend as shown for the individual market in Chart 1A. A majority of the issuers captured in our small group market appear to be concentrated close to the market relative risk (high concentration of observations between 0.9 and 1.1 relative risk) with mixed results on the impact of the proposed model changes. However, we note that there are large increases in relative risk for majority of the issuers below a 0.9 relative risk based on the 2022 final relative risk.

We further summarize the estimated impact of the 2023 proposed changes in Table 1A and Table 1B below.

Table 1A: Individual Market Payer and Receiver Improve/Deteriorate Transfer Status and Average Impact

	% of Issuers		Average Change in Relative Risk		
Issuers	**Improve**	**Deteriorate**	**Improve**	**Deteriorate**	**Average**
Payer	74.0%	26.0%	0.6%	-0.4%	0.4%
Receiver	24.4%	75.6%	0.4%	-0.8%	-0.5%

Table 1B: Small Group Market Payer and Receiver Improve/Deteriorate Transfer Status and Average Impact

	% of Issuers		Average Change in Relative Risk		
Issuers	**Improve**	**Deteriorate**	**Improve**	**Deteriorate**	**Average**
Payer	54.5%	45.5%	0.7%	-0.5%	0.2%
Receiver	36.3%	63.7%	0.3%	-0.6%	-0.3%

We observe the following changes in payer and receiver transfer status:

1) As shown in Table 1A above, of all issuers estimated to be payers in the individual market in the 2022 final model (below 1.0 relative risk), 74.0% are estimated to pay less under the 2023 proposed model. On average, all payers had a 0.4% increase in relative risk between the 2022 final and 2023 proposed model. Of all issuers estimated to be receivers in the individual market in the 2022 final model (above 1.0 relative risk), 75.6% are estimated to receive less under the 2023 proposed model. On average, all payers had a 0.5 % decrease in relative risk between the 2022 final and 2023 proposed model.

2) As shown in Table 1B above, of all issuers estimated to be payers in the small group market in the 2022 final model (below 1.0 relative risk), 54.5% are estimated to pay less under the 2023 proposed model. On average, all payers had a 0.2% increase in relative risk between the 2022 final and 2023 proposed model. Of all issuers estimated to be receivers in the small group market in the 2022 final model (above 1.0 relative risk), 63.7% are estimated to receive less under the 2023 proposed model. On average, all payers had a 0.3% decrease in relative risk between the 2022 final and 2023 proposed model. It appears that small group market has significantly different impact than as observed in the individual market.

As shown in Charts 1 and Tables 1 above, while there are some key patterns in our results, relative risk changes may vary significantly from one issuer to another (regardless of relative risk status, payer/receiver status or market). Therefore, each issuer's risk transfer changes due to model changes may vary significantly. In Table 2 below, we show issuer absolute risk transfer changes as a percent of statewide market average premium to illustrate the financial impact when comparing the 2022 final risk adjustment model to the 2023 proposed risk adjustment model. On average, the proposed risk adjustment model would impact risk transfers by 0.42% and 0.30% of market average premium for individual and small group markets separately. When performing this analysis based on 2020 WNRAR benefit year data, Wakely found the proposed risk adjustment model would impact risk transfers by 0.63% and 0.39% of market average premium for individual and small group markets separately.

Table 2: Issuer Absolute Transfer Change from 2022 Final to 2023 Proposed Model as a Percent of Statewide Market Average Premium

	Absolute Transfer Change as % of Statewide Market Average Premium	
Metric	**Individual**	**Small Group**
Average	0.42%	0.30%
10th Percentile	0.05%	0.04%
25th Percentile	0.12%	0.07%
50th Percentile	0.34%	0.19%
75th Percentile	0.57%	0.43%
90th Percentile	0.95%	0.72%

To further understand the risk score changes due to the 2023 proposed risk adjustment model, we compared how the different components of risk scores as a percentage of total risk score changed between the 2022 final and the 2023 proposed models. Table 3 below show changes in the components of risk scores.

Table 3: Percentage of Total Risk Score by Component (2022 Final v 2023 Proposed Model)

	Individual			Small Group		
	2022 Final Risk Score[1]	**2023 Proposed Risk Score[1]**	**Change in Percentage (Proposed-Final)**	**2022 Final Risk Score[1]**	**2023 Proposed Risk Score[1]**	**Change in Percentage (Proposed-Final)**
Demo	12.1%	18.7%	6.5%	17.3%	23.6%	6.3%
HCC	69.9%	63.6%	-6.3%	65.5%	59.7%	-5.7%
RXC	16.6%	17.0%	0.4%	15.8%	16.0%	0.2%
EDF	1.4%	0.7%	-0.7%	1.5%	0.7%	-0.8%

[1]Risk values presented exclude CSR and billable member month adjustments.

As shown in Table 3, the change in model weights appear to increase the proportion of demographic risk scores. In both individual and small group markets, demographic risk scores represent 18.7% and 23.6% of total risk scores respectively. This observation is consistent with the increase in relative risk for majority of the payers as they may have a higher proportion of members with demographic risk scores only (i.e. less number of members with HCC coded). On the other hand, HCC and EDF risk scores as a proportion of total risk scores will decrease as a result of the proposed model changes. Therefore, issuers with higher HCC prevalence rates (typically risk transfer receivers) will likely see their relative risks and consequently risk transfer receipts decrease, while the opposite scenario will hold true for payers.

Issuers who are current WNRAR participants have received their estimated 2022 and 2023 proposed risk transfer impact in the 202112 WNRAR deliverables. If you are not a current participant and you are interested in participating in this important project, please contact us at WNRARSupport@Wakely.com.

Disclosures and Limitations

This analysis applied the final 2022 and proposed 2023 risk adjustment model to WNRAR participants' 2021 data with claims incurred and paid through December 2021. Wakely did not make any adjustments or changes to collected data. The underlying market population, data, coding, morbidity and renewal patterns (EDFs) may change, potentially materially, from the time of this analysis through 2023. Furthermore, no adjustments were made for improved risk score optimization efforts such as coding and supplemental claims efforts. We also did not make any adjustments for the COVID-19 crisis.

This paper and the analysis contained herein are based on our interpretation and understanding of CMS's published guidance. Results may vary significantly by issuer and market.

The PLRS changes provided above are inherently uncertain and rely upon data provided by WNRAR participants. We extensively review the data and work with issuers to correct any observed issues but cannot completely guarantee the accuracy of any single issuer's data submission.

Users of this analysis should be qualified to use it and understand the results and its inherent uncertainty. We advise all WNRAR participants to discuss the analysis and appropriateness of application with Wakely before using these estimates.

Please contact Chia Yi Chin at 720.226.9819 | chiac@wakely.com or Maris Hayes at 720.531.7030 | maris.hayes@wakely.com with any questions or to follow up on any of the concepts presented here. Special thanks to Christopher Korloch for his contribution to this paper.

Wakely released a similar paper based on 2020 WNRAR data (instead of 2021 WNRAR data). The prior paper can be found here: https://www.wakely.com/blog/summary-and-analysis-hhs-risk-adjustment-technical-paper-possible-model-changes