

## State of Maryland

### Individual Market Stabilization – Reinsurance Analysis

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## Introduction

The State of Maryland's Department of Legislative Services ("Maryland") retained Wakely Consulting Group, LLC ("Wakely"), through Bolton Partners, to analyze the potential effects of a state-based reinsurance program on the 2019 individual Affordable Care Act (ACA) market. In recent years, Maryland's individual (also referred to as non-group) ACA market has experienced double digit premium increases and a reduction in the number of issuers offering coverage. To address instability in the individual market, Maryland requested that Wakely analyze how a state-based reinsurance program for the 2019 benefit year might impact the individual market. In particular, Wakely analyzed how a potential reinsurance program would impact premiums in 2019, what the potential pass through (i.e., 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 Maryland. This document contains the results, data, assumptions, and methods used in this first phase of 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.

## Premium Impacts

Reinsurance is a program that protects issuers against high claims cost 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Recently, the individual mandate was effectively repealed starting in the 2019 benefit year. Issuers have not yet included the effective repeal of the mandate into their rates. While there has been discussion on imposing a state-level mandate in Maryland, at the time of this report no law has been passed that would replace the Federal individual mandate. Given the uncertainty on if a mandate will be enforced in Maryland in 2019 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 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 High:** This scenario has enrollment losses due to the mandate repeal that generally mirrors what the Congressional Budget Office (CBO) has modeled; and

3. No Mandate Low: This scenario has enrollment losses due to mandate repeal that approximately aligns with the Centers for Medicare & Medicaid Services (CMS) Office of the Actuary’s (OACT) analysis on the effect of the mandate 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 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.

Wakely, following input from Maryland, included an assessment to fund the reinsurance equal to the approximate average of what the provider tax would have been (2.75% for all issuers in all markets) in 2019.<sup>1</sup> Wakely assumed all reinsurance funds would be allocated to paying claims and that all of the assessment collected would go to reinsurance payments. If Maryland was to allocate some of the assessment funds to non-reinsurance priorities, it would affect the results, likely increasing the pass through amount. Similarly, if the assessment is a one-time impact to premiums, the pass through rate, all else equal, would increase in future years.

Estimates of the 2019 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 1: 2018 Estimates for Key Assumptions**

	<b>2018 Estimates</b>
Average Total Individual ACA Enrollment	180,071
State Average Premium per member per month (PMPM)	\$602
Average Number of Enrollees with APTCs	103,468
Gross Average Premium PMPM for APTC Eligible	\$632
Average APTC PMPM	\$504
Average Net Premium PMPM for Enrollees with APTCs	\$129

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<sup>1</sup> Wakely did not estimate the total funding available to Maryland and actual funding may vary from the scenarios included in this report. In addition, to the extent to which funding amounts are collected as a percent of premium and premiums in the individual market are lower due to the reinsurance program, this would reduce the amount of funds collected. The scenarios listed in this report should be considered illustrative rather than directly tied to a particular funding level as a result of the assessment.

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

Table 2 below shows the estimated 2019 premium impact relative to baseline by scenario and for various funding amounts, in \$50 million increments. The premium impacts in Table 2 show how much lower premiums would be due to reinsurance relative to what they otherwise would have been in 2019. They do not show 2019 premium increases relative to 2018. Net premium changes from 2018 (i.e., average premium increases and premium decreases due to reinsurance) is multiplicative. For example, for the No Mandate Low scenario, the average rate increase before reinsurance is estimated to be approximately 40%. Accounting for the 23.7% premium impact due to \$350 million in reinsurance, the resulting increase from 2018 would be less than 7%. Similarly, for the No Mandate Low and \$400 million in reinsurance funds scenario, the estimated resulting premium increase relative to 2018 would be slightly over 1%.

**Table 2: Premium Impact of Reinsurance Relative to Baseline by Scenario at Various Funding Levels (in millions)**

Funding Level	\$100	\$150	\$200	\$250	\$300	\$350	\$400
Mandate	-3.7%	-7.1%	-10.4%	-13.8%	-17.1%	-20.5%	-23.8%
No Mandate High	-5.4%	-9.5%	-13.6%	-17.8%	-21.9%	-26.0%	-30.1%
No Mandate Low	-4.7%	-8.5%	-12.3%	-16.1%	-19.9%	-23.7%	-27.5%

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). Appendix B includes more detail on the calculations supporting the premium impacts.

As a rough approximation we estimate that for every \$50 million dollars spent, premiums will be 3% to 4% lower than they otherwise would have been. Please note that the amount of funds needed to keep premiums, at an absolute level, below 10% is highly dependent on non-reinsurance factors (such as the existence of a mandate). Furthermore, even if premiums are kept below a 10% increase for 2019, 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. As such, low premium increases may be insufficient to stem enrollment decreases in the individual market.

## 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 commiserate 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. Maryland could use some of the pass through amounts to fund the reinsurance program operations or could use it substantively for state funds.

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 APTC spent by the Federal government. Tables 3 and 4 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 Maryland would need to cover. Based on the Table 3 and Table 4 results as well as additional scenario testing, **we estimate that Maryland could receive approximately 56 percent to 71 percent of total reinsurance funds in Federal pass through amounts, if at least \$300 million in total reinsurance payments are made.** Once more information is known regarding 2018 enrollment and premiums and 2019 rate increases, 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 3: Estimated Pass through Amounts (in millions)**

Funding Level	\$100	\$150	\$200	\$250	\$300	\$350	\$400
Mandate	\$36.5	\$69.3	\$102.0	\$134.6	\$167.2	\$199.7	\$232.1
No Mandate High	\$50.4	\$89.4	\$128.2	\$167.0	\$205.7	\$244.3	\$282.9
No Mandate Low	\$44.8	\$81.2	\$117.6	\$153.8	\$190.0	\$226.1	\$262.1

**Table 4: Estimated Pass through (as a percent of total reinsurance payments)**

Funding Level (in millions)	\$100	\$150	\$200	\$250	\$300	\$350	\$400
Mandate	36%	46%	51%	54%	56%	57%	58%
No Mandate High	50%	60%	64%	67%	69%	70%	71%
No Mandate Low	45%	54%	59%	62%	63%	65%	66%

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 (and novelty) 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

Wakely discussed the initial estimates of premium impact and pass through by funding level with Maryland. Based on the discussion, it was determined that three funding level scenarios of \$300 million, \$350 million, and \$400 million would be analyzed using the No Mandate Low enrollment scenario.

To estimate the reinsurance parameters for each funding level, Wakely first had to estimate the 2019 individual market data. To do this, Wakely completed the following steps:

1. Wakely collected 2016 EDGE data from each Maryland carrier in the individual market.
2. The data was adjusted to 2019 using the following steps:
  - a. The first adjustment was to account for changes in the health status, or morbidity of the enrollment, from 2016. Wakely applied a change to the enrollment and morbidity (which is estimated by a change in paid claims) from 2016 to 2019. Wakely determined the most appropriate methodology was to remove members from the 2016 data, aligning with the overall estimated enrollment decrease from 2016 to 2019. The No Mandate Scenario that aligns with OACT based estimates results in an approximate 42% reduction in enrollment over the three years, after accounting for the impact of reinsurance. The estimated 2016 to 2018 enrollment decrease is 28%.

The enrollment was removed assuming the healthier and younger members would be more likely to drop coverage between 2016 and 2019. The removal of individuals resulted in a 19% morbidity adjustment. We estimated that those who left were 38% healthier than those that maintained enrollment, based on CBO's analysis of a mandate repeal on premiums. To the extent the actual morbidity impact differs from what Wakely has included in this analysis, the resulting reinsurance parameters will be impacted. It is important for Maryland to consider the level of conservatism they would like to have incorporated into the analysis, especially given the large enrollment decrease experienced in the last two years. 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 targeting, in combination with the morbidity adjustment, a medical loss ratio of approximately 85% in 2019. The medical loss ratio was calculated by comparing the estimated 2019 claims and estimated 2019 premiums prior to reinsurance being applied. The resulting adjustment is a 19% annual increase (annual over the three years from 2016 to 2019) that accounts for all rating factors other than morbidity changes. This 2019 increase is higher than what the carriers assumed in their 2018 rate filings.
- c. The combination of trend, morbidity increases, and other adjustments, which was achieved via targeting the 85% loss ratio based on the estimated 2019 premiums, roughly doubles the claims on a per member per month basis from 2016 to 2019. The portion of this increase that is morbidity, the portion that is trend, and which part may reflect other adjustments may impact the results of the reinsurance parameters, potentially significantly. If Maryland pursues a 1332 waiver, Wakely recommends getting additional data from the carriers to see if the 2017 data would produce similar results.

The resulting 2019 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 Cost Sharing Reduction (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 no private reinsurance that needs to be considered to avoid overlap of private and state-funded reinsurance.
- Ideally, coinsurance would be 80% or lower to incentivize issuers to continue to manage the care of the high cost individuals. Given the high levels of funding being analyzed, higher coinsurance amounts were required to avoid having an unreasonably low attachment point.

Given the expected significant decrease in enrollment and the high levels of funding, the resulting reinsurance parameters have low attachment points, high coinsurance percentages, and high cap amounts.

**Table 5: Reinsurance Parameters**

Funding Level	Attachment Point	Cap	Coinsurance
\$400 Million	\$37,000	\$1,000,000	80%
\$400 Million	\$45,500	\$1,000,000	90%
\$350 Million	\$46,500	\$1,000,000	80%
\$350 Million	\$56,000	\$1,000,000	90%
\$300 Million	\$60,000	\$1,000,000	80%
\$300 Million	\$70,000	\$1,000,000	90%
\$300 Million	\$50,000	\$250,000	90%

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) 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 Maryland decides to pursue a 1332 waiver, Wakely would continue to revise and refine the assumptions within this analysis with the most recent data available. There have been significant market changes which makes estimating the 2019 market and impact of reinsurance less certain. In addition, at high cap and coinsurance levels, the actual reinsurance funding needed can be more volatile if there are significant swings in catastrophic claims. For this reason, it is possible that the results of this analysis will vary from those included in a 1332 waiver, especially pertaining to 2019 estimates and the resulting impact to premiums, pass through amounts, and reinsurance parameters. Wakely will work with Maryland during these updates to ensure the most appropriate assumptions are incorporated into the analysis.**

## Appendix A

### Data and Methodology

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

1. Using publicly available data (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 the Maryland Health Connection as of 2/20/2018. This point estimate was then adjusted to a yearly average by an attrition factor. The attrition factor was based on the 2016 attrition experience, as measured by CMS' Effectuated Enrollment Report and the 2016 HHS Open Enrollment Report. The attrition was then reduced by 25% to account for potential differences in timing of data as a greater number of cancellations may have occurred in 2018 at the time of measuring enrollment than had occurred in 2016 at the time of data measurement.
  - b. On Exchange enrollment for 2018 was measured using Maryland's Health Connection data as of 2/20/2018. We adjusted the results to estimate 2018 average enrollment using the 2016 attrition experience, as measured by CMS' Effectuated Enrollment Report and the 2016 HHS Open Enrollment Report. The attrition was then reduced by 25% to account for potential differences in timing of data as a greater number of cancellations may have occurred in 2018 at the time of measuring enrollment than had occurred in 2016 at the time of data measurement.
  - c. Off Exchange enrollment for 2018 was measured using off Exchange 2018 enrollment provided by issuers estimated as of 1/30/2018 and then adjusted for estimated attrition based on 2016 on Exchange average enrollment attrition experience, as measured by CMS' Effectuated Enrollment Report and the 2016 HHS Open Enrollment Report. The attrition was then reduced by 25% to account for potential differences in timing of data as a greater number of cancellations may have occurred in 2018 at the time of measuring enrollment than had occurred in 2016 at the time of data measurement.
2. Given the uncertainty around the 2019 market, Wakely estimated three different scenarios for enrollment in 2019, before the impact of reinsurance: a scenario where a mandate is enforced in Maryland; a scenario in which the impact of mandate repeal is high; and a scenario in which the impact of mandate repeal is more muted.

- a. **Mandate Scenario:** In the mandate scenario, we assumed that Maryland's enrollment would not be affected by the effective national repeal or other potential regulatory changes. Overall enrollment in 2019 was estimated using a non-linear enrollment response function estimated by the Council of Economic Advisors (CEA take-up function).<sup>2</sup> 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. However, increased attractiveness of APTCs may attract additional individuals to apply for APTC eligibility as has happened between 2016 and 2018. Therefore, 2019 APTC enrollment was assumed to be slightly higher (1%) than 2018 enrollment. The result of these two assumptions is that enrollment decreases would occur among the unsubsidized portion of the individual market. 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 Maryland in 2019. The initial baseline was the previous mandate enforced scenario. Enrollment losses due to the mandate are estimated using the Center for American Progress' state level estimates of the CBO enrollment losses.<sup>3</sup> These losses were estimated for the 2025 year, so an adjustment, following the CBO's estimates for 2019<sup>4</sup>, was made to estimate Maryland specific enrollment attrition in 2019 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 if regulations change for 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 Maryland in 2019. 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 the Center for American Progress' state level estimates but then Maryland-specific enrollment attrition in 2019 due to the loss of the mandate was reduced to match the nationwide total enrollment losses as estimated by the CMS Office of the Actuary.<sup>5</sup> While CBO estimated a nationwide loss of 3 million enrollees in 2019,

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<sup>2</sup>[https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701\\_individual\\_health\\_insurance\\_market\\_cea\\_issue\\_brief.pdf](https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701_individual_health_insurance_market_cea_issue_brief.pdf)

<sup>3</sup> <https://www.americanprogress.org/issues/healthcare/news/2017/12/05/443767/estimates-increase-uninsured-congressional-district-senate-gop-tax-bill/>

<sup>4</sup> <https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53300-individualmandate.pdf>

<sup>5</sup> Please note the while the updated National Health Expenditure estimated an overall reduction of enrollment in the individual due to the mandate loss at 2 million as of 2021 it did not provide point estimates for 2019. As such we rely on an earlier OACT estimate found here for 2019 effects

the Office of the Actuary estimated an approximate loss of 2 million enrollees due to the mandate repeal. The result of the mandate loss for this scenario and resulting premium increases could cause additional enrollment losses, especially given the potential of alternative non-ACA products if regulations change for short-term limited duration plans and associations plans.

3. State wide average premium, before the impact of reinsurance: Wakely used the 2016 state average premium as reported by CMS on their June 30<sup>th</sup> report for the 2016 benefit year. This amount was increased by 25.2% as measured by the state rate review template to calculate 2017 state average premiums. Because of the lateness of the CSR adjustment to calculate 2018 premiums, we collected the 2018 average premiums including the CSR load from the issuers and calculated a weighted average of 41.1% using the issuers 2018 projected member months submitted in their rate filings. To calculate 2019 premiums, we increased premiums by the following:
  - a. Estimated medical and prescription drug trend. We developed the trend assumption from issuer 2018 rate filings.
  - b. Premiums were further increased due to uncertainty and potential for worse morbidity than expected in 2018.
  - c. Since the insurer fee will not be in effect for 2019, we lowered premiums in 2019 by approximately 1.9%, which was calculated using 2018 rate filings.
  - d. Finally, premiums were increased further to account for increased market morbidity as a result of premium increases driving enrollment decreases. To the extent that these increases are too conservative (or aggressive) will have an impact on the results of this analysis. Maryland should consider the level of conservatism that they may want to incorporate into this analysis.
  - e. For the two “no mandate” scenarios, the resulting morbidity increase due to enrollment attrition was higher, given larger expected enrollment decreases. The final result was an estimated premium increase of approximately 30% in the mandate scenario, 40% in the OACT based no mandate scenario, and approximately 45% in the CBO based no mandate scenario.

**It is important to note that actual premium increases for 2019 will be developed by the issuers and could vary significantly from these estimates. Based on conversations with the issuers and the state, we believe these rate increases are in the wide range of expected increases for 2019.**

4. APTC amounts per member per month (PMPM) for 2018 were measured via a Maryland Health Connection data sent to Wakely on 2/20/2018. To estimate 2019 APTC PMPMs, we used Maryland Health Connection data sent to Wakely on 2/20/2018 to measure the

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<https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/AHCA20170613.pdf>

average net premium among APTC enrollees (that is the actual amount APTC enrollees pay). We also increase the required contribution (i.e., net premium) to conform with the indexing of the contribution rate. We increased it 1% annually from 2018 to 2019. We then inflated gross premiums for APTC enrollees (the 2018 APTC amounts plus net premiums) by the 2019 premium increase less 5% since the gross premiums for APTC enrollees tends to increase at a lower rate. This new gross premium amount is then subtracted by the net premium values (since APTC enrollees share of premiums is capped based on their respective household income) to calculate the 2019 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 2.75% 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 (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 2016 data for shifts in members and claims costs, including trend, mix, and other changes. As previously stated, the estimated morbidity change was a 19% increase from 2016 to 2019. The annual increase for all other factors was calculated at 19% in order to achieve a claims to premium ratio of 85% in 2019.

In order to remove enrollment while targeting an increase in morbidity (i.e. claims PMPM) from 2016 to 2019, 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 30<sup>th</sup> 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 80<sup>th</sup> 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 2016 to 2018. Some of the numbers, particularly 2018, are estimates, since only initial enrollment numbers and premiums are available.

**Table 6: Enrollment and Premiums 2016 to 2018 Baseline**

Baseline	2016	2017	2018
<b>Average Annual Enrollment</b>			
Total Non-Group Enrollment	250,370	223,584	180,071
Exchange Enrollment	130,685	127,184	121,369
APTC Enrollment	95,054	99,579	103,468
Non-APTC Exchange Enrollment	35,631	27,605	17,901
Off-Exchange Enrollment	119,685	96,400	58,702
<b>Per Member Per Month (PMPM) Amounts</b>			
Total Non-Group Premium PMPM	\$340.73	\$426.60	\$601.98
APTC PMPM	\$246.90	\$316.72	\$503.83
<b>Total Annual Dollars</b>			
Total Non-Group Premiums	\$1,023,706,452	\$1,144,557,853	\$1,300,784,191
Total APTCs	\$281,625,991	\$378,462,886	\$625,562,615

The following table shows the 2019 estimated enrollment, premiums, and subsidies under the three enrollment scenarios.

**Table 7: Enrollment and Premium Projections 2019 Baseline**

	2018	2019 Mandate	2019 No Mandate High	2019 No Mandate Low
<b>Average Annual Enrollment</b>				
Total Non-Group Enrollment	180,071	172,755	122,715	139,395
Exchange Enrollment	121,369	120,452	97,460	105,124
APTC Enrollment	103,468	104,503	89,758	94,673
Non-APTC Exchange Enrollment	17,901	15,949	7,701	10,451
Off-Exchange Enrollment	58,702	52,302	25,255	34,271
<b>Per Member Per Month (PMPM) Amounts</b>				
Total Non-Group Premium	\$601.98	\$780.19	\$873.92	\$840.27
APTC	\$503.83	\$648.78	\$742.32	\$708.74
<b>Total Annual Dollars</b>				
Total Non-Group Premiums	\$1,300,784,191	\$1,617,379,035	\$1,286,917,310	\$1,405,554,097
Total APTCs	\$625,562,615	\$813,587,853	\$799,552,225	\$805,180,750

The following table shows for each funding level and the No Mandate Low scenario, the calculations to arrive at the pass through and premium impacts.

**Table 8: 2019 Pass Through and Premium Impact Calculations**

Scenario	\$300 Million Funding	\$350 Million Funding	\$400 Million Funding
Enrollment	No Mandate Low	No Mandate Low	No Mandate Low
<b>Baseline</b>			
Total Non-Group Enrollment	139,395	139,395	139,395
APTC Enrollment	94,673	94,673	94,673
Total Non-Group Premium PMPM	\$840.27	\$840.27	\$840.27
Gross Premiums PMPM for APTC Members	\$838.57	\$838.57	\$838.57
Net Premiums PMPM for APTC Members	\$129.84	\$129.84	\$129.84
APTC PMPM	\$708.74	\$708.74	\$708.74
Total Non-Group Premiums	\$1,405,554,097	\$1,405,554,097	\$1,405,554,097
Total APTCs	\$805,180,750	\$805,180,750	\$805,180,750
<b>After Reinsurance</b>			
Reinsurance Funding	\$300,000,000	\$350,000,000	\$400,000,000
Reduction in Premiums (Reinsurance Funding)	-21.3%	-24.9%	-28.5%
Reinsurance Assessment	2.8%	2.8%	2.8%
Reduction in Premiums (Improved Morbidity)	-1.0%	-1.2%	-1.5%
<b>Total Premium Impact</b>	<b>-19.9%</b>	<b>-23.7%</b>	<b>-27.5%</b>
Total Non-Group Premium PMPM	\$672.68	\$640.83	\$609.07
Gross Premiums PMPM for APTC Members	\$671.32	\$639.54	\$607.84
Net Premiums PMPM for APTC Members	\$129.84	\$129.84	\$129.84
APTC PMPM	\$541.48	\$509.70	\$478.00
Percent Change in Total Enrollment	2.9%	3.5%	4.2%
Total Non-Group Enrollment	143,442	144,343	145,294
APTC Enrollment	94,673	94,673	94,673
Total Premiums	\$1,157,884,248	\$1,109,997,731	\$1,061,928,351
Total APTCs	\$615,164,658	\$579,061,121	\$543,045,476
<b>Savings</b>			
Estimated APTC Savings	\$190,016,092	\$226,119,629	\$262,135,274
Difference in User Fees	\$0	\$0	\$0
Difference in Insurer Fees	\$0	\$0	\$0
<b>Estimated Net Federal Savings</b>	<b>\$190,016,092</b>	<b>\$226,119,629</b>	<b>\$262,135,274</b>
<b>Pass Through</b>	<b>63.3%</b>	<b>64.6%</b>	<b>65.5%</b>

## 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 2016 EDGE Server XML data from each individual market carrier. This data collected from the other 2016 individual market carriers 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 2016.
- The June 30<sup>th</sup> Risk Adjustment and Reinsurance Report for the 2016 benefit year produced by CMS<sup>6</sup>
- The 2016 and 2017 Open Enrollment Report PUF produced by HHS<sup>7</sup>
- Effectuated Enrollment Reports released by CMS<sup>9</sup>
- Maryland’s 2018 Open Enrollment data<sup>10</sup>
- 2018 Exchange enrollment and APTC data sent to Wakely from Maryland on 2/20/2018
- CBO Analysis on Impact of Repeal of the Mandate<sup>11</sup>
- OACT Analysis on Impact of Repeal of the Mandate<sup>12,13</sup>
- 2018 rate filings for the state of Maryland

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<sup>6</sup> <https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs/Downloads/Summary-Reinsurance-Payments-Risk-2016.pdf>

<sup>7</sup> <https://aspe.hhs.gov/health-insurance-marketplaces-2016-open-enrollment-period-final-enrollment-report>

<sup>8</sup> [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Marketplace-Products/Plan\\_Selection\\_ZIP.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Marketplace-Products/Plan_Selection_ZIP.html)

<sup>9</sup> <https://downloads.cms.gov/files/effectuated-enrollment-snapshot-report-06-12-17.pdf>

<sup>10</sup> <https://downloads.cms.gov/files/effectuated-enrollment-snapshot-report-06-12-17.pdf>

<sup>11</sup> <https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53300-individualmandate.pdf>

<sup>12</sup> <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/AHCA20170613.pdf>

<sup>13</sup> <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/ProjectionsMethodology.pdf>

- Issuer information provided by Maryland which was used to identify the size of the off Exchange market in 2018
- Discussions with Maryland issuers
- Reinsurance assessment of 2.75% in 2019 from the Department of Legislative Services

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

- Data Limitations.
  - As discussed above, Wakely collected EDGE data from the 2016 individual market carriers in order to complete this analysis. However, Wakely was not able to obtain a full set of EDGE data from one carrier. Wakely incorporated the data that was provided from the carrier into the analysis, and the limitation is not expected to have a significant impact on the results of the analysis. In addition, there were some variances in the EDGE data compared to other data sources that were used to check the reasonability of the EDGE data. Wakely worked with the carriers to understand whether these variances in the EDGE were known and/or expected to vary in impact in future years. To the extent the EDGE data varies differently in future years compared to Wakely's adjustments, the results of the analysis could be impacted.
  - 2017 detailed data and 2018 emerging enrollment and premium data were not yet fully available. Incorporating this data will reduce the uncertainty since less information will need to be estimated.
- Political Uncertainty. There is significant policy uncertainty around future federal actions in regards to the ACA market. Potential Maryland policy responses, for example, a state mandate, is also a source of uncertainty. For example, funding of CSRs by Federal government would reduce pass through amounts relative to what is estimated in this report.
- Enrollment Uncertainty. Given the combination of premium increases and the CSR load requirements, the size of the 2018 off Exchange market is uncertain. At the time of producing that report, only initial 2018 enrollment data was available. 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 that several regulations (association plans, short-term duration plans, etc.) have not been finalized, there is uncertainty in how issuers may respond in their 2019 premiums. There is additional uncertainty as metal level shifting that may have occurred in 2018 has not been fully accounted for due to lack of data. These

uncertainties result in limitations in providing point estimates on reinsurance parameters and impacts of a 1332 waiver.

- **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 is 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.

## Appendix D

### Disclosures and Limitations

**Responsible Actuaries.** Julie Peper and Danielle Hilson are the actuaries responsible for this communication. They are Members of the American Academy of Actuaries and Fellows of the Society of Actuaries. They meet 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 the Maryland. 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 Maryland 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 the state of Maryland.

**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 Maryland. Additionally, final federal regulations on short-term limited duration plans or associations plans have not yet been released. Nor have Maryland regulatory reactions to these potential regulations been finalized. Material changes as a result of Federal or state regulations on short-term limited duration plans or association plans 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. 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 supersedes 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