

Montana Healthcare Foundation

Individual Market Stabilization – Reinsurance Analysis

August 14, 2018

Prepared by:
Wakely Consulting Group

Julie Peper, FSA, MAAA
Principal

Michael Cohen, PhD
Consultant, Policy Analytics

Michael Forster
Senior Actuarial Analyst



Table of Contents

Introduction	1
Summary	1
Premium Impacts	3
Federal Pass-through Estimates and 1332 Waiver Implications	5
Reinsurance Parameters	6
Appendix A	10
Appendix B	14
Appendix C	17
Appendix D	20

Introduction

The Montana Healthcare Foundation (“MHCF”) retained Wakely Consulting Group, LLC (“Wakely”), to analyze the potential effects of a state-based reinsurance program on the 2020 individual Affordable Care Act (ACA) market. MHCF, the Montana Department of Administration (“DOA”), and the Montana Department of Health and Human Services (“DPHHS”) are interested in exploring policy options that will keep individual health insurance premiums affordable for Montanans. In the last two years, Montana’s individual (also referred to as non-group) ACA market has experienced double digit premium increases and enrollment has decreased significantly. To address instability in the individual market, MHCF requested that Wakely analyze how a state-based reinsurance program for the 2020 benefit year might impact the individual market. In particular, Wakely analyzed how a potential reinsurance program would impact premiums in 2020, what the potential pass-through (i.e., Federal reimbursement amounts) might be if the state pursues a reinsurance-based 1332 waiver, and potential reinsurance payment parameters for select funding scenarios.

This document has been prepared for the sole use of MHCF. This document contains the results, data, assumptions, and methods used in our analyses and satisfies the Actuarial Standard of Practice (ASOP) 41 reporting requirements. Using the information in this report for other purposes may not be appropriate.

Summary

Wakely analyzed the feasibility of a reinsurance program under various enrollment and funding scenarios. The scenarios, described in more detail later in the report, include the following:

- Enrollment
 - Mandate scenario, which has the highest enrollment in 2020 and lowest premiums
 - No Mandate Low, which has the enrollment and premiums in 2020 between the Mandate and No Mandate High scenarios
 - No Mandate High, which has the lowest enrollment (highest number of members leaving the market) in 2020 and the highest premiums
- Total Funding for the program
 - \$50 million
 - \$75 million

- \$100 million¹
- Carrier Assessment to fund Montana's portion of the Total Funding²
 - 1% carrier assessment
 - 2% carrier assessment

Based on the various assumptions, Table 1 shows the range of premium impacts³ and Federal funding by the three funding levels. The ranges illustrate the estimates based on the enrollment and assessment scenarios.

Table 1: 2020 Range of Results by Funding Level

Funding Level	\$50 Million	\$75 Million	\$100 Million
Premium Impact	-9.6% to -14.5%	-15.4% to -22.2%	-21.2% to -29.9%
Federal Pass-through	\$30 to \$39 Million	\$48 to \$59 Million	\$67 to \$80 Million
Needed State Funding	\$11 to \$20 Million	\$16 to \$27 Million	\$20 to \$33 Million
Federal Pass-through %	60.2% to 77.4%	64.5% to 79.2%	66.7% to 80.0%

The following three sections provide additional information on the detailed results and methodology for the premium impacts, pass-through amounts, and reinsurance parameters for the various scenarios.

¹ Please note that it is unlikely that a \$100 million scenario will be feasible given a 1% or 2% assessment. It is included primarily for illustrative purposes.

² The premium assessment contemplated in this report would operate in a similar manner to the insurer assessment imposed to maintain the high risk pool (Montana Comprehensive Health Association--MCHA), which was in effect from 1985 until 2014.) If Montana were to decide to pursue a state reinsurance program through a 1332 waiver, the details of the assessment would need to be determined by the legislature. For the purposes of this report, we estimated that the assessment might be in the range of 1 % to 2 % of total premium volume written in Montana and applied to all insurers, health service corporations or health maintenance organizations that issue coverage for any type of medical care and all insurance that meets the definition of disability insurance as defined in Mont. Code Ann. 33-1-207. This would include not just major medical health insurers but other types of policies, such as accident only, fixed indemnity cancer and specified disease policies. If there is an assessment, no general fund dollars would be necessary to support this program.

³ The premium impacts shown throughout the report represent how much lower premiums would be due to reinsurance relative to what they otherwise would have been. They do not show 2020 premium changes relative to 2019 unless otherwise stated.

Premium Impacts

Reinsurance is a program that protects issuers against high claim costs for enrollees. A state-based reinsurance program is operated by the state and provides reinsurance to the issuers in the individual ACA market with the primary goal of lowering premiums. The first part of the analysis estimated the impact to premiums of a reinsurance program based on various levels of funding.

Recently, the individual mandate was effectively repealed starting in the 2019 benefit year. Given the uncertainty on the effects of a mandate repeal in Montana in 2019 and in future years and the general uncertainty about the effects of recent Federal regulation, Wakely modeled three different scenarios:

1. **Mandate:** This scenario is a steady state from the 2018 regulatory environment. That is, a market where a mandate still exists or the repeal has no effects and the effects of potential regulations that could encourage migration out of ACA plans and into non-ACA plans (e.g., short-term limited duration and association plans) are minimal.
2. **No Mandate Low:** This scenario has enrollment losses due to mandate repeal that approximately aligns with survey data from Kaiser Family Foundation analysis on the effect of the mandate loss; and
3. **No Mandate High:** This scenario has enrollment losses due to the mandate repeal that generally mirrors what the Congressional Budget Office (CBO) has modeled. This scenario results in the largest enrollment loss.

While Wakely has not directly modeled the effects of potential Federal regulations on short-term limited plans or association health plans, enrollment decreases in the ACA market may be thought of as aligning with the higher enrollment loss scenario (CBO estimates) since there is likely overlap among those who would drop coverage due to the loss of the mandate and those who would drop ACA coverage to enroll in short-term or association plans. It is also expected that some short-term and association plan enrollment will come from the uninsured population. Take-up of non-ACA plans by the uninsured would not affect these findings.

Based on insurer feedback, the current expectation is that enrollment will end up between the mandate and no mandate low scenarios. Given the uncertainty, the analysis should be updated once 2019 enrollment numbers are known.

For this analysis, we assumed that funding from the program would be from a carrier assessment for all fully insured health care products sold in Montana. Wakely modeled an assessment of 1% and 2% in 2020. Wakely assumed all reinsurance funds would be allocated to paying claims and that all of the assessment collected would go to reinsurance payments (that is, none would be allocated to administering the program).

Estimates of the 2020 benefit year rely heavily on the 2018 experience. For example, small changes in net premiums for Advanced Premium Tax Credit (APTC) eligible members can have significant effects on the Federal pass-through. In the table below are Wakely’s estimates for key assumptions for 2018.

Table 2: 2018 Estimates for Key Assumptions

2018 Estimates	
Total Non-Group Market	
Average Total Individual ACA Enrollment	52,589
State Average Premium per member per month (PMPM)	\$638.58
APTC Eligible Enrollees	
Average Number of Enrollees with APTCs	35,860
Gross Average Premium PMPM for APTC Eligible	\$658.21
Average APTC PMPM	\$553.39
Average Net Premium PMPM for Enrollees with APTCs	\$104.81

Appendix A includes the methodology and data sources for the 2018 benefit year as well as further assumptions used to estimate 2019 and 2020 experience.

Table 3 below shows the estimated 2020 premium impact relative to baseline by scenario for \$50, \$75, and \$100 million funding amounts. The premium impacts show how much lower premiums would be due to reinsurance relative to what they otherwise would have been. They do not show 2020 premium increases relative to 2019.

Table 3: Premium Impact of Reinsurance Relative to Baseline by Funding, Enrollment and Assessment Scenario

Funding Level	\$50 Million		\$75 Million		\$100 Million	
	1%	2%	1%	2%	1%	2%
Carrier Assessment	1%		2%		1%	
Mandate	-10.5%	-9.6%	-16.3%	-15.4%	-22.0%	-21.2%
No Mandate Low	-12.3%	-11.4%	-19.0%	-18.1%	-25.6%	-24.8%
No Mandate High	-14.5%	-13.6%	-22.2%	-21.4%	-29.9%	-29.2%

As expected, greater funding in the reinsurance program yields a greater reduction in projected premiums. Larger attrition of enrollment, specifically due to a loss of the mandate, increases the impact of reinsurance payments on premiums relative to what they otherwise would have been. This is because the amount of claims being reimbursed or the funding level (the numerator) is constant while the total amount of premiums is less (the denominator). Lastly, the difference in the carrier assessment scenarios is the 1% difference in premiums. Appendix B includes more detail on the calculations supporting the premium impacts.

As a rough approximation, we estimate that for every \$25 million dollars spent in total funding, premiums will be approximately 6% to 8% lower than they otherwise would have been. Please note that even if premiums are kept low, it would not guarantee that large enrollment decreases would not occur. Enrollment losses due to the effective mandate repeal may occur both for financial reasons and norm-driven reasons.⁴ As such, low premium increases may be insufficient to stem enrollment decreases in the individual market.

Federal Pass-through Estimates and 1332 Waiver Implications

The ACA permits states to waive certain provisions of the ACA in order to increase access to affordable coverage. However, in order for both the Secretaries of Health and Human Services (HHS) and Treasury to approve the waiver, the state must complete an application in which it demonstrates that it has met the regulatory requirements. States may receive funds from the Federal Government commensurate with the federal savings the state waiver achieves.

The state-based reinsurance program will lower premium amounts for the entire market. Since premium tax credits (PTCs) are tied to the second lowest cost silver plan (SLCSP) in each county, any reduction in SLCSP premiums will lead to a decrease in the amount of PTC for which the Federal Government is liable. Through a 1332 waiver, a state can request that the Federal Government return the amount of net federal savings, or “pass-through” savings, back to the state to help fund the reinsurance program. Montana could use some of the pass-through amounts to fund the reinsurance program operations.

The absolute amount of federal pass-through increases as the amount of reinsurance funds increases. This is because the greater the reinsurance funds spent on the ACA individual market, the greater the premium impact, and the larger the reduction in PTC spent by the Federal government.

Tables 4 and 5 below show the estimated pass-through funding based on our best estimate scenarios. The difference between the total funding amount and the pass-through amount is the funding Montana would need to cover. Based on the Table 3 and Table 4 results as well as additional scenario testing, **we estimate that Montana could receive approximately 60 percent to 80 percent of total reinsurance funds in Federal pass-through amounts.** It is likely the actual waiver would not be completed until early 2019. At that time, more information will be known

⁴ Individuals are expected to drop coverage due to the effective mandate repeal both for financial reasons (i.e., there is no penalty) and non-financial reasons such as loss aversion (people respond more to penalties than subsidies) and social norms (fewer people with coverage may encourage individuals to not have coverage regardless of financial incentives). For more details, please see the CBO <https://www.cbo.gov/system/files?file=115th-congress-2017-2018/presentation/53310-presentation.pdf>.

on enrollment impacts from recent regulatory changes. Once the analysis is refined with 2019 enrollment data, it is possible the funding may be higher or lower than this range, but this is the best estimate based on the information currently available.

Table 4: Estimated Federal Pass-through Amounts (in millions)

Funding Level	\$50 Million		\$75 Million		\$100 Million	
Carrier Assessment	1%	2%	1%	2%	1%	2%
Mandate	\$33.0	\$30.1	\$51.1	\$48.4	\$69.2	\$66.7
No Mandate Low	\$35.5	\$32.9	\$54.7	\$52.2	\$73.8	\$71.6
No Mandate High	\$38.7	\$36.3	\$59.4	\$57.2	\$80.0	\$78.1

Table 5: Estimated Pass-through (as a percent of total reinsurance payments)

Funding Level	\$50 Million		\$75 Million		\$100 Million	
Carrier Assessment	1%	2%	1%	2%	1%	2%
Mandate	66.1%	60.2%	68.2%	64.5%	69.2%	66.7%
No Mandate Low	71.0%	65.7%	72.9%	69.7%	73.8%	71.6%
No Mandate High	77.4%	72.7%	79.2%	76.3%	80.0%	78.1%

Generally, the larger the proportion of enrollees with APTCs as a percentage of those eligible for reinsurance payments, the larger the pass-through amount. Larger attrition of unsubsidized enrollees due to the mandate repeal (e.g., those above 400% of the Federal Poverty Level, or FPL) will increase the percentage of total funds the Federal pass-through amount represents. Again, the exact pass-through amount is highly dependent on the exact configuration of the state’s market. The current regulatory uncertainty increases the level of uncertainty in the estimates. For example, if a larger number of enrollees with APTCs drop coverage, it would decrease the pass-through amounts. Conversely, if a greater number of enrollees without APTCs drop coverage, the pass-through amounts could increase. Appendix B includes more detail on the calculations supporting the pass-through estimates.

Reinsurance Parameters

If Montana decides to pursue a state-based reinsurance program, the reinsurance parameters can be updated to match the selected funding and assumptions. Wakely selected a scenario that used the \$75 million funding level, assumed a 2% premium assessment, and used the No Mandate Low enrollment scenario. These parameters are shown for illustrative purposes.

To estimate the reinsurance parameters, Wakely first had to estimate the 2020 individual market data. To do this, Wakely completed the following steps:

1. Wakely collected 2017 EDGE or similar data from each Montana carrier in the individual market.
2. The data was adjusted to 2020 using the following steps:
 - a. The first adjustment was to account for changes in the health status, or morbidity of the enrollment, from 2017. Wakely applied a change to the enrollment and morbidity (which is estimated by a change in paid claims) from 2017 to 2020. Wakely determined the most appropriate methodology was to remove members from the 2017 data, aligning with the overall estimated enrollment decrease from 2017 to 2020. The No Mandate Low Scenario results in an approximate 28% to 29% reduction in enrollment over the three years, after accounting for the impact of reinsurance. The estimated 2017 to 2018 enrollment decrease is 13%. The resulting 2018 to 2020 decrease is around 18%. Since the EDGE data enrollment is slightly different from the 2017 enrollment provided by the carriers, ultimately we targeted the estimated 2020 enrollment based on the post reinsurance enrollment estimates.

The enrollment was removed assuming the healthier and younger members would be more likely to drop coverage between 2017 and 2020. The removal of individuals resulted in a 10% morbidity adjustment over the three years. We estimated that those who left were 27% healthier than those who maintained enrollment.⁵ The health status statistics are cited from a study the CEA conducted (noted above). To the extent the actual morbidity impact differs from what Wakely has included in this analysis, the resulting reinsurance parameters will be impacted. More detail on the methodology for removing members is included in Appendix A.

- b. An additional adjustment was made to account for medical trend and member shifting between issuers, products, and plans. This adjustment was developed by targeting, in combination with the morbidity adjustment, a medical loss ratio of approximately 80% in 2020. The medical loss ratio was calculated by comparing the estimated 2020 claims and estimated 2020 premiums prior to reinsurance being applied. The resulting trend is an 8% annual trend that accounts for all rating factors other than morbidity changes.
- c. The combination of trend and morbidity increases, which was achieved via targeting the 80% loss ratio based on the estimated 2020 premiums, increased the claims on a per member per month basis from 2017 to 2020 by 38%. The portion

⁵https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701_individual_health_insurance_market_cea_issue_brief.pdf

of this increase that is morbidity and the portion that is trend may impact the results of the reinsurance parameters, potentially significantly. If Montana pursues a 1332 waiver, Wakely recommends adding 2018 data, assuming it is available at the time.

The resulting 2020 data was used to determine the reinsurance parameters. In general, the methodology used to apply the reinsurance parameters parallels the methodology used for the Federal Transitional Reinsurance program under the ACA. For example, members are grouped by carrier, but are allowed to accumulate claims if they change plans or rating areas within a carrier. However, no adjustment was made for CSR plan enrollees since carriers now bear the cost of enrollees in these plans.

Wakely considered the following when determining reinsurance parameters for the two funding levels:

- A cap of no more than \$1 million should be used to avoid overlap with the HHS risk adjustment methodology’s high cost pooling reimbursement, which has an effective attachment point of \$1 million in 2019.
- Based on discussions with the issuers, there is likely no private reinsurance that needs to be considered to avoid overlap of private and state-funded reinsurance, but these should be verified before Montana finalizes any parameters.
- Ideally, coinsurance would be between 50% and 80% to incentivize issuers to continue to manage the care of the high cost individuals.
- Where appropriate, higher coinsurance amounts were used to avoid having an unreasonably low attachment point.

Table 6: Reinsurance Parameters Using the Mandate Low Scenario

Funding Level	Attachment Point	Cap	Coinsurance
\$75M	\$30,000	\$1,000,000	50%
\$75M	\$60,000	\$500,000	80%
\$75M	\$45,000	\$250,000	80%

It is important to note that individual issuers may be affected differently by reinsurance. Issuers with relatively higher claims cost will receive relatively more reinsurance payments. While the reinsurance program will reduce total risk adjustments transfers, since the state average premium

will be lower, some enrollees with Hierarchical Condition Categories (HCCs)⁶ will get compensated both for risk adjustment and reinsurance. The result could be very different profitability patterns within the market than currently exists, and the result could also vary depending on the chosen funding level and reinsurance parameters.

If Montana decides to pursue a 1332 waiver, it is advisable to continue to revise and refine the assumptions within this analysis with the most recent data available. There have been significant market changes and further changes are expected, which makes estimating the 2020 market and impact of reinsurance less certain. For this reason, it is possible that the results of this analysis will vary from those included in a 1332 waiver, especially pertaining to 2020 estimates and the resulting impact to premiums, pass-through amounts, and reinsurance parameters.

⁶ CMS, as part of the HHS risk adjustment model, uses HCCs as a way of using diagnoses to predict medical expenditure risk. See Kautter et al (2014) "The HHS-HCC Risk Adjustment Model for Individual and Small Group Markets under the ACA" Medicare and Medicaid Research Review

Appendix A

Data and Methodology

To create the enrollment, premium estimates, and reinsurance parameters, Wakely completed the following steps:

1. Using publicly available data and data from the issuers (see Appendix C, Reliances and Caveats), estimates were made for 2018 average enrollment.
 - a. The number of enrollees with PTCs in 2018 was measured based on the reported number of APTC enrollees provided by Montana issuers as of April 2018. This point estimate was then adjusted to a yearly average by an attrition factor. The attrition factor was based on the 2017 attrition experience, as measured by Montana issuer data for the 2017 benefit year and the HHS First Half of 2017 Average Effectuated Enrollment Data.⁷
 - b. On Exchange enrollment for 2018 was measured using Montana issuer data as of April 2018. We adjusted the results to estimate 2018 average enrollment using the 2017 attrition experience, as measured by Montana issuer data for the 2017 benefit year and the HHS First Half of 2017 Average Effectuated Enrollment Data.
 - c. Off Exchange enrollment for 2018 was measured using Montana issuer data as of April 2018 and then adjusted for estimated attrition based on 2017 non-APTC enrollees on Exchange average enrollment attrition experience, as measured by Montana issuer data and the HHS First Half of 2017 Average Effectuated Enrollment Data.
2. Given the uncertainty around the 2020 market, Wakely estimated three different scenarios for enrollment in 2019: a scenario where a mandate is enforced in Montana (or its effective repeal has no impact); a scenario in which the impact of mandate repeal is high; and a scenario in which the impact of mandate repeal is more moderate.
 - a. Mandate Scenario: In the mandate scenario, we assumed that Montana's enrollment would not be affected by the effective repeal of the mandate or other potential regulatory changes. Overall enrollment in 2019 and 2020 was estimated based on a non-linear enrollment response function estimated by the Council of

⁷ <https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/Downloads/2017-12-13-2017-Effectuated-Enrollment-Data.pdf>

Economic Advisors (CEA take-up function)⁸ based on estimated premium increases in 2019 and 2020. The elasticity of the take-up function was reduced to account for the likely reduction in responsiveness of enrollees to premium changes given the effective repeal of mandate and greater availability of non-ACA products. The function computes expected enrollment change based on premium rate increases and the portion of the market that is not receiving subsidies. Enrollees who are subsidy eligible are not expected to have attrition, given the APTC subsidy structure insulates them from premium increases. The changes in enrollment were distributed pro rata between on Exchange unsubsidized and off Exchange by the share of unsubsidized enrollment that the on Exchange enrollees represent.

- b. No Mandate Scenario High: In this scenario, we assume that no mandate is enforced in Montana in 2020. The initial baseline was the previous mandate enforced scenario. Enrollment losses due to the mandate are estimated using the Center for American Progress' estimates of Montana specific losses based on CBO's estimates.⁹ The Montana specific estimates by Center for American Progress were estimated in part by using the American Community Survey Public Use Microdata Sample (ACS PUMS) to estimate non-elderly primary coverage in Montana. These losses were estimated for the 2025 year, so an adjustment, following the CBO's estimates for 2020,¹⁰ was made to estimate Montana specific enrollment attrition in 2020 due to the loss of the mandate. The result of the mandate loss and resulting premium increases could cause additional enrollment losses, especially given the potential of alternative non-ACA products such as short-term limited duration plans and associations plans.
- c. No Mandate Low Scenario: In this scenario, we continue to assume that no mandate is enforced in Montana in 2020. There is considerable uncertainty on the exact effects of the mandate repeal. Consequently, we used a different benchmark than the high scenario. Enrollment losses due to the mandate are estimated using Kaiser Family Foundations survey of non-group enrollees.¹¹ While CBO estimated a nationwide loss of 4 million enrollees in 2019, the Kaiser survey data estimated an approximate loss of 10% of enrollees due to the mandate repeal in the first year of the effective mandate repeal. The 10% reduction was repeated in 2020 to account for greater awareness of the mandate repeal as well as the greater availability of non-ACA products such as association health plans or short-term duration plans. The result of the mandate loss for this scenario and resulting premium increases could cause additional enrollment losses, especially given the

⁸https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701_individual_health_insurance_market_cea_issue_brief.pdf

⁹ <https://www.americanprogress.org/issues/healthcare/news/2017/12/05/443767/estimates-increase-uninsured-congressional-district-senate-gop-tax-bill/>

¹⁰ <https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53300-individualmandate.pdf>

¹¹ <https://www.kff.org/health-reform/press-release/poll-most-non-group-enrollees-plan-to-buy-insurance-despite-repeal-of-individual-mandate-penalty/>

potential of alternative non-ACA products in the form of short-term limited duration plans and associations plans.

3. State wide average premium: Wakely used the 2018 state average premium as captured by Montana issuer data. This amount was then increased by expected 2019 and 2020 rate increases. This was done by a combination of estimated medical and prescription drug trend, increased morbidity due to reduction in enrollment (including loss of enrollment due to the mandate repeal), as well as other factors. For 2019, the submitted rate increases by issuer have been submitted. Weighting these increases based on the April 2018 enrollment and premium information results in a 5.5% increase in 2019. We used this assumption for the No Mandate Low scenario and slightly lower/higher increases for the Mandate and No Mandate High scenarios. Wakely further assumed 2020 rate increases of approximately 9% to 12% in 2020. The higher rate increases in 2020 are driven by the assumed return of the provider insurer fee (there is a moratorium in 2019), trend, and the various morbidity assumptions for each enrollment scenario.
4. APTC amounts per member per month for 2018 were calculated from the Montana issuer data from April 2018. To estimate 2020 APTC PMPMs, we increased the required contribution (i.e., net premium) to conform with the indexing of the contribution rate. We increased it 1% annually from 2018 to 2020. We then inflated gross premiums for APTC enrollees (the 2018 APTC amounts plus net premiums) by the 2019 and 2020 premium increases. This new 2020 gross premium amount is then reduced by the 2020 net premium values (since APTC enrollees share of premiums is capped based on their respective household income) to calculate the 2020 APTC PMPM amounts.
5. To calculate the effects of reinsurance payments on premiums, we used the estimated enrollment and premium amounts for the relevant scenarios. We reduced total premiums by the amount of the reinsurance payments or total funding available. We then increased premiums 2% to account for the assessment to fund the reinsurance program. We estimated the increase in enrollment that would result from the lower premiums. This was estimated using the CEA take-up function as described earlier. These new enrollees, given their price sensitivity, are expected to improve the risk pool's morbidity level. The change in morbidity was developed based on statistics of the health status of those leaving the market compared to those staying and the estimated percentage of members assumed to be leaving. The health status statistics are cited from a study the CEA conducted (noted above).

APTC PMPMs post reinsurance were calculated by decreasing the gross premium amounts for those with APTC by the decrease in premiums due to reinsurance/improvement in morbidity. We then subtracted from that amount the net premiums (we assumed no composition shift for these enrollees, so only indexing changes would affect the net premiums paid). The difference between the estimated total APTC paid before reinsurance and the estimated total APTC paid after reinsurance is equal to

total Federal savings/pass-through amount. Wakely assumed that APTC amounts are equal to Premium Tax Credit amounts and did not account for differences as a result of tax reconciliation.

6. In order to create the reinsurance parameters, we adjusted the 2017 EDGE data for shifts in members and claims costs, including trend and mix changes.

In order to remove enrollment while targeting an increase in morbidity (i.e. claims PMPM) from 2017 to 2020, Wakely assigned probabilities to members based on their health (estimated by annual paid claims) and age status. Members were grouped by decile of annual paid claim amounts and age bands (with a separate age band for children and thereafter 10-year age bands). Using these two indicators, Wakely assigned a factor of likelihood that a member would leave the market. For example, a member with between the ages of 19-29 that is in the 30th percentile of claims will be more likely to leave the market than a member that is between the ages of 40-49 that is within the 80th percentile of claims. Each individual's probability of remaining in or leaving the market was then multiplied by a random factor to select a random population upon each time of running the model. Several iterations were performed to ensure that a consistent impact to the market was occurring for each set of parameters used.

Appendix B

Additional Detailed Results

The following table shows Baseline data from 2017 and 2018. Some of the numbers, particularly 2018, are estimates, since only initial enrollment numbers and premiums are available.

Table 7: Enrollment and Premiums 2017 and 2018 Baseline

Baseline	2017	2018
Average Annual Enrollment		
Total Non-Group Enrollment	60,607	52,589
Exchange Enrollment	44,576	41,115
APTC Enrollment	38,812	35,860
Non-APTC Exchange Enrollment	5,764	5,255
Off-Exchange Enrollment	16,030	11,475
Per Member Per Month (PMPM) Amounts		
Total Non-Group Premium PMPM	\$561.61	\$638.58
APTC PMPM	\$476.38	\$553.39
Total Annual Dollars		
Total Non-Group Premiums	\$408,446,283	\$402,986,248
Total APTCs	\$221,871,384	\$238,134,029

The following table shows the 2020 estimated enrollment, premiums, and subsidies under the three enrollment scenarios.

Table 8: Enrollment and Premium Projections 2020 Baseline

	2018	2020 Mandate	2020 No Mandate Low	2020 No Mandate High
Average Annual Enrollment				
Total Non-Group Enrollment	52,589	51,993	42,579	34,856
Exchange Enrollment	41,115	40,928	34,783	29,909
APTC Enrollment	35,860	35,860	31,213	27,644
Non-APTC Exchange Enrollment	5,216	5,068	3,570	2,265
Off-Exchange Enrollment	11,475	11,066	7,795	4,946
Per Member Per Month (PMPM) Amounts				
Total Non-Group Premium	\$638.58	\$717.20	\$755.72	\$791.85
APTC	\$553.39	\$650.81	\$691.51	\$729.68
Total Annual Dollars				
Total Non-Group Premiums	\$402,986,248	\$447,476,736	\$386,130,329	\$331,204,587
Total APTCs	\$238,134,029	\$280,054,909	\$259,005,996	\$242,052,620

The following table shows the process to estimate the pass-through and premium impacts.

**Table 9: 2020 Pass-through and Premium Impact Calculations
No Mandate Low Scenario and Assuming 2% Carrier Assessment**

Scenario	\$50M Funding	\$75M Funding	\$100M Funding
Baseline			
Total Non-Group Enrollment	42,579	42,579	42,579
Exchange Enrollment	34,783	34,783	34,783
APTC Enrollment	31,213	31,213	31,213
Total Non-Group Premium PMPM	\$755.72	\$755.72	\$755.72
Exchange Premium PMPM	\$760.19	\$760.19	\$760.19
Gross Premiums PMPM for APTC Members	\$798.43	\$798.43	\$798.43
Net Premiums PMPM for APTC Members	\$106.92	\$106.92	\$106.92
APTC PMPM	\$691.51	\$691.51	\$691.51
Total Non-Group Premiums	\$386,130,329	\$386,130,329	\$386,130,329
Total APTCs	\$259,005,996	\$259,005,996	\$259,005,996
After Reinsurance			
Reinsurance Funding	\$50,000,000	\$75,000,000	\$100,000,000
Reduction in Premiums (Rein Funding)	-12.9%	-19.4%	-25.9%
Reinsurance Assessment	2.0%	2.0%	2.0%
Reduction in Premiums (Improved Morbidity)	-0.3%	-0.4%	-0.6%
Total Premium Impact	-11.4%	-18.1%	-24.8%
Total Non-Group Premium PMPM	\$669.58	\$618.75	\$568.02
Exchange Premium PMPM	\$675.25	\$625.03	\$574.81
Gross Premiums PMPM for APTC Members	\$707.42	\$653.72	\$600.12
Net Premiums PMPM for APTC Members	\$106.92	\$106.92	\$106.92
APTC PMPM	\$600.50	\$546.80	\$493.20
Percent Change in Total Enrollment	1.0%	1.6%	2.3%
Total Non-Group Enrollment	42,993	43,266	43,565
Exchange Enrollment	34,913	34,999	35,093
APTC Enrollment	31,213	31,213	31,213
Total Premiums	\$345,449,395	\$321,254,695	\$296,945,753
Total APTCs	\$224,917,271	\$204,804,592	\$184,728,446
APTC Savings			
Estimated APTC Savings	\$34,088,726	\$54,201,404	\$74,277,550
Difference in User Fees	-\$1,229,032	-\$1,956,302	-\$2,684,00
Estimated Net Federal Savings	\$32,859,694	\$52,245,103	\$71,593,550
Pass-through	65.7%	69.7%	71.6%

Appendix C

Reliances and Caveats

The following is a list of the data Wakely relied on for the analysis:

- Wakely collected a complete set of 2017 EDGE Server XML data from each individual market carrier or data that replicated the information needed from the EDGE files. The data collected includes:
 - The inbound enrollment, medical, pharmacy, and supplement files that were submitted by each carrier to the EDGE Server,
 - The corresponding response files that apply an accept/reject status to the claims in the inbound files, and
 - The final outbound files that were produced in May 2018.
- Additional information provided by the issuers such as:
 - 2016 and 2017 continuance tables
 - 2017 and 2018 enrollment and premium information, split by metal level, APTC status, and other breakouts.
 - Information provided as part of conference calls with each of the Montana issuers
- 2019 submitted rate increases by the issuers¹²
- The 2016 , 2017, 2018 Open Enrollment Report PUF produced by HHS^{13 14 15}
- Effectuated Enrollment Reports released by CMS¹⁶
- CBO Analysis on Impact of Repeal of the Mandate¹⁷

The following are additional reliances and caveats that could have an impact on results:

¹² <https://csimt.gov/your-insurance/health/2019-rate-filings-and-rate-review/>

¹³ <https://aspe.hhs.gov/health-insurance-marketplaces-2016-open-enrollment-period-final-enrollment-report>

¹⁴ https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Marketplace-Products/Plan_Selection_ZIP.html

¹⁵ <https://downloads.cms.gov/files/effectuated-enrollment-snapshot-report-06-12-17.pdf>

¹⁶ <https://downloads.cms.gov/files/effectuated-enrollment-snapshot-report-06-12-17.pdf>

¹⁷ <https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53300-individualmandate.pdf>

- **Data Limitations.** As discussed above, Wakely collected EDGE or similar data from the 2017 individual market carriers in order to complete this analysis. There were some variances in the EDGE data compared to other data sources that were used to check the reasonability of the EDGE data; however, the variances were reasonable and not expected to impact the results.
- **Political Uncertainty.** There is significant policy uncertainty. Future federal actions or requirements in regards to reinsurance funds, income verification, silver-loading, and/or CSR payments could dramatically change premiums and enrollment in 2020.
- **Enrollment Uncertainty.** At the time of producing this report, early 2018 enrollment data was available. To the extent 2018 attrition varies significant from historical rates, the estimates for 2020 will not be accurate. 2019 is additionally uncertain. Beyond changes to potential rates and policy, individual enrollee responses to these changes also has uncertainty. All of these factors result in uncertainty for estimates on reinsurance parameters and impacts of a 1332 waiver.
- **Premium Uncertainty.** Given the impact of several regulations (mandate repeal, association plans, short-term duration plans, etc.), there is uncertainty in how issuers may respond in their 2020 premiums and the enrollment and morbidity impact on costs. These uncertainties result in limitations in providing point estimates.
- **Pass-through Uncertainty.** Ultimately, the Department of Health and Human Services and the Department of Treasury model the pass-through amounts. The extent to which the exact assumptions and micro-simulation modeling differs from Wakely's models, differences in the pass-through amounts are possible.
- **Reinsurance Operations.** If actual operations of the reinsurance program differ from the data configurations used in this analysis, Wakely's analysis would need to be adjusted to match actual reinsurance data requirements. Changes to assumed data requirements, actual data requirements, and data submission quality for reinsurance operations may impact the results. Wakely is basing its estimates on EDGE data, which will not match issuer incurred claims for reasons including but not limited to: drug rebates are not incorporated, claim filters are applied, and there are only four months of claim runout. If actual operations of the reinsurance program differ from the analysis, Wakely's analysis would need to be adjusted to match actual reinsurance data requirements.

The 1332 waiver is typically approved for a five-year time period. While Wakely did not analyze future years, on a legal basis, there would be no major impediments from using some of the funds allocated for the initial program year (whether state or Federal pass-through) in future years. Without a reinsurance program in 2021, premiums would be

expected to rise commensurate with the impact of reinsurance payments on the 2020 benefit year.

Appendix D

Disclosures and Limitations

Responsible Actuaries. Julie Peper is the actuary responsible for this communication. She is a Member of the American Academy of Actuaries and a Fellow of the Society of Actuaries. She meets the Qualification Standards of the American Academy of Actuaries to issue this report.

Intended Users. This information has been prepared for the sole use of MHCF. Distribution to parties should be made in its entirety and should be evaluated only by qualified users. 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 our estimates. Wakely does not warrant or guarantee that Montana 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. The responsible actuaries are 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 MHCF.

Data and Reliance. We have relied on others for data and assumptions used in the assignment. We have reviewed the data for reasonableness, but have not performed any independent audit or otherwise verified the accuracy of the data/information. If the underlying information is incomplete or inaccurate, our estimates may be impacted, potentially significantly. The information included in the 'Data and Methodology' and 'Reliances and Caveats' sections identifies the key data and reliances.

Subsequent Events. These analyses are based on the implicit assumption that the ACA will continue to be in effect in future years with no material change. Material changes in state or federal laws regarding health benefit plans may have a material impact on the results included in this report, including actions in regards to mandate enforcement by the state of Montana. Material changes as a result of Federal or state regulations may also have a material impact on the results. In addition, any changes in issuer actions as well as emerging 2018 enrollment and experience could impact the results. Changes to current Montana practice of loading CSR amounts to Silver plans only could also impact the results. There are no other known relevant events subsequent to the date of information received that would impact the results of this report.

Contents of Actuarial Report. This document (the report, including appendices) constitutes the entirety of actuarial report and supersede any previous communications on the project.

Deviations from ASOPs. Wakely completed the analyses using sound actuarial practice. To the best of our 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. 23, Data Quality

ASOP No. 41, Actuarial Communication