



2021 Analysis for the State Reinsurance Program

MARYLAND HEALTH BENEFIT EXCHANGE

STATE OF MARYLAND

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INTRODUCTION

In 2019, the state of Maryland implemented the State Reinsurance Program (“SRP”) for the individual market by using an Affordable Care Act (“ACA”) Section 1332 waiver (“Waiver”). The SRP provides funds to health insurers operating in the individual market to help cover the costs of high-cost members.

Pursuant to the Code of Maryland Regulations (“COMAR”) Section 14.35.17.04.B¹, each year the Maryland Health Benefit Exchange (“MHBE”) Board of Trustees (“Board”) must set the payment parameters for the State Reinsurance Program by determining the attachment point, the coinsurance rate, and the reinsurance cap.

For 2019 and 2020, the Board set payment parameters such that the SRP would provide a payment equal to 80% of the claims incurred between \$20,000 and \$250,000 for each member in the individual market. The goal based on these parameters was to reduce premiums in the individual market by 30% (due to direct funding and associated morbidity improvements).

The federal risk adjustment program, operated by the Department of Health & Human Services (“HHS”), also provides payments to insurers for members who are expected to have high costs based on demographic characteristics and diagnosis data.

Because both programs cover some of the same high-risk, high-cost individuals, there is potential that some insurer claims are covered by both programs. This interaction of the reinsurance and risk adjustment programs could inappropriately disrupt the individual market if adjustments are not made.² Therefore, pursuant to Section 14.35.17.04.B.(4), the Board can set a market-level dampening factor provided by the Maryland Insurance Commissioner, if determined necessary to mitigate the interaction of the SRP and the federal risk adjustment program.

The Board determined a dampening factor was again necessary for 2020. The Commissioner established a dampening factor of 0.785, i.e. a reduction of 21.5% to calculated risk adjustment transfers. The Commissioner concluded that a 21.5% reduction was appropriate to address the potential for interaction between the SRP and federal risk adjustment program.

This report has been prepared for the MHBE and the Maryland Insurance Administration (“MIA”) to help inform the MHBE Board of Trustees in setting the 2021 parameters for the State Reinsurance Program.

¹ <http://mdrules.elaws.us/comar/14.35.17.04>

² In this report, the word “interaction” refers to payments received by a carrier for the enrolled population whose risk and claims experience would be eligible for payments under both the Federal Risk Adjustment Program and the State Reinsurance Program.

REINSURANCE PAYMENT PARAMETERS

METHODOLOGY

The steps in projecting the impact of the State Reinsurance Program's payment parameters for the 2021 individual market included:

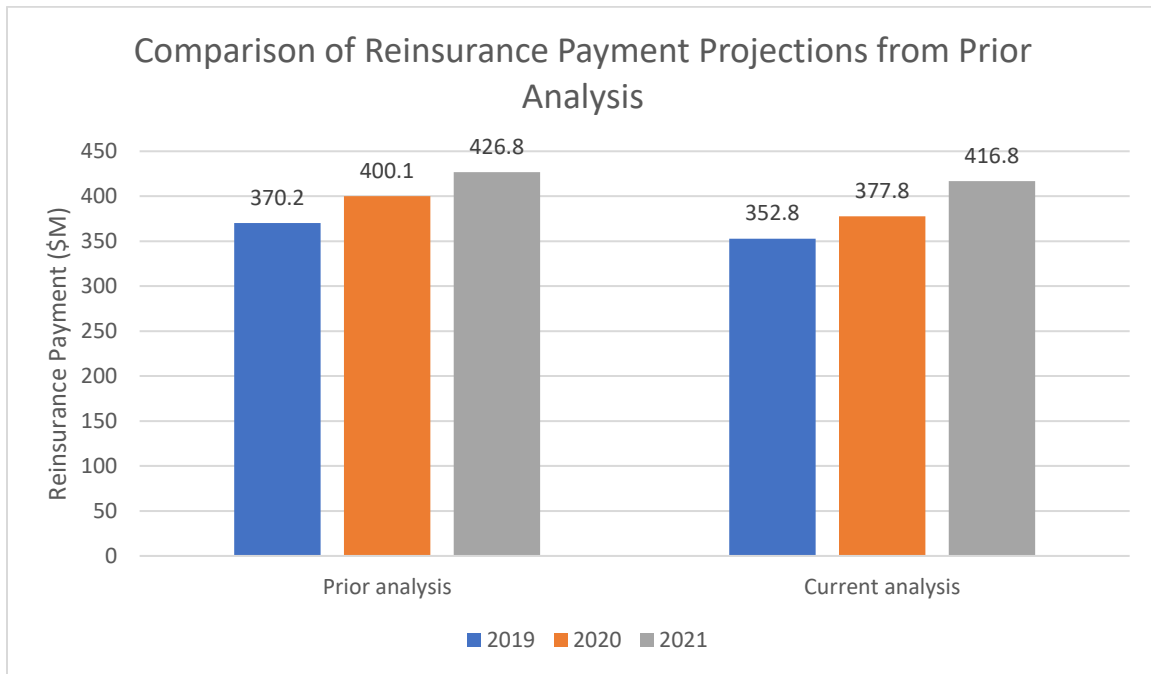
- 1) **Reviewing previous reinsurance reports and estimates** – These documents were produced by L&E in 2019 for the 2020 reinsurance parameters and previously by Wakely Consulting (“Wakely”) in 2018 for the 2019 reinsurance parameters. These documents included estimated impacts to the individual ACA market for 2019 and beyond.
- 2) **Gathering experience data** – L&E collected updated 2019 – 2020³ claims experience data from the insurers participating in the individual market, CareFirst and Kaiser.
- 3) **Collecting information for projection assumptions** - In addition to claims experience, L&E utilized actual 2020 plan enrollment as well as other information provided in the 2021 rate filings. L&E also had discussions with the MIA and MHBE concerning any internal analyses performed and review of carrier information. L&E reviewed data from the Centers for Medicare and Medicaid Services (“CMS”), MHBE, MIA and carriers to calibrate and project premiums, Advance Premium Tax Credits (“APTC”), and federal pass-through funding.
- 4) **Updating reinsurance model** – Having performed the prior reinsurance program analysis and additional analysis on potential subsidies⁴, L&E refined its projection methodology and expanded the data requests in order to improve the predictive ability of the model.
- 5) **Developing and projecting reinsurance payments** – Starting with the 2019 full year and 2020 partial year claims data provided by CareFirst and Kaiser, L&E projected the claims with carriers' assumptions with refinement from discussions with MHBE and MIA (see Step #3 above) for claims trend, enrollment and expenses.
- 6) **Comparing current results to prior projections** – An actual-to-expected analysis helped L&E understand differences versus prior projections and the implications for the State Reinsurance Program.

³ Claims data is through May 2020.

⁴ At the end of 2019 and beginning of 2020, L&E performed an impact analysis of state funded subsidies in the individual market. The subsidies analyzed included young adult subsidies and a subsidy for those between 400-600% of the Federal Poverty Limit.

RESULTS

L&E projects Maryland's State Reinsurance Program will pay out approximately \$353M in 2019, \$378M in 2020, and \$417M in 2021. For each year, the projected reinsurance payment is less than what was projected in L&E's prior analysis due to the 2019 actual claims coming in lower than projected and the impact of COVID-19 lowering the total incurred and reinsured claims⁵. See the following graph for a comparison of the prior analysis with the current analysis⁶.



The reinsurance program helps to stabilize the Individual market by reimbursing carriers for high cost claims, which in turn, reduces premiums in the market when compared to a scenario without the reinsurance program. The expected premium reductions are driven by a claims reduction due to:

1. Reinsurance (as described); and
2. An improvement to the covered population's morbidity due to additional healthy members entering and staying in the individual market because of the lower premiums resulting from the introduction of the SRP. Reviewing the 2017 to 2018 and 2018 to 2019 claims experience, most of the change in membership came from the healthiest (or, lowest claims) individuals.

Additionally, there is a premium offset due to the health insurer provider fee (Section 6-102.1 of the Maryland Insurance Code) which is 2.75% for 2019 and 1.00% for 2020 through 2023.

⁵ Reinsured claims are projected to decrease by 2% in 2020 and 1% in 2021 as a result of COVID-19 and is discussed in more detail at the end of this section.

⁶ Prior analysis refers to L&E's reinsurance modeling and report from Fall 2020, which utilized 2018 full year and 2019 partial year claims data to project reinsurance payments 2019 and beyond. The current analysis utilized 2019 full year and 2020 partial year claims data to project reinsurance payments 2020 and beyond.

To target and maintain an estimated 30% premium reduction for 2021, L&E recommends the attachment point to remain at \$20,000, along with an 80% coinsurance rate and a \$250,000 cap on reinsurance payments.

L&E expects the federal pass-through funding for 2021 to be \$568M, up from the \$447M⁷ received for 2020. The increase to the pass-through funding for 2021 is primarily driven by a projected 16% decrease in the average benchmark premium. Factors influencing changes in the pass-through funding include:

- Carriers have filed rate decreases for 2021, which reduces the benchmark premiums, and thus APTC PMPM.
- A new carrier is entering the individual market in 2021 and the new carrier's filed rates have reduced the benchmark premiums even further from the average rate decrease previously filed by the returning carriers. The benchmark premiums in some counties were reduced by as much as 40%⁸.
- In a hypothetical scenario where the reinsurance program does not exist, premiums and APTC PMPM are expected to continue to rise.
- Overall, the APTC population is assumed to be steady⁹ with and without the reinsurance program, but increasing in magnitude over time (e.g., SEP enrollment from COVID-19 and the Maryland Easy Enrollment Health Insurance Program).

Scenario	Avg Premium PMPM for all members		Avg APTC PMPM for APTC members		APTC Enrollment	
	2020	2021	2020	2021	2020 ¹⁰	2021
Reinsurance Waiver	\$494	\$424	\$438	\$350	127.1k	138.0k
No Reinsurance Waiver	\$786	\$736	\$765	\$707	127.1k	138.0k

⁷ This is CMS's finalized pass through funding as of April 3, 2020 (<https://www.cms.gov/CCIIO/Programs-and-Initiatives/State-Innovation-Waivers/Downloads/1332-MD-2020.pdf>).

⁸ This modeling assumes that UnitedHealthcare entered the Individual market due to the reinsurance program and that UnitedHealthcare is not included in the baseline scenario without reinsurance.

⁹ The net premium paid by APTC members is typically not impacted by the overall rate level because it is primarily a function of their income.

¹⁰ Latest enrollment information as of June 2020. The impact of the Special Enrollment Period due to COVID-19 and the Maryland Easy Enrollment Health Insurance Program is included in the enrollment figures under the reinsurance waiver scenario and the no reinsurance waiver scenario.

The COVID-19 global pandemic is a major consideration not fully understood at the time of the modeling used for this report. Maryland reopened its individual exchange enrollment due to COVID-19. Enrollment data from MHBE and MIA through June 2020 indicate there has been an increase in enrollment in the individual market due to the Special Enrollment Period ("SEP") for COVID-19 and the Maryland Easy Enrollment Health Insurance Program. These two SEPs have resulted in an increase of 17,500 lives on the Exchange through June 2020, with 95% enrolling from the COVID-19 SEP.

Maryland was under a stay at home order from March 30, 2020 to May 15, 2020¹¹. To determine COVID-19's impact on SRP claims, L&E reviewed additional continuance tables from the carriers through May 2020. L&E estimated cumulative reinsurance payments for both 2019 and 2020 at the end of March, April, and May (where data was available) to determine if there was an impact on reinsured claims due to COVID-19. The amount of reinsured claims in April 2020 relative to reinsured claims in the first quarter of 2020 reinsured claims was lower compared to 2019 over the same time period. It should be noted that this pattern was experienced across the total incurred claims (i.e. not just claims that would qualify for reinsurance).

During late June 2020 and early July 2020, many states begun to incur a reemergence of COVID-19 cases, including Maryland. It is likely that another reduction in claims, as seen in April, could occur again in the second half of 2020 and in 2021. Therefore, L&E projected a 2% reduction to reinsured claims for 2020 and a 1% reduction to reinsured claims for 2021.

At the time of this report, the hospitalization and death rates from COVID-19 in Maryland have been approximately roughly equal to the nationwide average. If Maryland were to experience a higher COVID-19 impact in late 2020 or in 2021 (i.e., higher hospitalization and death rates such as those seen by New York in March and April of 2020), L&E projects reinsurance payments to increase from \$378M to \$391M in 2020 or from \$417M to \$430M in 2021.

DIFFERENCES FROM L&E'S PRIOR ANALYSIS

Given that any adjustments to the reinsurance payment parameters could have substantial ramifications for a wide range of stakeholders, L&E believes it is important to comment on the differences in the 2021 analysis (current analysis) versus the 2020 analysis (prior analysis).

Key differences between L&E's current analysis and the prior analysis include:

- Enhancement in the premium and APTC calculation
 - L&E received one additional year of data to calibrate premiums for both APTC and non-APTC members.

¹¹ <https://www.usatoday.com/storytelling/coronavirus-reopening-america-map/#>

- L&E was able to use enrollment data delineated by age and income in the APTC calculation. This information was developed and available as part of L&E’s subsidy modeling, but it was not available for the prior reinsurance modeling.
- L&E incorporated the impact of the SEP, particularly enrollment and claims from the COVID-19 pandemic.
- Trend and morbidity
 - L&E used trend and morbidity assumptions that are directionally consistent with the prior analysis (e.g., enrollment changes are the healthy members); however, they were updated based on the 2021 rate filings.

The following table summarizes the differences between projections from the 2020 and the 2021 analyses.

<i>Model</i>	Total Reinsurance Payment		Average Enrollment ¹² with Reinsurance		APTC Enrollment with Reinsurance	
	<i>Year</i> 2020	2021	2020	2021	2020	2021
L&E prior analysis	\$400M	\$426M	193.0k	193.0k	111.4k	112.0k
L&E current analysis	\$378M	\$417M	207.2k	225.0k	127.1k	138.0k

¹² Enrollment shown in this table is the total average enrollment for a year, which is calculated as the total member months divided by 12. Total average enrollment should not to be confused with the total unique enrollment, which is the unique count of those who enrolled in a year (i.e., someone who was enrolled for 1 month out of the year would be included as 1 enrollee in the unique enrollment, whereas they would be counted as 1/12 for the average enrollment).

DAMPENING FACTOR

METHODOLOGIES

The first step in evaluating the 2021 dampening factor was to examine 2019 historical data. L&E collected the External Data Gathering Environment (EDGE) server data from the individual carriers. The EDGE data contains risk scores, diagnosis data, claims data, and premium data.

The assumption-setting process for the dampening analysis was similar to the process for reinsurance analysis described above and included discussions with MIA regarding their review of the current filings. In addition to the historical EDGE data, L&E utilized plan enrollment experience, information provided in the 2021 rate filings, and actual 2020 rate changes by carrier. Premiums were calculated under the expected 2021 scenario with an SRP and the hypothetical scenario in which the SRP did not exist.

L&E assumed slight changes to membership distributions in the market, consistent with the 2020 approved rate decreases and the latest estimates of the 2021 rate changes. As premiums decrease, coverage becomes more attractive to healthy young individuals for whom high-priced coverage may not be economically viable without the SRP. Therefore, L&E has assumed that there will be an increase in low-morbidity members relative to 2019 due to decreasing premium rates.

L&E used the 2021 HHS risk adjustment formula for calculating risk transfer payments based on allowable rating factors and risk scores by member. There are two transfer amounts based on the two premium/enrollment scenarios referenced above. For each member, the contributions from the SRP and the HHS high-cost member program were calculated based on projected 2021 claims. The 2021 reinsurance payment parameters were based on the analysis in the Reinsurance Payment Parameters section of this report.

COMAR 14.35.17.02B11 requires that the dampening factor modify payments such that “the claims-to-premium ratio between payers and receivers under the risk adjustment is normalized.” This language is not entirely clear on how to normalize these ratios.

Last year’s analysis performed by L&E and the MIA used a normalization approach where the population was divided into six cohorts. The first cohort represented members with no paid claims. The last cohort represented members with reinsurance payments, i.e. those with claims over the \$20,000 attachment point. The remaining members were split evenly into four quartiles.

These six cohorts were then collapsed into two populations, intended to serve as a proxy for risk adjustment “payers” and risk adjustment “receivers”. The payer population was made up of the

non-claimants and the first three quartiles, while the receiver population was made up of the fourth quartile and the members with reinsurance payments. An adjusted loss ratio for each cohort was calculated based on the following formula:

Adjusted Loss Ratio

$$= \frac{\text{Claims} - \text{Reinsurance Contributions} - \text{Risk Adjustment Receivables}}{\text{Earned Premium}}$$

The final 2020 dampening factor was calculated in order to ensure that the adjusted loss ratios between the payer and the receiver populations, as defined above, were equal.

In this report, L&E calculates the dampening factor in three (3) ways, representing different interpretations of the statute. These methods, demonstrated in the subsequent sections, are:

- The Claims Cohort method used for 2020.
- The Risk Score Cohort method discussed in the 2020 report, and
- A Hybrid Cohort approach which considers policies grouped by both their risk transfer status and their claims level.

RESULTS – CLAIMS BASED COHORTS

In this approach L&E summarized the risk adjustment transfers, which are calculated at the member level, by grouping the members into six cohorts representing their overall claims level.

The first step in this analysis is based on the hypothetical scenario where the State Reinsurance Program is not in place for 2021. The results have been structured to replicate the reporting of the 2020 analysis:

1) Undampened Risk Adjustment, No Reinsurance

Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
No claims incurred	456,580	\$0	\$240,057,118	(\$167,076,537)	\$0	70%
Claims between 0.01 and 400	525,437	\$10,557,102	\$297,456,953	(\$182,780,367)	\$0	65%
Claims between 400 and 1,200	508,831	\$39,250,686	\$317,178,540	(\$174,989,209)	\$0	68%
Claims between 1,200 and 3,000	464,353	\$91,144,920	\$322,641,607	(\$134,038,047)	\$0	70%
Claims between 3,000 and 20,000	441,633	\$317,420,582	\$340,840,009	\$79,920,122	\$0	70%
Claims >= 20,000	140,702	\$845,239,345	\$118,784,174	\$578,964,039	\$0	224%
Total	2,537,537	\$1,303,612,635	\$1,636,958,401	\$0	\$0	80%
Low Claims (<3000)	1,955,202	\$140,952,708	\$1,177,334,218	(\$658,884,160)	\$0	68%
High Claims (>3000)	582,335	\$1,162,659,927	\$459,624,183	\$658,884,160	\$0	110%

Insurers have a significantly worse loss ratio for subscribers who had claims that qualified for the SRP. This is to be expected, as members with high claims would be expected to have disproportionately higher loss ratios.

The second step in this analysis incorporates the implementation of the SRP parameters. As expected, market wide premiums decrease significantly which proportionally decreases risk adjustment transfers.

2) Undampened Risk Adjustment, With Reinsurance

Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
No claims incurred	456,580	\$0	\$169,651,924	(\$117,267,225)	\$0	69%
Claims between 0.01 and 400	525,437	\$10,557,102	\$208,532,197	(\$128,289,810)	\$0	67%
Claims between 400 and 1,200	508,831	\$39,250,686	\$222,358,015	(\$122,822,038)	\$0	73%
Claims between 1,200 and 3,000	464,353	\$91,144,920	\$226,187,898	(\$94,079,215)	\$0	82%
Claims between 3,000 and 20,000	441,633	\$317,420,582	\$238,945,888	\$56,094,109	\$0	109%
Claims >= 20,000	140,702	\$845,239,345	\$83,273,645	\$406,364,179	\$417,660,839	25%
Total	2,537,537	\$1,303,612,635	\$1,148,949,568	\$0	\$417,660,839	77%
Low Claims (<3000)	1,955,202	\$140,952,708	\$826,730,034	(\$462,458,288)	\$0	73%
High Claims (>3000)	582,335	\$1,162,659,927	\$322,219,533	\$462,458,288	\$417,660,839	88%

L&E notes that the application of the SRP reduces the loss ratio for the highest cohort to a lower value than the loss ratio for the next-highest claims cohort. Additionally, the “low” claimants are expected to have a 73% loss ratio while the “high” claimants have an 88% loss ratio.

To return the loss ratio differential between these groups back to the “No Reinsurance” scenario, a dampening factor of 13.5% would be required. This methodology is summarized below:

3) Risk Adjustment Dampened by 13.5%, With Reinsurance

Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
No claims incurred	456,580	\$0	\$169,651,924	(\$101,409,911)	\$0	60%
Claims between 0.01 and 400	525,437	\$10,557,102	\$208,532,197	(\$110,941,981)	\$0	58%
Claims between 400 and 1,200	508,831	\$39,250,686	\$222,358,015	(\$106,213,581)	\$0	65%
Claims between 1,200 and 3,000	464,353	\$91,144,920	\$226,187,898	(\$81,357,470)	\$0	76%
Claims between 3,000 and 20,000	441,633	\$317,420,582	\$238,945,888	\$48,508,853	\$0	113%
Claims >= 20,000	140,702	\$845,239,345	\$83,273,645	\$351,414,089	\$417,660,839	91%
Total	2,537,537	\$1,303,612,635	\$1,148,949,568	\$0	\$417,660,839	77%
Low Claims (<3000)	1,955,202	\$140,952,708	\$826,730,034	(\$399,922,942)	\$0	65%
High Claims (>3000)	582,335	\$1,162,659,927	\$322,219,533	\$399,922,942	\$417,660,839	107%

L&E believes this approach is compliant with the COMAR 14.35.17 since it “normalizes” the results back to the loss ratio relationship that would have occurred in absence of the SRP. L&E notes that the dampening factor calculated by this method has decreased from last year’s value.

RESULTS – RISK BASED COHORTS

As stated previously, COMAR 14.35.17.02B11 requires that the dampening factor modify payments such that “the claims-to-premium ratio between payers and receivers under the risk adjustment is normalized.” Consistent with the 2020 analysis, this method considers the implications of grouping members by risk score rather than claim level.

The first step in calculating the dampening factor under a risk-based method is to group the data by PLRS cohort (instead of by claims). The first table below assumes that the SRP is not in place.

1) Undampened Risk Adjustment, No Reinsurance

Risk Score Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
RS 0 to 1	2,065,275	336,279,863	1,253,415,963	(\$877,474,647)	\$0	97%
RS 1 to 2	128,144	\$70,786,852	\$99,704,883	(\$19,623,497)	\$0	91%
RS 2 to 3	100,626	\$86,305,106	\$80,679,606	\$30,057,857	\$0	70%
RS 3 to 4	53,617	\$61,805,658	\$42,221,488	\$34,394,550	\$0	65%
RS 4 to 5	24,971	\$36,607,950	\$19,794,036	\$26,132,741	\$0	53%
RS 5+	164,904	\$711,827,206	\$141,142,425	\$806,512,996	\$0	-67%
Total	2,537,537	\$1,303,612,635	\$1,636,958,401	\$0	\$0	80%
RA Payers	2,193,419	407,066,715	\$1,353,120,846	(\$897,098,144)	\$0	96%
RA Receivers	344,118	\$896,545,920	\$283,837,555	\$897,098,144	\$0	0%

The difference in loss ratios between risk adjustment payers (represented by risk scores 0 to 2) and receivers (risk scores 2+) is equal to 96%. That is, this is the loss ratio differential which would exist if the reinsurance program did not exist.

The next step in the risk-based analysis is to layer in the SRP without any dampening adjustments.

2) Undampened Risk Adjustment, With Reinsurance

Category	Members	Total				Loss Ratio
		Claims	Premium	RA	RI	
RS 0 to 1	2,065,275	\$336,279,863	\$879,681,257	(\$615,882,245)	\$24,766,811	105%
RS 1 to 2	128,144	\$70,786,852	\$70,056,971	(\$13,773,642)	\$7,724,582	110%
RS 2 to 3	100,626	\$86,305,106	\$56,628,995	\$21,096,818	\$17,889,504	84%
RS 3 to 4	53,617	\$61,805,658	\$29,659,495	\$24,140,848	\$13,537,588	81%
RS 4 to 5	24,971	\$36,607,950	\$13,890,371	\$18,341,951	\$10,386,101	57%
RS 5+	164,904	\$711,827,206	\$99,032,478	\$566,076,271	\$343,356,253	-200%
Total	2,537,537	\$1,303,612,635	\$1,148,949,568	\$0	\$417,660,839	77%
RA Payers	2,193,419	407,066,715	\$949,738,229	(\$629,655,887)	\$32,491,393	106%
RA Receivers	344,118	\$896,545,920	\$199,211,339	\$629,655,887	\$385,169,446	-59%

The loss ratio of -196% for the highest risk score category demonstrates that carriers would be materially overcompensated for the highest risk subscribers. This clearly demonstrates a material interaction between the risk adjustment program and the SRP. The difference in loss ratios between payers and receivers has grown from approximately 96% to 165%.

To return this loss ratio difference to the targeted, pre-reinsurance 96%, a dampening factor of approximately 17.9% would need to be applied. This is demonstrated below:

3) Risk Adjustment Dampened by 17.9%, With Reinsurance

Category	Members	Total				Loss Ratio
		Claims	Premium	RA	RI	
RS 0 to 1	2,065,275	\$336,279,863	\$879,681,257	(\$505,531,562.14)	\$24,766,811	93%
RS 1 to 2	128,144	\$70,786,852	\$70,056,971	(\$11,305,750.33)	\$7,724,582	106%
RS 2 to 3	100,626	\$86,305,106	\$56,628,995	\$17,316,796.10	\$17,889,504	90%
RS 3 to 4	53,617	\$61,805,658	\$29,659,495	\$19,815,412.30	\$13,537,588	96%
RS 4 to 5	24,971	\$36,607,950	\$13,890,371	\$15,055,532.14	\$10,386,101	80%
RS 5+	164,904	\$711,827,206	\$99,032,478	\$464,649,571.92	\$343,356,253	-97%
Total	2,537,537	\$1,303,612,635	\$1,148,949,568	\$0	\$417,660,839	77%
RA Payers	2,193,419	407,066,715	\$949,738,229	(\$516,837,312)	\$32,491,393	94%
RA Receivers	344,118	\$896,545,920	\$199,211,339	\$516,837,312	\$385,169,446	-3%

RESULTS – HYBRID APPROACH

Per discussions with MIA, L&E has calculated a new approach for estimating an appropriate dampening factor for 2021. In this approach, all members in the individual market are assigned to one of 4 cohorts, based on whether they produced a positive or negative risk transfer, and whether or not they triggered a reinsurance payment for their insurance carrier. These cohorts are described below:

Cohort	Risk Adjustment	Reinsurance Payment
Cohort 1	Payor	No
Cohort 2	Payor	Yes
Cohort 3	Receiver	No
Cohort 4	Receiver	Yes

Otherwise, this methodology follows the same pattern as the other approaches. Results for these cohorts in the “without reinsurance” and “with reinsurance” scenarios are shown below.

1) Undampened Risk Adjustment, No Reinsurance

Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
Cohort 1	2,132,732	\$306,671,814	\$1,328,573,867	(\$896,524,773)	\$0	91%
Cohort 2	23,761	\$86,970,043	\$19,981,738	(\$10,336,813)	\$0	487%
Cohort 3	264,103	\$151,701,476	\$189,600,360	\$317,560,734	\$0	-87%
Cohort 4	116,941	\$758,269,302	\$98,802,436	\$589,300,852	\$0	171%
Total	2,537,537	\$1,303,612,635	\$1,636,958,401	\$0	\$0	80%
Total Payor	2,156,493	\$393,641,857	\$1,348,555,605	(\$906,861,586)	\$0	96%
Total Receiver	381,044	\$909,970,778	\$288,402,796	\$906,861,586	\$0	1%

2) Undampened Risk Adjustment, With Reinsurance

Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
Cohort 1	2,132,732	\$306,671,814	\$931,396,709	(\$629,253,103)	\$0	100%
Cohort 2	23,761	\$86,970,043	\$14,008,198	(\$7,255,234)	\$32,319,438	442%
Cohort 3	264,103	\$151,701,476	\$134,279,213	\$222,888,924	\$0	-53%
Cohort 4	116,941	\$758,269,302	\$69,265,448	\$413,619,413	\$385,341,401	-59%
Total	2,537,537	\$1,303,612,635	\$1,148,949,568	\$0	\$417,660,839	77%
Total Payor	2,156,493	\$393,641,857	\$945,404,907	(\$636,508,337)	\$32,319,438	106%
Total Receiver	381,044	\$909,970,778	\$203,544,661	\$636,508,337	\$385,341,401	-55%

In this methodology, Cohort 1 and Cohort 4 are normalized to have the same loss ratio after the application of the dampening factor. This would require a dampening factor of 24.0%, as shown below.

3) Risk Adjustment Dampened by 24.0%, With Reinsurance

Category	Member Months	Total				Loss Ratio
		Claims	Premium	RA	RI	
Cohort 1	2,132,732	\$306,671,814	\$931,396,709	(\$478,513,835)	\$0	84%
Cohort 2	23,761	\$86,970,043	\$14,008,198	(\$5,517,223)	\$32,319,438	430%
Cohort 3	264,103	\$151,701,476	\$134,279,213	\$169,495,285	\$0	-13%
Cohort 4	116,941	\$758,269,302	\$69,265,448	\$314,535,773	\$385,341,401	84%
Total	2,537,537	\$1,303,612,635	\$1,148,949,568	\$0	\$417,660,839	77%
Total Payor	2,156,493	\$393,641,857	\$945,404,907	(\$484,031,058)	\$32,319,438	89%
Total Receiver	381,044	\$909,970,778	\$203,544,661	\$484,031,058	\$385,341,401	20%

APPENDICES

APPENDIX A: CAVEATS

L&E performed reasonability tests on the data used; however, L&E did not perform a detailed audit of the data. To the extent that the information provided was incomplete or inaccurate, the results in this report may be incomplete or inaccurate.

L&E made several assumptions in performing the analysis. Several of these assumptions are subject to material uncertainty and it is not unexpected that actual results could materially differ from the projections. Examples of uncertainty inherent in the assumptions include, but are not limited to:

- Data Limitations.
 - L&E relied on the data submitted from the insurers for significant portions of this analysis. To the extent that the data is inaccurate, the analysis will be impacted.
- Enrollment Uncertainty.
 - Beyond changes to premiums and market wide programs, consumer responses to these has inherent uncertainty. Therefore, actual enrollment could vary significantly.
- Political and Health Policy Uncertainty.
 - Future federal or state actions could dramatically change premiums and enrollment in 2021.
- Risk Adjustment Transfers.
 - Given historical enrollment changes in the Maryland market, estimates of risk adjustment transfers by cost category is highly uncertain.
- COVID-19 Pandemic
 - Claims data used in modeling is through May 2020 and likely does not reflect the full impact of the COVID-19 global pandemic.

This report has been prepared for the MHBE and the MIA for discussion purposes in relation to the State Reinsurance Program analysis. Any other use may not be appropriate. L&E understands that this report may be distributed to other parties; however, any user of this report must possess a certain level of expertise in actuarial science and/or health insurance so as not to misinterpret the data presented. Any distribution of this report should be made in its entirety. Any third party with access to this report acknowledges, as a condition of receipt, that L&E does not make any representations or warranties as to the accuracy or completeness of the material. Any third party with access to these materials cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.

APPENDIX B: DISCLOSURES

The Actuarial Standards Board (ASB), vested by the U.S.-based actuarial organizations¹³, promulgates Actuarial Standards of Practice (ASOPs) for use by actuaries when providing professional services in the United States.

Each of these organizations requires its members, through its Code of Professional Conduct¹⁴, to observe the ASOPs of the ASB when practicing in the United States. ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in the following.

IDENTIFICATION OF THE RESPONSIBLE ACTUARIES

The responsible actuaries are:

- Josh Hammerquist, FSA, MAAA, Vice President & Principal
- Michael Lin, FSA, MAAA, Vice President & Consulting Actuary
- Dave Dillon, FSA, MAAA, MS, Senior Vice President & Principal
- Kevin Rugeberg, ASA, MAAA, Assistant Vice President & Consulting Actuary

The actuaries are available to provide supplementary information and explanation.

IDENTIFICATION OF ACTUARIAL DOCUMENTS

The date of this document is July 17, 2020. The date (a.k.a. "latest information date") through which data or other information has been considered in performing this analysis is July 1, 2020.

DISCLOSURES IN ACTUARIAL REPORTS

- The contents of this report are intended for the use of the Maryland Health Benefit Exchange and the Maryland Insurance Administration. Any third party with access to this report acknowledges, as a condition of receipt, that they cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.
- Lewis & Ellis Inc. is financially and organizationally independent from the companies that participate in the Maryland individual market. L&E is not aware of anything that would impair or seem to impair the objectivity of the work.
- The purpose of this report is to assist the MHBE and the MIA with an analysis of the 2021 State Reinsurance Program.
- The responsible actuaries identified above are qualified as specified in the Qualification Standards of the American Academy of Actuaries.

¹³ The American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

¹⁴ These organizations adopted identical Codes of Professional Conduct effective January 1, 2001.

- Lewis & Ellis has reviewed the data provided for reasonableness but has not audited it. L&E nor the responsible actuaries assume responsibility for items that may have a material impact on the analysis. To the extent that there are material inaccuracies in, misrepresentations in, or lack of adequate disclosure by the data, the results may be accordingly affected.
- Besides the COVID-19 pandemic, L&E is not aware of other subsequent events that may have a material effect on the findings.

ACTUARIAL FINDINGS

The actuarial findings of the report can be found in the body of this report.

METHODS, PROCEDURES, ASSUMPTIONS, AND DATA

The methods, procedures, assumptions, and data used can be found in the body of this report.

ASSUMPTIONS OR METHODS PRESCRIBED BY LAW

This report was prepared as prescribed by applicable law, statutes, regulations, and other legally binding authority.

RESPONSIBILITY FOR ASSUMPTIONS AND METHODS

The actuaries do not disclaim responsibility for material assumptions or methods.

DEVIATION FROM THE GUIDANCE OF AN ASOP

The actuaries do not believe that material deviations from the guidance set forth in an applicable ASOP have been made.