

Minnesota Comprehensive Health Association

2021 Fourth Quarter Report
Results for The Minnesota Premium Security Plan

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Prepared by:
Wakely Consulting Group

Tyson Reed, FSA, MAAA
Consulting Actuary

Sara Hemmingson, FSA, FCAS, MAAA
Consulting Actuary

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Introduction

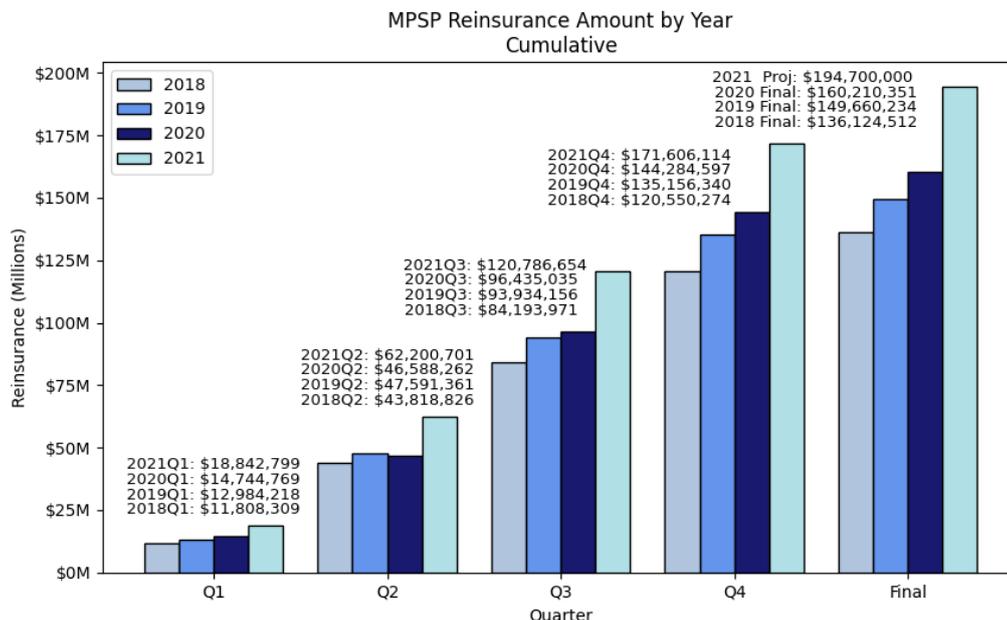
The Minnesota Comprehensive Health Association (MCHA) retained Wakely Consulting Group, LLC (Wakely) to collect data related to the Minnesota state-based reinsurance program (referred to as the Minnesota Premium Security Plan (MPSP)), review the data for reasonability, calculate the reinsurance payments to the issuers participating in the program, and provide summary reports for MCHA to distribute as appropriate to stakeholders.

This document has been prepared for the use of MCHA and its Board of Directors. Wakely understands that this report will be made public and distributed to stakeholders beyond MCHA and its Board of Directors due to Minnesota Statutes §62E.24. Wakely does not intend to benefit third parties and assumes no duty or liability to other parties who receive this work. The report should be reviewed in its entirety. This document contains the data, assumptions, and methods used in these analyses and satisfies the Actuarial Standard of Practice (ASOP) 41 reporting requirements.

Executive Summary

The estimated reinsurance for 2021 benefit year under the MPSP is \$194.7 million which is approximately 21.5% higher than the final 2020 benefit year reinsurance. This estimate is based on claims incurred and paid through December 2021 and has been adjusted for claims yet to be reported and adjudicated. The final 2021 benefit year reinsurance will be calculated in compliance with Minnesota Statute §62E.23 and will use the CMS EDGE Server data reported by Minnesota issuers through April 2022.

The final 2021 reinsurance amount may vary, potentially significantly, from estimated reinsurance amounts included in this report due to uncertainty in the assumptions used to develop this estimate. The biggest difference between the data underlying this projection and the CMS EDGE Server dataset is claims runout. A detailed discussion of the development of the estimated reinsurance is included in the Methodology section of this report.



Reported reinsurance for benefit year 2021 using claims submitted and paid through December 2021 total approximately \$171.6 million for 3,474 distinct enrollees. The data underlying this analysis was provided by Minnesota issuers eligible for reinsurance under MPSP. The figure on the previous page shows the reinsurance included in the 2018 through 2021 quarterly reports.

The total year-to-date reinsurance amount in the 2021Q4 quarterly report is approximately 18.9% higher than the reinsurance in the 2020Q4 quarterly report. Note that 2020Q4 to 2021Q4 comparisons are impacted by the COVID-19 pandemic, a special enrollment period beginning in February 2021, and other changes as a result of the American Recovery Act which was signed into law March 11th, 2021. For additional information, please see the [2021 Considerations](#) section of this report.

Table 1 provides enrollment and reinsurance information underlying the final and fourth quarterly reports between 2018 and 2021. The 2020Q4 to 2021Q4 increase is higher than previous years due to the overall market size increase and the decrease in medical utilization during 2020 as a result of COVID-19. When comparing 2019Q4 to 2021Q4, there is a 12.7% average annual trend.

Table 1: Reported Reinsurance Amounts and Enrollee Counts

Report	Distinct RI Enrollees	RI Enrollee YOY % Change	Reported Reinsurance	Reinsurance YOY % Change
2021CY Projected	3,851	17.4%	\$194,700,000	21.5%
2020CY Final	3,279	3.0%	\$160,210,351	7.0%
2019CY Final	3,183	8.8%	\$149,660,234	9.9%
2018CY Final	2,925	-	\$136,124,512	-
2021Q4 Report	3,474	15.1%	\$171,606,114	18.9%
2020Q4 Report	3,019	2.9%	\$144,284,597	6.8%
2019Q4 Report	2,934	10.3%	\$135,156,340	12.1%
2018Q4 Report	2,660	-	\$120,550,274	-

The remainder of this report provides a description of the projection methodology, reinsurance by reporting variables analyses, miscellaneous discussions, and associated caveats and disclosures.

Projection Methodology

Issuers participating in Minnesota’s non-grandfathered individual commercial market provided Wakely with January through December 2021 claim experience with paid dates through December 2021. The data request included both enrollment and claim experience at the issuer level. The data request also included enrollee-level data for Minnesotans enrolled in the individual market that issuers identified with claims above the attachment point of \$50,000. Wakely aggregated these templates and calculated reinsurance payments using the reinsurance parameters shown in the figure to the right. Wakely validated this amount against the issuer calculations.

Claim Range ^[1]		Liability
\$0	\$50,000	Plan Pays: 100%
\$50,001	\$250,000	Plan Pays: 20% MPSP Pays: 80%
\$250,001	\$250,001	Plan Pays ^[2] : 100%

[1] - Claim Range Excludes Member Cost Sharing

[2] - Excludes Impact of High-Cost Risk Pool

To assist with the final benefit year 2021 reinsurance projection, issuers provided supplemental data not included in previous quarterly reports that allowed Wakely to analyze the timing difference between when claims are incurred and when claims are paid. Historical experience was reported separately for the three following cohorts of individuals:

1. Cohort One - Enrollees with incurred claims that exceeded the attachment point but not the reinsurance cap with claims paid through December. Enrollees in this cohort for benefit year 2021 will have claims that are adjudicated and paid in 2022. These claims will be partially reimbursed by MPSP for benefit year 2021.
2. Cohort Two - Enrollees with claims that exceeded the reinsurance cap with claims paid through December. For benefit year 2021, enrollees in this cohort will have claims that are adjudicated and paid in 2022. These additional claims are not partially reimbursed by MPSP since the enrollee has exceeded the reinsurance cap.
3. Cohort Three - Enrollees with claims that did not exceed the attachment point with claims paid through December, but did exceed the attachment point with claims paid in the following year. Enrollees in this cohort for benefit year 2021 will have claims that are adjudicated and paid in 2022 that are partially reimbursed by MPSP.

For the 2021 projection, issuers provided Wakely with a refresh of 2019 and 2020 reporting data. Wakely assumed the 2015 through 2018 experience from previous data requests was complete and would not change with additional claim adjudication.

Wakely was able to categorize each enrollee in the underlying 2021Q4 enrollee-level file as either Cohort One or Cohort Two. Given the underlying nature of claim data, issuers and Wakely are not able to identify enrollees that should be classified as Cohort Three. For example, an individual may be discharged from a hospital in late December which causes the enrollee to exceed the attachment point, but the claim will not be fully adjudicated until February of 2022. This enrollee will be eligible for reinsurance because the February adjudication of the claim will occur before the EDGE Server submission cutoff date in April, but the enrollee will not be in the enrollee-level data submitted by the issuer because the claim was adjudicated after December.

Wakely estimated final reinsurance by issuer for each cohort separately using the following methods:

1. Cohort One - Wakely used historical experience to estimate completion factors to account for incurred 2021 claims that will be paid in 2022.
2. Cohort Two - Wakely did not adjust reinsurance for Cohort Two since any additional claims that are paid for these individuals in 2022 are not partially reimbursed by MPSP.
3. Cohort Three - Wakely estimated the average reinsurance per enrollee using historical experience. Wakely estimated the number of individuals using historical enrollee distributions relative to Cohort One and Cohort Two.

Table 2 on the next page provides the estimate of the statewide reinsurance per enrollee broken out by the cohorts described above.

Table 2: Development of Estimated Reinsurance Per Enrollee by Cohort

	Reinsurance Per Enrollee Thru December	Completion Factor	Additive Adj	2020 Estimated Reinsurance Per Enrollee
Cohort	(A)	(B)	(C)	(D)
Cohort One	\$38,369	1.112	\$0	\$42,663
Cohort Two	\$160,000	1.000	\$0	\$160,000
Cohort Three	\$0	1.000	\$25,184	\$25,184

The formula used to calculate 2021 estimated reinsurance per enrollee is:

$$(D) = (A) \times (B) + (C).$$

Table 3 shows the calculation of the aggregate reinsurance shown in Table 1.

Table 3: Development of Aggregate 2021 Reinsurance Estimate

	Estimated Enrollees	2020 Estimated Reinsurance Per Enrollee	Aggregate Estimated Reinsurance
Cohort One	3,159	\$42,663	\$134,772,857
Cohort Two	315	\$160,000	\$50,400,000
Cohort Three	377	\$25,184	\$9,494,366
Total Enrollees	3,851	\$50,550	\$194,667,223

Please note the following about Table 2 and Table 3:

1. Wakely assumed that Cohort One reinsurance per enrollee will increase by a factor of 1.112. Historically, Cohort One's completion has been between 1.108 and 1.146.
2. Wakely assumed 9.8% ($\approx \frac{377}{3,851}$) of the reinsurance eligible enrollees will be in Cohort Three. Historically, Cohort Three has been between 8.7% and 11.3% of the total reinsurance eligible population.
3. Wakely assumed that the reinsurance per enrollee in Cohort Three is \$25,184. This was based on the average 2018 through 2020 reinsurance for Cohort Three increased by 5% to account for trend.
4. In total, Wakely estimates that reported reinsurance will increase by a factor of 1.1344 ($\approx \frac{\$194,667,223}{\$171,606,114}$) between the December enrollee-level file and the final reinsurance calculation. Historically, the total completion rate has been reported between 1.115 and 1.169.
5. In the Executive Summary, the total aggregate reinsurance is rounded to the nearest \$100,000.

Appendix E shows historical experience used to develop assumptions used for projection. The overall estimated 2021 completion rate (1.134) is lower than the completion rate used for preliminary 2018, 2019, and 2020 reinsurance estimates (1.152, 1.159, and 1.149 respectively). Wakely's methodology selected lower factors given that completion factors have been decreasing since 2018.

Reported Reinsurance Analysis

This section provides additional detail for the 2021Q4 reinsurance amount shown in Table 1. The distribution total in the following tables may not add to 100% due to rounding. The 2018, 2019, and 2020 distributions are shown next to the 2021Q4 distribution for reference.

The enrollee-level data supplied by issuers accounted for movement between HIOS plan identifiers. For example, under certain circumstances, an enrollee might have been enrolled in both a silver and gold plan for a portion of the benefit year. This transferring does not impact results when reporting at an issuer level; however, when reporting at a more granular level (e.g. metal), reported results may change depending on the allocation method. For this report, Wakely allocated reinsurance estimates for enrollees transferring between cohorts based on incurred claims within that time period. For example if 75% of an enrollee’s claims occurred in a silver plan and 25% occurred in a gold plan, then 75% of the reinsurance for the individual was allocated to the silver plan and 25% to the gold plan.

New Market Entrant

Starting January 1st, 2021, Quartz entered the individual market in five southeastern counties. Prior 2021 quarterly reporting includes Quartz; however, the 2018 through 2020 reports do not. The entrant of a new issuer likely has minimal impact on aggregate reinsurance payments since these enrollees would have likely been enrolled with another issuer if Quartz did not enter the market.

Reinsurance by First Quarter in Report

The table below shows the enrollee count and estimated reinsurance by the quarter an enrollee first became eligible for reinsurance in 2021. For example, if an individual is in the 2021Q2 data template but not the 2021Q1 data template, then he or she is included in the 2021Q2 line. This table illustrates how much of the increase in reinsurance between quarterly reports is attributed to individuals first exceeding the attachment point and individuals that first appeared in prior quarters incurring additional claims.

Table 4: Reinsurance Amount by Enrollee’s First 2021 Report

Cohort	Enrollees	Reinsurance by Quarter				
		2021Q1	2021Q2	2021Q3	2021Q4	2021 YTD
2021Q1	556	\$18,842,799	\$17,191,899	\$11,177,626	\$4,068,075	\$51,280,398
2021Q2	873	n/a	\$26,166,003	\$21,703,891	\$12,087,869	\$59,957,763
2021Q3	1,033	n/a	n/a	\$25,704,436	\$15,596,122	\$41,300,558
2021Q4	1,012	n/a	n/a	n/a	\$19,067,394	\$19,067,394
Total	3,474	\$18,842,799	\$43,357,902	\$58,585,953	\$50,819,460	\$171,606,114

1. Reinsurance amounts increased by approximately \$50.8 million between the 2021Q3 and 2021Q4 reports. The increase between the 2020Q3 and 2020Q4 reports was approximately \$47.8 million.
2. There were a total of 1,012 new reinsurance eligible enrollees in the 2021Q4 report with approximately \$19.1 million in reinsurance. During the 2020Q4 report, these values were 916 and \$17.5 million.

Reinsurance by Area

The table in this section shows the amount of reinsurance for each of Minnesota’s nine rating regions. A list of counties in each rating area can be found on either the [Minnesota Department of Commerce](#)

website or the [CMS](#) website.

Table 5: Reinsurance Amount by Area

Rate Region	2021Q4 Reinsurance	2021Q4 Dist'n	2020 Dist'n	2019 Dist'n	2018 Dist'n
Rating Area 1	\$18,906,627	11%	11%	12%	10%
Rating Area 2	\$9,510,750	6%	6%	6%	6%
Rating Area 3	\$11,955,486	7%	7%	7%	6%
Rating Area 4	\$5,280,691	3%	2%	3%	3%
Rating Area 5	\$8,619,587	5%	4%	4%	5%
Rating Area 6	\$6,095,878	4%	5%	4%	4%
Rating Area 7	\$14,220,358	8%	7%	9%	7%
Rating Area 8	\$95,201,849	55%	57%	54%	55%
Rating Area 9	\$1,814,888	1%	1%	1%	2%
Statewide	\$171,606,114	100%	100%	100%	100%

Reinsurance by Metal Level

The table in this section provides the reinsurance and distribution by metal tier. There are four different metal tiers in the individual market which reflect different levels of cost sharing an enrollee is expected to pay. The leanest is the bronze plan where an enrollee can expect to pay for about 40% of his or her total medical costs out of pocket in the form of cost sharing such as deductibles, coinsurance, and copays. The richest plan type is the platinum tier where an enrollee can expect to pay approximately 10% of total costs out of pocket. There is a fifth tier called Catastrophic with enrollment limited to enrollees who are eligible for a hardship exemption or are under the age of 30.

Due to the cost sharing levels of the different metal types, the distribution may shift between metal levels as 2021 completes.

Table 6: Reinsurance Amount by Metal Tier

Metal Tier	2021Q4 Reinsurance	2021Q4 Dist'n	2020 Dist'n	2019 Dist'n	2018 Dist'n
Catastrophic	\$505,605	0%	1%	0%	0%
Bronze	\$83,042,348	48%	45%	44%	48%
Silver	\$44,299,469	26%	29%	29%	29%
Gold	\$42,998,301	25%	25%	26%	22%
Platinum	\$760,390	0%	1%	1%	1%
Total	\$171,606,114	100%	100%	100%	100%

Reinsurance by Exchange Status

This section provides the reinsurance based on whether the enrollee purchased coverage through Minnesota's Exchange, MNSure, or directly through the issuer. The distribution may change relative to prior reports due to increased subsidies from the American Rescue Plan being available on the Exchange.

Table 7: Reinsurance Amount by Exchange Status

Exchange Status	2021Q4 Reinsurance	2021Q4 Dist'n	2020 Dist'n	2019 Dist'n	2018 Dist'n
On-Exchange	\$115,138,145	67%	69%	69%	68%
Off-Exchange	\$56,467,969	33%	31%	31%	32%
Total	\$171,606,114	100%	100%	100%	100%

Reinsurance by Plan Type

This section provides reinsurance amounts by plan type. In the Affordable Care Act, some individuals and families qualify for cost-sharing reduction subsidies (CSR) which lower out-of-pocket costs. There are several different levels of CSRs. The first is 73% which reduces the individual's out-of-pocket cost to approximately 27% (= 1 - 73%) of total medical costs. There are CSR plans available at the 87% and 94% level as well. CSR plans are only available on the Exchange. Finally, there are limited cost-sharing and zero cost-sharing plans for American Indians and Alaska Natives.

Table 8: Reinsurance Amount by Plan Type

Plan Type	2021Q4 Reinsurance	2021Q4 Dist'n	2020 Dist'n	2019 Dist'n	2018 Dist'n
Standard	\$157,422,579	92%	90%	90%	91%
Zero Cost Sharing	\$364,218	0%	0%	0%	0%
Limited Cost Sharing	\$730,145	0%	0%	0%	0%
73% CSR	\$11,163,672	7%	9%	9%	9%
94% CSR	\$1,925,500	1%	0%	0%	0%
Total	\$171,606,114	100%	100%	100%	100%

Reinsurance by Claim Spend

Please see [Appendix A](#) for reinsurance by claim spend level.

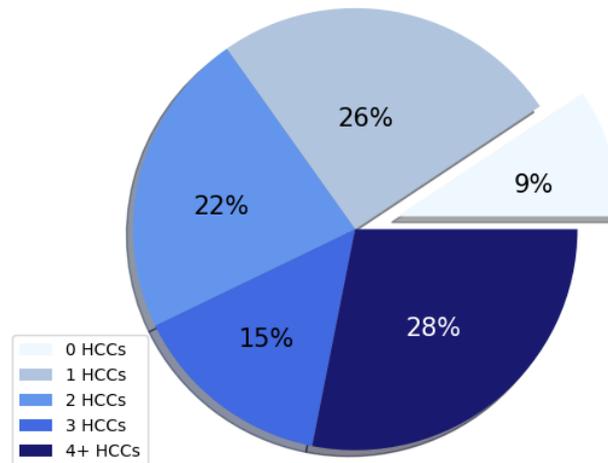
Distribution of HCC Count

Minnesota issuers provided hierarchical condition categories (HCC) data by individual as part of the data submission to Wakely. HCCs are used by CMS as part of the risk adjustment process that transfers money in the individual market from issuers that enrolled a healthier population to issuers that enrolled a sicker population. An individual is assigned to an HCC based on his or her medical diagnostic history during the benefit year. For example, if an enrollee fractures his or her hip in an accident, the doctor would code the medical claim with a hip fracture diagnosis code. That diagnosis code then identifies that individual in the *Hip Fractures and Pathological Vertebral or Humerus Fractures* condition category (HCC226).

There are diagnosis codes that do not map to an HCC. As a result, even though an individual may have a claim, he or she may not be assigned to an HCC. Enrollees can have more than one HCC in a year. Typically, the more HCCs an individual has, the sicker and more costly he or she is. As a general rule of thumb, approximately 20% of the individual market population is assigned to an HCC. In other words, 80% of the general individual population does not have an HCC. In comparison, only 9% of the reinsurance population does not have an HCC and 90% have at least one HCC. These enrollees may have experienced a traumatic accident with a diagnosis code that is not used in the HCC model.

2021Q4 Distribution of HCC Count

The HCC model is hierarchical and similar conditions are grouped together. For example, diabetes has three HCCs: Diabetes with Acute Complications (HCC019), Diabetes with Chronic Complications (HCC020), and Diabetes without Complication (HCC021). An enrollee with a diagnosis code in both HCC019 and HCC021 would be only classified as HCC019 to avoid double counting. Finally, all diabetic HCCs are grouped together in the Diabetic Group (G01). Similar hierarchies and groupings exist for other conditions.



The chart on the right shows the distribution of HCCs for the statewide reinsurance population. HCC counts and risk scores are dependent on how long an individual is enrolled during the year. An individual with 12 months of enrollment typically has more conditions identified than an individual with 6 months of enrollment. As such, the distribution shown in this report may change in the final report with additional 2021 incurred claims being adjudicated in 2022. The table below provides the final HCC count distribution by reinsurance year.

Table 9: HCC Distribution by Year

HCC Count	2021Q4	2020	2019	2018
0 HCCs	9%	10%	9%	7%
1 HCC	26%	28%	29%	27%
2 HCCs	22%	21%	22%	23%
3 HCCs	15%	14%	13%	14%
4+ HCCs	28%	27%	27%	29%

Appendix B gives the list of the most prevalent HCCs and groupings during benefit year 2021 for enrollees eligible for reinsurance. The most common HCCs during 2020 are included for reference and are labeled *2020BY*.

Reinsurance by Product

Appendix C gives the amount of reinsurance and number of claimants that exceeded \$50,000 in claims by product and Exchange status. To define product, Wakely used the first ten digits of the HIOS plan identifier and requested that issuers provide a product name associated with the product identifier. For the column labeled *Claimants*, an enrollee may be double counted if he or she transferred between products during the experience period. As a result, the claimant count in Appendix C may not match the enrollee count in Table 1. The column labeled *Claimants* shows "*<100*" for product and Exchange-status combinations with less than 100 claimants for protected health information (PHI) reasons. Multiple issuers updated the on- and off-Exchange mapping in the data they provided to Wakely between the 2019Q2 and 2019Q3 reports. As a result, the values shown in Appendix C for the 2021Q3 report are not directly comparable to the values in reports prior to 2019Q2.

2021 Considerations

This section discusses changes occurring during 2020 and 2021 that impact aggregate reinsurance payments and trends.

1. **2020 Utilization Decrease** - The results for MPSP during 2020 are consistent with the nationwide utilization decrease since many individuals deferred or canceled medical care to avoid public settings and health care providers followed state-issued orders for non-essential care. Overall, this utilization decrease dampened 2020 reinsurance relative to a scenario with no pandemic. As a result, the reported change between 2020 and 2021 is especially pronounced.
2. **COVID-19 Impacts - Deferral of Care / Pent-Up Demand** - Minnesotans likely deferred medical care from 2020 into 2021 due to COVID-19. For certain individuals, this could potentially shift reinsurance that would have been paid during 2020 to benefit year 2021.
3. **2021 Special Enrollment Period (SEP)** - MNSure opened a SEP starting February 16th, 2021 similar to the federally-facilitated Marketplace. The intent of the SEP was to provide access to health coverage during the pandemic. In Minnesota, the SEP ran through July 16th. The SEP likely increased the overall market size, and as a result, the aggregate reinsurance payments for 2021.
4. **2020 Special Enrollment Period** - Similar to above, MNSure opened a SEP during 2020 which caused the overall market size to increase relative to 2019. Since reinsurance for high-cost inpatient admissions is based on discharge date, it's likely that there were more inpatient admissions that started in 2020 and ended in 2021 than there were that started in 2019 and ended in 2020. This could cause the 2020 to 2021 reinsurance trend to be higher than the 2019 to 2020 reinsurance trend all-else-equal.
5. **American Rescue Plan** - The American Rescue Plan temporarily increased the amount of premium tax credits available to enrollees and increased the eligibility for premium tax credits. This has the potential to increase enrollment in the individual market and aggregate reinsurance payments for 2021.

Hush / Crush Trends

The 2020 to 2021 reinsurance trend will appear higher than usual as Minnesota transitions through the pandemic and medical care returns to normal levels. This is referred to as the *Hush and Crush* effect. The *hush* in the context of MPSP is the decreased utilization caused by the pandemic. The *crush* is caused by the excess increase above regular increases necessary to return to normal. This example is for illustrative purposes only and assumes that 2020Q3 reinsurance increased above the 2019Q3 reinsurance at the same rate that reinsurance increased between 2018Q3 and 2019Q3.

1. Between 2018Q4 and 2019Q4, reinsurance increased approximately 12.1% (Table 1).
2. Between 2019Q4 and 2020Q4, reinsurance increased approximately 6.8% (Table 1).
3. Between 2019Q4 and 2021Q4, reinsurance increased approximately 18.9% (Table 1, $\approx \frac{\$171.6M}{\$144.2M} - 1$)

Table 10: Example Reinsurance

Description	Example Reinsurance	Formula
2019Q4	\$100.00	Example Reinsurance
2020Q4 with Pandemic	\$106.80	$\$100 \times (1 + 6.8\%)$
Example 2020Q4 without Pandemic	\$112.10	$\$100 \times (1 + 12.1\%)$
2021Q4	\$118.90	$\$100 \times (1 + 18.9\%)$

Table 11: Example Trend Calculation

Description	% Change	Formula
2020Q4 with Pandemic → 2021Q4	11.3%	$\frac{\$118.9}{\$106.80} - 1$
Example 2020Q4 without Pandemic → 2021Q4	6.1%	$\frac{\$118.90}{\$106.8} - 1$

The selection of which trend to use to calculate the scenario without a pandemic is subjective and different actuaries can use different assumptions. As such, any takeaways from this example should be interpreted carefully.

One way to remove subjectivity is to measure the annual trend between 2019 and 2021. The two-year change between 2019Q4 and 2021Q4 was 27.0%. On an annual basis, this equates to 12.7% per year ($\approx 1.270^{1/2} - 1$). A portion of this increase is caused by changes to the overall size of the individual market.

Deductible Leveraging

In a reinsurance setting, trends for a reinsurer can be higher than the overall cost trend of the reinsured entity due to deductible leveraging. Deductible leveraging occurs when the underlying claim costs for the insurer increases at a rate higher than the increase in the deductible. In context of MPSP, the words attachment point and deductible are synonymous. The example below shows the calculation of liability for an insurance company that has an enrollee with \$55,000 in total claims using MPSP’s \$50,000 attachment point and 20% coinsurance. This example is for illustrative purposes only and does not represent an analysis of the impact of deductible leveraging for MPSP.

Table 12: Deductible Leveraging Example

Description	Amount	Formula	Payer
Deductible	\$50,000	$\min\{\$55,000, \$50,000\}$	Issuer
Coinsurance	\$1,000	$(\$55,000 - \$50,000) \times 20\%$	Issuer
Reinsurance	\$4,000	$(\$55,000 - \$50,000) \times 80\%$	Reinsurer

If the claim increases by 1% because of regular cost trends, then the cost of the claim is now \$55,550 ($= \$55,000 \times 1.01$), but the cost to the reinsurer increases by approximately 11.0% ($= \frac{\$4,440}{\$4,000} - 1$). This is shown in the next table.

Table 13: Deductible Leveraging Example – Trended

Description	Amount	Formula	Payer
Deductible	\$50,000	$\min\{\$55,550, \$50,000\}$	Issuer
Coinsurance	\$1,110	$(\$55,550 - \$50,000) \times 20\%$	Issuer
Reinsurance	\$4,440	$(\$55,550 - \$50,000) \times 80\%$	Reinsurer

The impact of deductible leveraging is minimally off-set by a reinsurance cap since the reinsurer is no longer liable for additional costs exceeding the reinsurance cap. Deductible leveraging can impact both

the number of enrollees eligible for reinsurance and the average cost of reinsurance per reinsurance eligible enrollee. The overall deductible leveraging trend depends both on the proportion of claims for enrollees exceeding the attachment point and the total change in costs for enrollees exceeding the attachment point.

Data Review

Wakely compared the portion of enrollees with claims above the attachment point underlying the issuer submitted templates against the claim continuance table located in the actuarial report in Minnesota's 1332 Waiver. In the comparison, the actual portion of enrollees with claims above the attachment point was lower than the portion of enrollees with claims above the attachment point. This is likely caused by the underlying issuer data being based on a partial year of experience with limited claim runout. For example, the enrollee-level dataset excludes enrollees that will exceed the attachment point because of claims that are incurred between July and December 2021.

State Mandated Benefits

Wakely did not adjust the reinsurance calculation methodology for state mandated benefits at the direction of MCHA. Wakely's understanding is that issuers and Minnesota Department of Commerce (DoC) will make the appropriate adjustments when issuers submit data to DoC for reimbursement.

Disclosures and Limitations

Responsible Actuary. I, Tyson Reed, am responsible for this communication. I am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to issue this report.

Intended Users. This information has been prepared for the use of the management of MCHA. Wakely understands that the report will be made public and distributed to other stakeholders. Distribution to such parties should be made and evaluated in its entirety. The parties receiving this report should retain their own actuarial experts in interpreting results.

Risks and Uncertainties. The assumptions and resulting estimates included in this report and produced by the modeling are inherently uncertain. Users of the results should be qualified to use it and understand the results and the inherent uncertainty. Actual results may vary, potentially materially, from Wakely's estimates. Wakely does not warrant or guarantee that Minnesota issuers will attain the estimated values included in the report. It is the responsibility of those receiving this output to review the assumptions carefully and notify Wakely of any potential concerns.

Conflict of Interest. I am financially independent and free from conflict concerning all matters related to performing the actuarial services underlying these analyses. In addition, Wakely is organizationally and financially independent of MCHA.

Data and Reliance. I have relied on others for data and assumptions used in the assignment. I have reviewed the data for reasonableness, but I have not performed any independent audit or otherwise verified the accuracy of the data / information. If the underlying information is incomplete or inaccurate, my estimates and calculations may be impacted, potentially significantly. The information

included in the other sections identifies the key data and assumptions.

Subsequent Events. Material changes in state or federal laws regarding health benefit plans and other externalities such as the on-going COVID pandemic may have a material impact on the results included in this report. I am not aware of any additional subsequent events that would impact the results of this analysis.

Contents of Actuarial Report. This document constitutes the entirety of the actuarial report.

Deviations from ASOPs. Wakely completed the analyses using sound actuarial practice. To the best of my knowledge, the report and methods used in the analyses are in compliance with the appropriate ASOPs with no known deviations. A summary of ASOP compliance is listed below:

- ASOP No. 1, Introductory Actuarial Standard of Practice
- ASOP No. 23, Data Quality
- ASOP No. 41, Actuarial Communication
- ASOP No. 56, Modeling

Signed,



Tyson Reed, FSA, MAAA
Consulting Actuary
612.800.6545 | Tyson.Reed@wakely.com

Appendix A - Reinsurance Amount by Claim Spend Level

2021Q4 Reinsurance Amount by Claim Spend Level

Incurred Claims		Enrollee Count	Average Incurred Claims Per Enrollee	Average Reinsurance Per Enrollee	Aggregate Reinsurance
Low Range	High Range				
\$50,000	\$52,508	203	\$51,168	\$934	\$189,698
\$52,508	\$58,498	356	\$55,238	\$4,190	\$1,491,720
\$58,498	\$119,795	1,793	\$80,821	\$24,656	\$44,208,947
\$119,795	\$200,000	640	\$152,620	\$82,096	\$52,541,599
\$200,000	\$9,999,999	482	\$356,649	\$151,814	\$73,174,151
Total		3,474	\$127,963	\$49,397	\$171,606,114

2020 Final Reinsurance Amount by Claim Spend Level

Incurred Claims		Enrollee Count	Average Incurred Claims Per Enrollee	Average Reinsurance Per Enrollee	Aggregate Reinsurance
Low Range	High Range				
\$50,000	\$52,508	155	\$51,198	\$958	\$148,534
\$52,508	\$58,498	354	\$55,457	\$4,365	\$1,545,383
\$58,498	\$119,795	1,761	\$80,824	\$24,659	\$43,424,822
\$119,795	\$200,000	557	\$153,704	\$82,963	\$46,210,511
\$200,000	\$9,999,999	452	\$349,424	\$152,392	\$68,881,102
Total		3,279	\$126,091	\$48,860	\$160,210,351

Notes:

1. Average Reinsurance Per Enrollee = $\min\{(\text{Average Incurred Claims} - \$50,000) \times 80\%, \$160,000\}$.
2. The claim intervals originate from the 1332 Waiver Application.
3. The 2021Q4 distribution is expected to change as 2021 completes.

Appendix A (Cont.) - Reinsurance Amount by Claim Spend Level

2019 Final Reinsurance Amount by Claim Spend Level

Incurred Claims		Enrollee Count	Average Incurred Claims Per Enrollee	Average Reinsurance Per Enrollee	Aggregate Reinsurance
Low Range	High Range				
\$50,000	\$52,508	177	\$51,219	\$975	\$172,613
\$52,508	\$58,498	389	\$55,448	\$4,358	\$1,695,271
\$58,498	\$119,795	1,678	\$80,984	\$24,787	\$41,592,460
\$119,795	\$200,000	527	\$152,994	\$82,395	\$43,422,371
\$200,000	\$9,999,999	412	\$374,574	\$152,373	\$62,777,520
Total		3,183	\$126,132	\$47,019	\$149,660,234

2018 Final Reinsurance Amount by Claim Spend Level

Incurred Claims		Enrollee Count	Average Incurred Claims Per Enrollee	Average Reinsurance Per Enrollee	Aggregate Reinsurance
Low Range	High Range				
\$50,000	\$52,508	173	\$51,263	\$1,010	\$174,801
\$52,508	\$58,498	359	\$55,413	\$4,330	\$1,554,606
\$58,498	\$119,795	1,513	\$81,257	\$25,005	\$37,833,247
\$119,795	\$200,000	522	\$150,761	\$80,609	\$42,077,922
\$200,000	\$9,999,999	358	\$360,572	\$152,190	\$54,483,936
Total		2,925	\$122,901	\$46,538	\$136,124,512

Notes:

1. Average Reinsurance Per Enrollee = $\min\{(\text{Average Incurred Claims} - \$50,000) \times 80\%, \$160,000\}$.
2. The claim intervals originate from the 1332 Waiver Application.

Appendix B - 2021Q4 Enrollee Count by HCC

Limited to HCCs with at least 100 Enrollees

Rank	HCC	HCC Description	Enrollee Count ¹	% of Reinsurance Eligible Enrollees
1	G01	Diabetes	640	18%
2	HCC142	Specified Heart Arrhythmias	486	14%
3	HCC008	Metastatic Cancer	483	14%
4	HCC130	Heart Failure	451	13%
5	G13	Respiratory Arrest; Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes	419	12%
6	HCC056	Rheumatoid Arthritis and Specified Autoimmune Disorders	415	12%
7	HCC002	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	355	10%
8	HCC023	Protein-Calorie Malnutrition	316	9%
9	G15A	Chronic Obstructive Pulmonary Disease, Including Bronchiectasis; Severe Asthma; Asthma, Except Severe	287	8%
10	HCC075	Coagulation Defects and Other Specified Hematological Disorders	278	8%
11	G08	Disorders of the Immune Mechanism	269	8%
12	HCC048	Inflammatory Bowel Disease	244	7%
13	HCC156	Pulmonary Embolism and Deep Vein Thrombosis	234	7%
14	HCC009	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia	231	7%
15	G02A	Mucopolysaccharidosis; Metabolic Disorders; Endocrine Disorders	224	6%
16	HCC012	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors	194	6%
17	HCC131	Acute Myocardial Infarction	187	5%
18	HCC120	Seizure Disorders and Convulsions	183	5%
19	HCC115	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy	173	5%

1. An enrollee may have multiple HCCs and could be double counted if combining enrollee counts between HCCs.

Appendix B (Cont.) - 2021Q4 Enrollee Count by HCC

Limited to HCCs with at least 100 Enrollees

Rank	HCC	HCC Description	Enrollee Count ¹	% of Reinsurance Eligible Enrollees
20	HCC253	Artificial Openings for Feeding or Elimination	170	5%
21	G15	Asthma; Chronic Obstructive Pulmonary Disease, Including Bronchiectasis	166	5%
22	HCC045	Intestinal Obstruction	135	4%
23	HCC118	Multiple Sclerosis	130	4%
24	HCC088	Major Depressive and Bipolar Disorders	128	4%
25	HCC163	Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections	122	4%
26	HCC135	Heart Infection/Inflammation, Except Rheumatic	108	3%
27	HCC125	Respirator Dependence/Tracheostomy Status	107	3%
28	HCC010	Non-Hodgkin's Lymphomas and Other Cancers and Tumors	102	3%
29	HCC006	Opportunistic Infections	100	3%

1. An enrollee may have multiple HCCs and could be double counted if combining enrollee counts between HCCs.

Appendix B (Cont.) - 2020BY Enrollee Count by HCC

Limited to HCCs with at least 100 Enrollees

Rank	HCC	HCC Description	Enrollee Count ¹	% of Reinsurance Eligible Enrollees
1	G01	Diabetes	597	18%
2	G15	Asthma; Chronic Obstructive Pulmonary Disease, Including Bronchiectasis	521	16%
3	HCC056	Rheumatoid Arthritis and Specified Autoimmune Disorders	456	14%
4	HCC008	Metastatic Cancer	437	13%
5	HCC142	Specified Heart Arrhythmias	435	13%
6	HCC130	Congestive Heart Failure	393	12%
7	G13	Respiratory Arrest; Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes	357	11%
8	HCC002	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	341	10%
9	HCC023	Protein-Calorie Malnutrition	263	8%
10	HCC048	Inflammatory Bowel Disease	245	7%
11	HCC156	Pulmonary Embolism and Deep Vein Thrombosis	227	7%
12	HCC075	Coagulation Defects and Other Specified Hematological Disorders	225	7%
13	G02A	Mucopolysaccharidosis; Metabolic Disorders; Endocrine Disorders	192	6%
14	G08	Disorders of the Immune Mechanism	183	6%
15	HCC253	Artificial Openings for Feeding or Elimination	173	5%
16	HCC131	Acute Myocardial Infarction	165	5%
17	HCC012	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors	160	5%
18	HCC118	Multiple Sclerosis	151	5%
19	HCC088	Major Depressive and Bipolar Disorders	150	5%

1. An enrollee may have multiple HCCs and could be double counted if combining enrollee counts between HCCs.

Appendix B (Cont.) - 2020BY Enrollee Count by HCC

Limited to HCCs with at least 100 Enrollees

Rank	HCC	HCC Description	Enrollee Count ¹	% of Reinsurance Eligible Enrollees
20	HCC120	Seizure Disorders and Convulsions	146	4%
21	HCC045	Intestinal Obstruction	139	4%
22	HCC047	Acute Pancreatitis/Other Pancreatic Disorders and Intestinal Malabsorption	126	4%
23	HCC115	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy	126	4%
24	HCC009	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia	120	4%
25	HCC163	Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections	115	4%
26	G09	Drug Psychosis; Drug Dependence	106	3%
27	HCC125	Respirator Dependence/Tracheostomy Status	106	3%
28	HCC122	Non-Traumatic Coma, Brain Compression/Anoxic Damage	106	3%

1. An enrollee may have multiple HCCs and could be double counted if combining enrollee counts between HCCs.

Appendix C - Estimated Reinsurance Amount and Claimants by Product

Issuer	Product ID	Product Name	Exchange Status	Claimants	Reinsurance
UCare	85736MN023	UCare Individual and Family Plans	On-Exchange	955	\$44,777,155
HealthPartners	34102MN007	GHI AM Off Exchange	Off-Exchange	441	\$21,740,091
HealthPartners	34102MN001	GHI On Exchange	On-Exchange	331	\$15,945,747
Blue Plus	57129MN054	Blue Plus Minnesota Value	On-Exchange	304	\$14,219,044
Medica	31616MN042	Medica Applause	On-Exchange	293	\$14,189,080
Medica	31616MN044	Engage by Medica	On-Exchange	197	\$12,212,259
Blue Plus	57129MN053	Blue Plus Minnesota Value	Off-Exchange	187	\$9,860,163
Medica	31616MN042	Medica Applause	Off-Exchange	174	\$8,216,813
Blue Plus	57129MN008	Blue Plus Metro	Off-Exchange	156	\$6,850,679
Blue Plus	57129MN009	Blue Plus Metro	On-Exchange	133	\$5,566,438
Blue Plus	57129MN015	Blue Plus Southeast	On-Exchange	<100	\$5,047,055
Medica	31616MN044	Engage by Medica	Off-Exchange	<100	\$3,344,294
Blue Plus	57129MN014	Blue Plus Southeast	Off-Exchange	<100	\$1,853,486
Medica	31616MN043	North Memorial Acclaim by Medica	On-Exchange	<100	\$1,223,503
PreferredOne	88102MN001	PreferredHealth	Off-Exchange	<100	\$1,029,561
Quartz	70373MN004	Individual HMO	On-Exchange	<100	\$870,169
PreferredOne	88102MN021	Ultimate	Off-Exchange	<100	\$797,381
HealthPartners	34102MN008	GHI NAM Off Exchange - HP Ind	Off-Exchange	<100	\$549,312
Medica	31616MN020	Medica HSA	Off-Exchange	<100	\$520,926

1. Products with less than 100 claimants are labeled as < 100 due to protected health information (PHI) reasons.
2. The *Claimants* column counts enrollees that transfer between products more than once. As a result, the total claimants in this section differs from the enrollee count shown in Table 1.

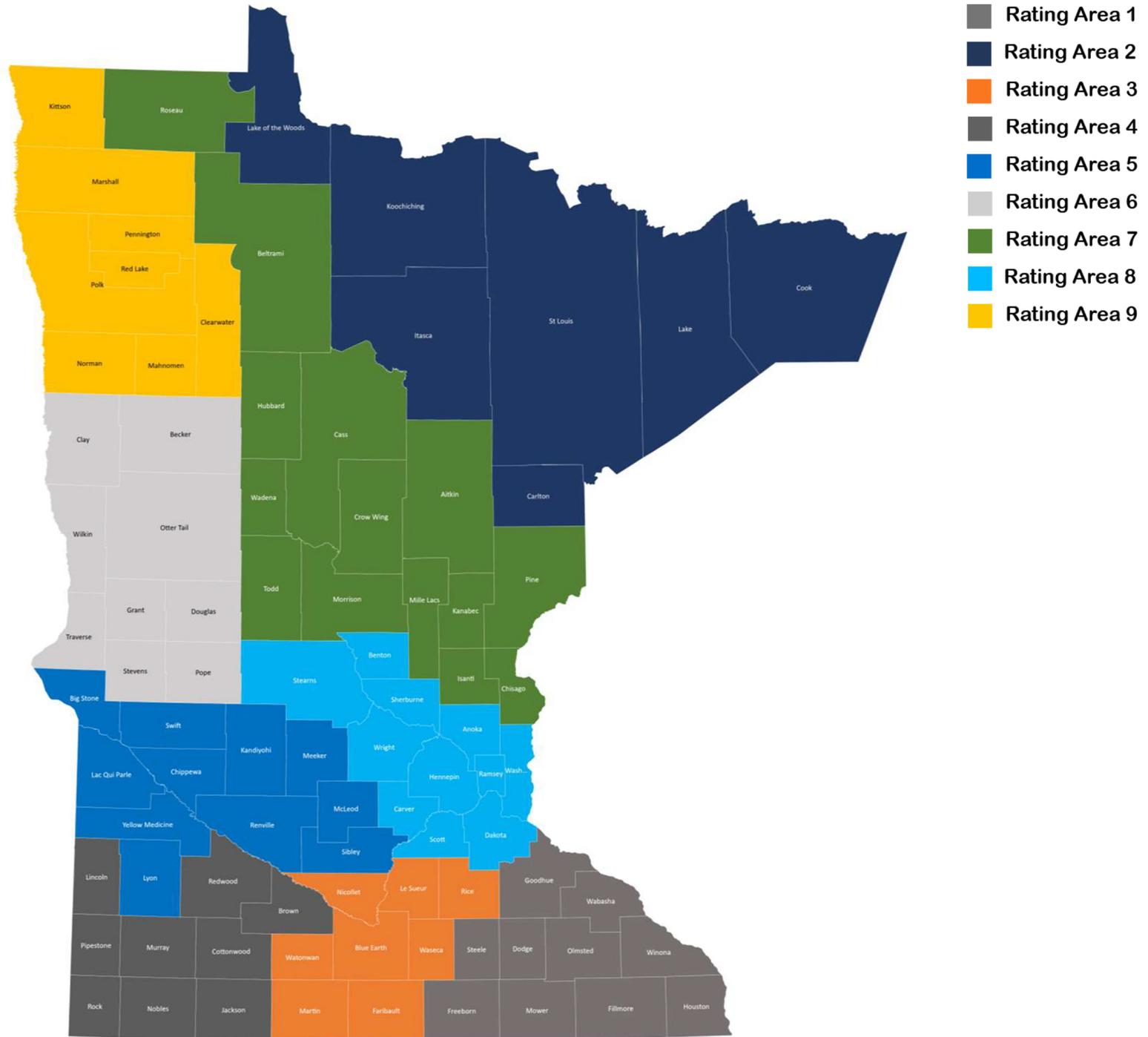
Appendix C (Cont.) - Estimated Reinsurance Amount and Claimants by Product

Issuer	Product ID	Product Name	Exchange Status	Claimants ²	Reinsurance
Medica	31616MN021	Medica Value	Off-Exchange	<100	\$482,325
Medica	31616MN047	Bold by M Health Fairview	On-Exchange	<100	\$366,560
Medica	31616MN045	Altru Prime by Medica	On-Exchange	<100	\$362,245
Medica	31616MN046	Ridgeview Distinct by Medica	On-Exchange	<100	\$358,891
Medica	31616MN018	Medica Solo	Off-Exchange	<100	\$330,543
Medica	31616MN047	Bold by M Health Fairview	Off-Exchange	<100	\$288,801
Medica	31616MN043	North Memorial Acclaim by Medica	Off-Exchange	<100	\$211,889
Medica	31616MN045	Altru Prime by Medica	Off-Exchange	<100	\$186,662
Medica	31616MN019	Medica Encore	Off-Exchange	<100	\$160,000
Quartz	70373MN004	Individual HMO	Off-Exchange	<100	\$26,914
Medica	31616MN046	Ridgeview Distinct by Medica	Off-Exchange	<100	\$14,238
PreferredOne	88102MN023	PreferredOne	Off-Exchange	<100	\$3,890
Total (All Issuers)				3,484	\$171,606,114

Notes:

1. Products with less than 100 claimants are labeled as < 100 due to protected health information (PHI) reasons.
2. The *Claimants* column counts enrollees that transfer between products more than once. As a result, the total claimants in this section differs from the enrollee count shown in Table 1.

Appendix D - Minnesota Rating Regions



Appendix E - 2021 Projection Factor Development

Based on Issuer Submitted Templates

2015

Cohort Description	Count of Enrollees	Enrollee Dist'n	Total Reinsurance with Runout thru December 2015	Total Reinsurance with Runout thru April 2016	Completion
Cohort One - Enrollees Exceeding Attachment Point Based on Runout Thru December Not Exceeding Reinsurance Cap by December 2015	3,781	82%	\$130,605,997	\$149,718,508	1.146
Cohort Two - Enrollees Exceeding Attachment Point Based on Runout Thru December Exceeding Reinsurance Cap by December 2015	328	7%	\$52,480,000	\$52,440,335	0.999
Cohort Three - Enrollees Exceeding Attachment Point Based on Runout After January 2016	523	11%	\$0	\$8,975,908	
Total 2015	4,632	100%	\$183,085,997	\$211,134,750	1.153

2016

Cohort Description	Count of Enrollees	Enrollee Dist'n	Total Reinsurance with Runout thru December 2016	Total Reinsurance with Runout thru April 2017	Completion
Cohort One - Enrollees Exceeding Attachment Point Based on Runout Thru December Not Exceeding Reinsurance Cap by December 2016	3,743	82%	\$128,722,764	\$144,052,148	1.119
Cohort Two - Enrollees Exceeding Attachment Point Based on Runout Thru December Exceeding Reinsurance Cap by December 2016	429	9%	\$68,640,000	\$68,640,000	1.000
Cohort Three - Enrollees Exceeding Attachment Point Based on Runout After January 2017	399	9%	\$0	\$7,427,177	
Total 2016	4,571	100%	\$197,362,764	\$220,119,325	1.115

Appendix E - 2020 Projection Factor Development

Based on Issuer Submitted Templates

2017

Cohort Description	Count of Enrollees	Enrollee Dist'n	Total Reinsurance with Runout thru December 2017	Total Reinsurance with Runout thru April 2018	Completion
Cohort One - Enrollees Exceeding Attachment Point Based on Runout Thru December Not Exceeding Reinsurance Cap by December 2017	2,448	85%	\$83,233,346	\$92,238,291	1.108
Cohort Two - Enrollees Exceeding Attachment Point Based on Runout Thru December Exceeding Reinsurance Cap by December 2017	168	6%	\$26,880,000	\$26,880,000	1.000
Cohort Three - Enrollees Exceeding Attachment Point Based on Runout After January 2018	272	9%	\$0	\$4,840,295	
Total 2017	2,888	100%	\$110,113,346	\$123,958,586	1.126

2018

Cohort Description	Count of Enrollees	Enrollee Dist'n	Total Reinsurance with Runout thru December 2018	Total Reinsurance with Runout thru April 2019	Completion
Cohort One - Enrollees Exceeding Attachment Point Based on Runout Thru December Not Exceeding Reinsurance Cap by December 2018	2,404	83%	\$87,700,875	\$99,814,458	1.138
Cohort Two - Enrollees Exceeding Attachment Point Based on Runout Thru December Exceeding Reinsurance Cap by December 2018	175	7%	\$28,000,000	\$28,000,000	1.000
Cohort Three - Enrollees Exceeding Attachment Point Based on Runout After January 2019	325	11%	\$0	\$7,422,439	
Total 2018	2,904	100%	\$115,700,875	\$135,236,897	1.169

Appendix E - 2020 Projection Factor Development

Based on Issuer Submitted Templates

2019

Cohort Description	Count of Enrollees	Enrollee Dist'n	Total Reinsurance with Runout thru December 2019	Total Reinsurance with Runout thru April 2020	Completion
Cohort One - Enrollees Exceeding Attachment Point Based on Runout Thru December Not Exceeding Reinsurance Cap by December 2019	2,654	84%	\$94,630,684	\$105,902,822	1.119
Cohort Two - Enrollees Exceeding Attachment Point Based on Runout Thru December Exceeding Reinsurance Cap by December 2019	216	%7	\$34,560,000	\$34,560,000	1.000
Cohort Three - Enrollees Exceeding Attachment Point Based on Runout After January 2020	282	9%	\$0	\$7,673,520	
Total 2019	3,152	100%	\$129,190,684	\$148,136,341	1.147

2020

Cohort Description	Count of Enrollees	Enrollee Dist'n	Total Reinsurance with Runout thru December 2020	Total Reinsurance with Runout thru April 2021	Completion
Cohort One - Enrollees Exceeding Attachment Point Based on Runout Thru December Not Exceeding Reinsurance Cap by December 2020	2,732	83%	\$99,893,796	\$111,918,961	1.120
Cohort Two - Enrollees Exceeding Attachment Point Based on Runout Thru December Exceeding Reinsurance Cap by December 2020	246	%8	\$39,360,000	\$39,360,000	1.000
Cohort Three - Enrollees Exceeding Attachment Point Based on Runout After January 2021	300	9%	\$0	\$6,658,215	
Total 2020	3,278	100%	\$139,253,796	\$157,937,175	1.134