

Final 2021 HHS HCC Risk Adjustment Model Impact Estimates - *Revised*

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[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 collected¹ WNRAR participants' 2020 data incurred and paid through December 31st, 2020 scored with the 2020 Department of Health and Human Services (HHS) Hierarchical Condition Category (HCC) model as well as the final 2021 model.²

This paper is revised from our previous March 2021 release to reflect the recently updated NDC-to-RXC mapping³ for the 2020 risk adjustment model. We have also added Appendix B to discuss the impact of the recently updated NDC-to-RXC mapping. In general, the key takeaways remain unchanged from the prior paper. In addition, we have also removed our findings with regards to the proposed 2022 model as the finalized model is different than proposed.⁴

We compared results from the two models and noted the following:

- From the 2020 model to the 2021 model, we estimate an increase of 9.1% and 11.5% in estimated absolute transfer dollars for the individual and small group markets respectively. Issuer's relative risk generally moved away from 1.0 (or the market average). That is, many issuers estimated⁵ to be payers in the 2020 model are estimated to pay more in the 2021 model. Likewise, many issuers estimated⁴ to be receivers in the 2020 model are estimated to receive more in the 2021 model.
- The 2020 nationwide market average risk scores in the individual and small group markets decreased by 1.5% and 0.9% respectively when rescored using the final 2021 risk adjustment model, holding the membership constant.
- Each issuer's plan liability risk score (PLRS) change due to the model changes in 2021 varied, often significantly. For example, for 10% of the individual market issuers (at the 90th percentile and above), we estimated their risk scores to increase by at least 0.6% from 2020 to 2021, whereas the average risk score change is a 1.5% decrease. Note that PLRS is a component of

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

² Final 2021 risk adjustment model based on 2021 Final Notice of Benefit and Payment Parameters (NBPP) <https://s3.amazonaws.com/public-inspection.federalregister.gov/2020-10045.pdf>.

³ https://www.regtap.info/reg_library_openfile.php?id=3554&type=I

⁴ We will follow up with a separate white paper on the impact of the final 2022 risk adjustment model at a later date.

⁵ As estimated through our WNRAR 202012S reporting run, with enrollment and claims data through December 31, 2020, paid through December 31, 2020.

the risk adjustment model. While risk scores may increase or decrease from year-to-year, risk transfers are calculated based on relative to market average basis.

Background and Methodology

Each year, changes to the HHS HCC risk adjustment model are summarized by Centers for Medicare and Medicaid Services (CMS) in its annual Notice of Benefit and Payment Parameters (NBPP). In the final 2021 NBPP, CMS finalized significant changes to the 2021 HHS HCC risk adjustment model, including but not limited to:

- 1) Reclassifying hierarchical condition categories (HCCs) to reflect the coding changes due to the transition to ICD-10.
- 2) Recalibrating HCC risk coefficients based on 2016, 2017, and 2018 EDGE server data.
- 3) Adjusting risk coefficient for Hepatitis C drugs’ plan liability assuming the availability of generics.
- 4) Including pre-exposure prophylaxis (PrEP) plan liability in preventative services.

More information on the 2021 HHS HCC risk adjustment model can be found in the final 2021 NBPP.⁶ A brief reading is also available through Wakely’s summary of the final 2021 NBPP.⁷

As a result of these changes, direct comparison of year-over-year total risk scores is not appropriate as risk coefficients and HCCs will be significantly different in 2021. In order to estimate the impact of the 2021 final risk adjustment model, Wakely collected needed information in the distributed project codes based on the model changes and collected summarized results from WNRAR participants. It is important to note that Wakely does not make adjustments to the results collected, so the analysis and its accompanying estimates do not consider year-over-year changes in demographics, morbidity, coding improvement, or changes in laws and regulations. The membership distribution and diagnosis codes are held constant year-over-year in our analysis.

Observations

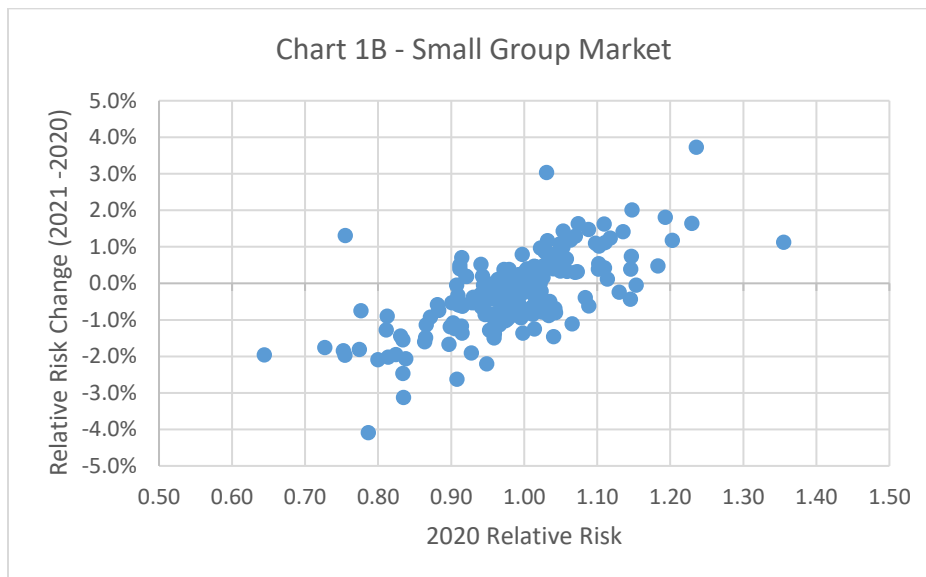
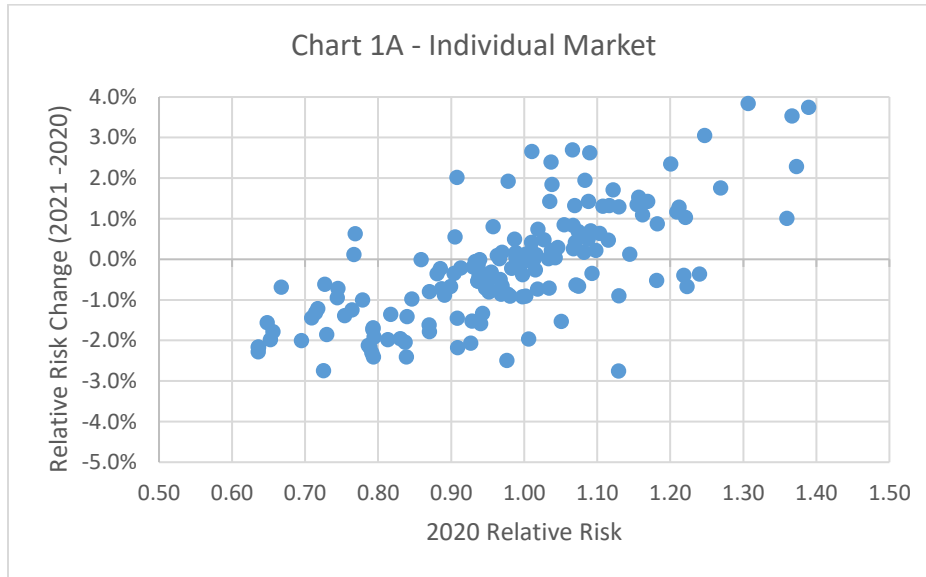
Charts 1A and 1B below show the relative risk⁸ change between the 2021 and 2020 model by the 2020 model relative risk. As shown, the relative risk of issuers in the 2020 risk adjustment model moves away from 1.0 when data is rescored on the 2021 risk adjustment model. Note that a 1.0 relative risk represents the market average risk.

⁶ <https://s3.amazonaws.com/public-inspection.federalregister.gov/2020-10045.pdf>

⁷ <https://www.wakely.com/sites/default/files/files/content/wakely-summary-2021-final-nbpp-51320200.pdf>

⁸ 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. 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.

Chart 1A-B: Issuer Relative Risk Change (2021-2020) based on 2020 Relative Risk



As a result, we observe the following changes in payer and receiver transfer status:⁹

- Of all issuers estimated to be payers in the 2020 model (below 1.0 relative risk), 81.6% and 83.0% are estimated to pay more under the 2021 model for the individual and small group markets respectively.

⁹ Please reference Appendix A for more information on payer/receiver status

- Of all issuers estimated to be receivers in the 2020 model (above 1.0 relative risk), 74.0% and 66.9% are estimated to receive more under the 2021 model for the individual and small group markets respectively.

As shown in Chart 1, relative risk changes varied significantly from one issuer to another. As a result of this variation, issuers’ risk transfers will be affected, often materially. In Table 1 below, we show issuer absolute risk transfer changes as a percent of statewide market average premium to illustrate the impact of the final 2021 risk adjustment model.

Table 1: Issuer Absolute Transfer Change from 2020 to 2021 RA Model as a Percent of Statewide Market Average Premium

| Metric | Absolute Transfer Change as % of Statewide Market Average Premium | |
|-----------------------------|---|-------------|
| | Individual | Small Group |
| Average | 1.0% | 0.5% |
| 10 th Percentile | 0.1% | 0.0% |
| 25 th Percentile | 0.3% | 0.1% |
| 50 th Percentile | 0.8% | 0.3% |
| 75 th Percentile | 1.3% | 1.0% |
| 90 th Percentile | 2.1% | 1.2% |

To further understand the risk score changes due to the new risk adjustment models, we compared how the different components of risk scores as a percentage of total risk score changed between the 2020 and 2021 models. Table 2 below shows changes in the components of risk scores.

Table 2: Percentage of Total Risk Score by Component (2020 v 2021 HHS Model)

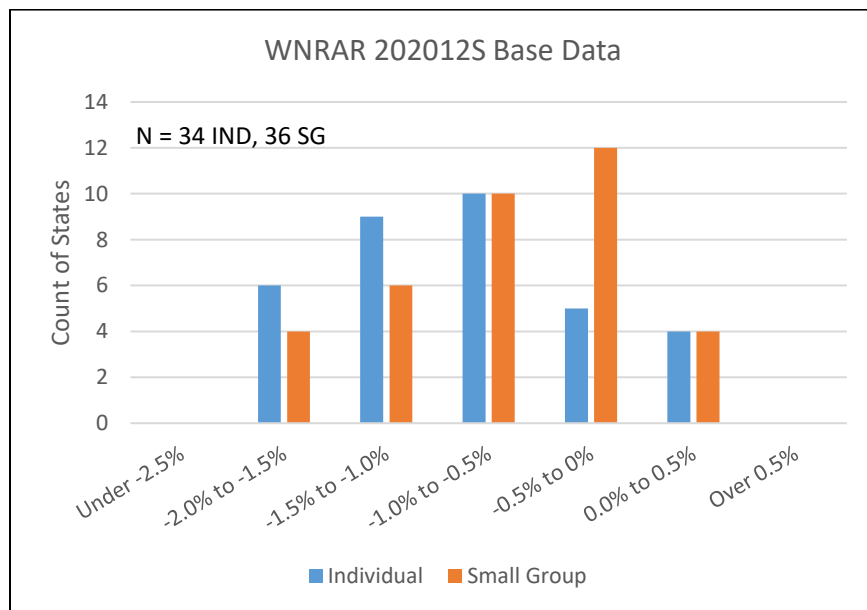
| | Individual | | | Small Group | | |
|------|------------------------------|------------------------------|----------------------------------|------------------------------|------------------------------|----------------------------------|
| | 2020 Risk Score ¹ | 2021 Risk Score ¹ | Change in Percentage (2021-2020) | 2020 Risk Score ¹ | 2021 Risk Score ¹ | Change in Percentage (2021-2020) |
| Demo | 15.6% | 13.0% | -2.6% | 21.3% | 18.0% | -3.3% |
| HCC | 69.4% | 69.4% | 0.0% | 63.7% | 64.8% | 1.1% |
| RXC | 13.5% | 16.5% | 3.0% | 13.0% | 15.6% | 2.6% |
| EDF | 1.5% | 1.1% | -0.4% | 2.0% | 1.5% | -0.5% |

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

As shown in Table 2, prescription drug imputed HCC (RXC) will be a larger component of total risk in the final 2021 model compared to the 2020 model. For example, RXC increased from 13.5% of total risk score in 2020 to 16.5% of total risk score in 2021 for the individual market. This is consistent with the observation that the 2021 final model is generally moving relative risks away from 1.0. Therefore, issuers with higher RXC prevalence rates (typically risk transfer receivers) will likely see their relative risks and consequently risk transfer receipts increase, while the opposite scenario will hold true for issuers with lower RXC prevalence rates.

Chart 2 below shows the distribution of average PLRS changes by market from the current 2020 risk adjustment model to the final 2021 risk adjustment model. Change in risk score between years is due to a general change in risk score coefficients. Given that we did not make any demographic or morbidity adjustments to the underlying 2020 data, these risk score changes do not indicate that there is a change in overall morbidity.

Chart 2: Market Risk Score Change from 2020 to 2021 RA Model



In addition, we also observed that the risk score changes for issuers can be significantly different than market averages. In Table 3 below, we show issuer average risk score changes, as well as key metrics by market.¹⁰ While market average risk score decreased from 2020 to 2021 by 1.5% and 0.9% for the individual and small group markets respectively, issuer risk score changes can vary widely. The spread in change of risk scores from issuer to issuer can be quite significant. As shown in Table 3, the spreads in risk score change from 2020 to 2021 between the 90th percentile and the 10th percentile are 4.5% and 3.1% for individual and small group markets respectively

¹⁰ Additional illustration of issuer risk score changes by market share can be found in Appendix B.

Table 3: Issuer Risk Score Change from 2020 to 2021 RA Model

| Metric | Risk Score Change (2021/2020) | |
|-----------------------------|-------------------------------|-------------|
| | Individual | Small Group |
| Average | -1.5% | -0.9% |
| 10 th Percentile | -3.9% | -3.2% |
| 25 th Percentile | -2.8% | -1.4% |
| 50 th Percentile | -1.2% | -0.7% |
| 75 th Percentile | -0.6% | -0.3% |
| 90 th Percentile | 0.6% | -0.1% |

Issuers who are current WNRAR participants have received their estimated 2021 impact in the 202012S 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 2021 risk adjustment model to WNRAR participants' 2020 data with claims incurred and paid through December 2020. 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 2021. 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, and CMS may make further changes to the 2021 model. 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 participants to discuss the analysis and appropriateness of application with Wakely before using these estimates. Wakely does not intend to create a reliance by any outside parties (non-WNRAR participants) receiving this report. Outside parties receiving this report should retain their own qualified experts in interpreting the results. It is the responsibility of the organizations receiving this report to review the assumptions carefully and notify Wakely of any potential concerns.

Please contact Chia Yi Chin at 720.226.9819 | chiac@wakely.com with any questions or to follow up on any of the concepts presented here.

Appendix A – Additional 2020 to 2021 Changes

Table A-1: Payer and Receiver Improve/Deteriorate Transfer Status (2020 to 2021)

| | Individual | | Small Group | |
|----------|------------|-------------|-------------|-------------|
| Issuers | Improve | Deteriorate | Improve | Deteriorate |
| Payer | 18.4% | 81.6% | 17.0% | 83.0% |
| Receiver | 74.0% | 26.0% | 66.9% | 33.1% |

Chart A-1: Individual Risk Score Change from 2020 to 2021 RA Model by Market Share

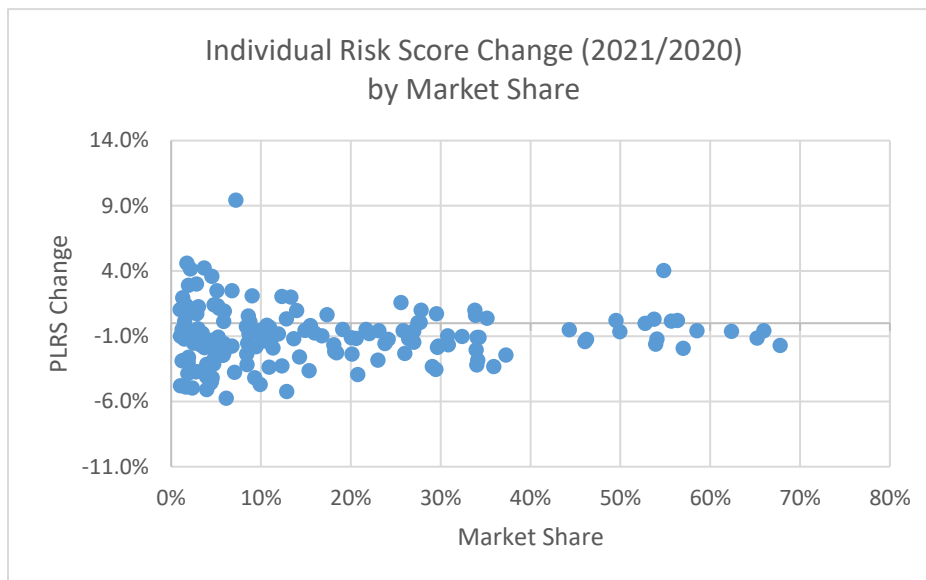
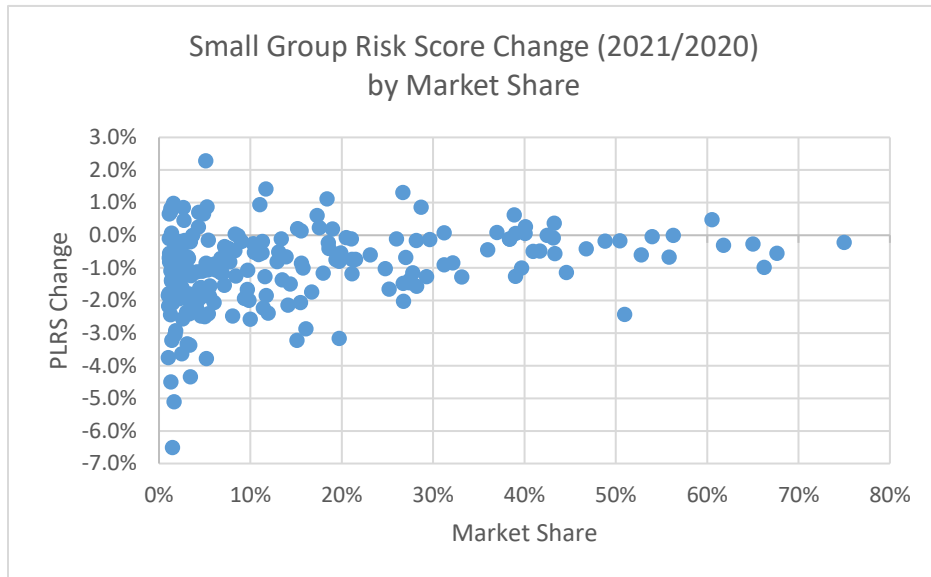


Chart A-2: Small Group Risk Score Change from 2020 to 2021 RA Model by Market Share



Appendix B – Changes from 202012 to 202012S

This additional Appendix is added in our May 2021 revision for this whitepaper. Wakely updated our 202012 reporting run results in the 202012S¹¹ results to reflect NDC-to-RXC mapping changes, which include the notable change of removing hydroxychloroquine from RXC09 (“Immune Suppressants and Immunomodulators”).

The tables and charts provided below are based on our comparison of the results in 202012 and 202012S reporting runs. The results shown in this section are based on the 2020 risk adjustment model only.

Table B1 below shows that the RXC mapping changes resulted in lower risk scores in general.

Table B-1: Issuer Risk Score Change from 202012 to 202012S

| Metric | Risk Score Change (202012S/202012) | |
|-----------------------------|---------------------------------------|-------------|
| | Individual | Small Group |
| Average | -3.9% | -5.3% |
| 10 th Percentile | -5.2% | -7.8% |
| 25 th Percentile | -4.9% | -6.6% |
| 50 th Percentile | -4.1% | -5.3% |
| 75 th Percentile | -3.2% | -3.9% |
| 90 th Percentile | -2.1% | -2.3% |

While risk scores have decreased as a result of the NDC mapping updates, issuer specific relative risk and risk transfer results may have significantly different impact, depending on issuer results in comparison to the market average. The charts on the following pages show the significant variation for issuers’ relative risk and risk transfers.

¹¹ To generate the 202012S WNRAR results, data was recollected from all issuers to reflect the NDC to RXC mapping change. The data reflects the same timeframe as the 202012 results (January 2020 through December 2020), however small changes did occur between datasets due to retroactivity and run out.

Chart B-1: Relative Risk Changes from 202012 to 202012S for Individual Market

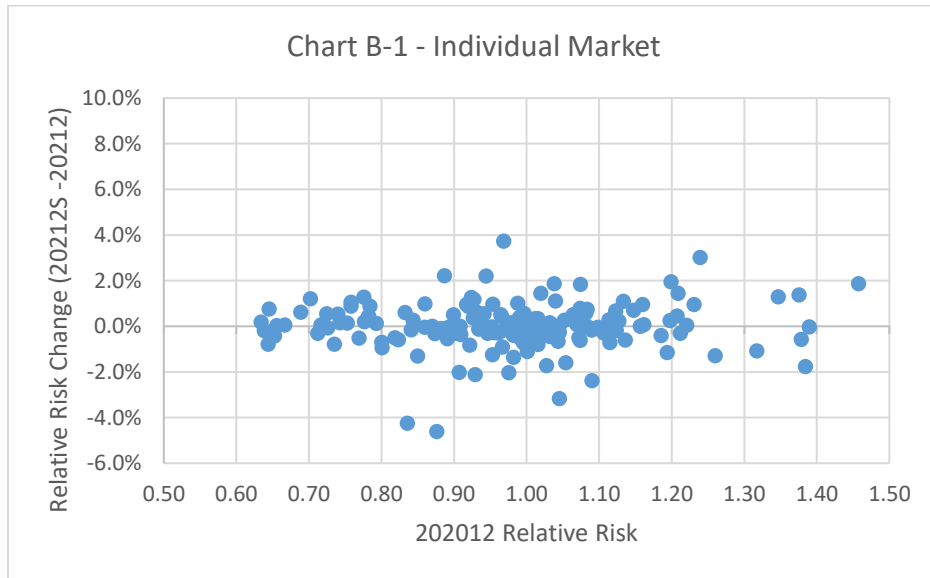


Chart B-2: Relative Risk Changes from 202012 to 202012S for Small Group Market

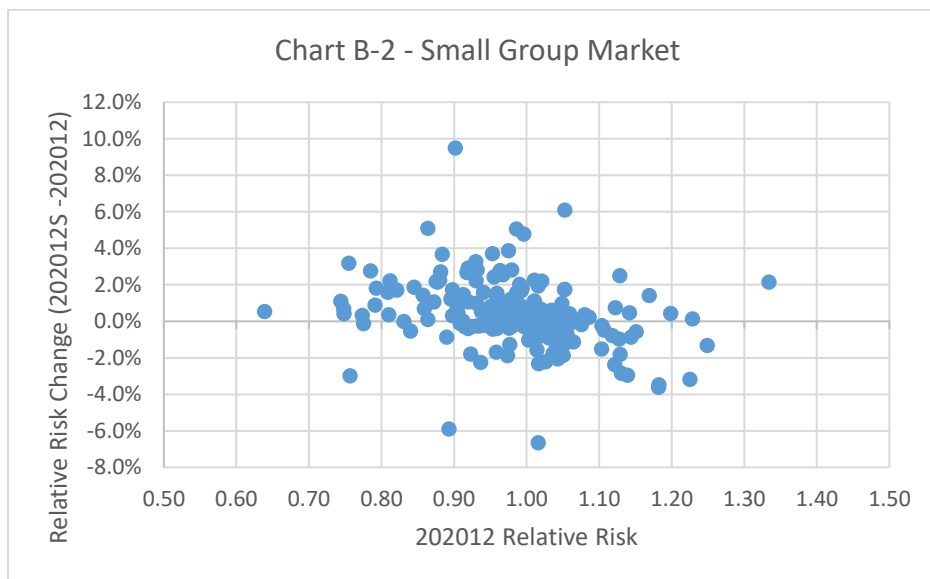


Chart B-3: Transfer PMPM Changes as a Percentage of Statewide Average Premium from 202012 to 202012S for Individual Market

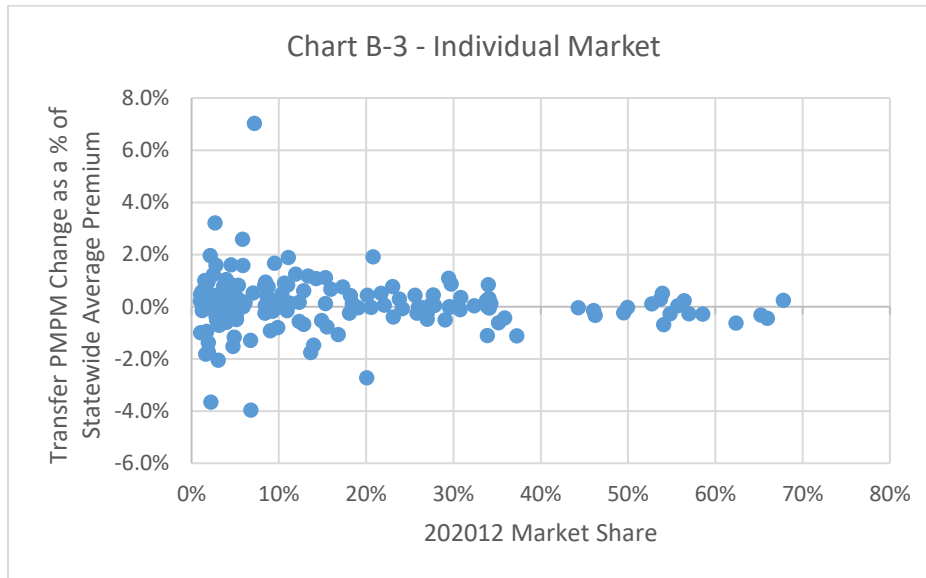


Chart B-4: Transfer PMPM Changes as a Percentage of Statewide Average Premium from 202012 to 202012S for Small Group Market

