

MILLIMAN REPORT

# Proposed health savings account plan options in individual marketplace:



## What percentage of enrollees may financially benefit?

Commissioned by Paragon Health Institute

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## Purpose, scope, and background

Paragon Health Institute (Paragon) has commissioned Milliman to evaluate a portion of a policy proposal that seeks to add health savings account (HSA) plan options to the individual health insurance marketplaces created by the Patient Protection and Affordable Care Act (ACA). Specifically, Milliman has been asked to estimate the percentage of enrollees who could financially benefit by choosing an HSA plan in place of a non-HSA plan, where the comparisons are made using a limited scope of actuarial assumptions and plan parameters.

In June 2022, Paragon published a policy proposal called “The HSA Option”<sup>1</sup>. Under this proposal, individuals who are eligible for cost sharing reduction (CSR) subsidies in the individual marketplace would be able to select an HSA plan as an alternative plan option. The HSA plan would include an HSA contribution. The HSA contribution is money that the enrollee can use to pay for cost sharing during the benefit year, spend on other qualifying health care expenses, or save and apply to future health expenditures. The HSA plans would be expected to have higher deductibles and maximum out of pocket limits compared to non-HSA plans of similar overall benefit value and premium. Paragon used a modified version of the 2023 federal Actuarial Value (AV) Calculator to develop pairs of HSA and non-HSA plans, where plans within each pair have similar actuarial values (i.e., the actuarial value metric produced by the AV Calculator). For this analysis, Milliman produced a modified AV Calculator that values HSA contributions as a 100% paid benefit, rather than a benefit that is limited to the percentage that would be spent on cost-sharing for essential health benefits during the year, which is the current AV Calculator methodology. This modification is discussed later in this report.

HSA plans typically benefit individuals more when they have relatively low claim costs, as they retain more of the HSA contribution to spend on future healthcare needs. For this reason, HSA plans often attract members who anticipate having low claims costs and therefore hope to save HSA contributions over time. The main downside for the individual is that a single high-cost medical episode can use most or all of the accumulated HSA contributions due to the high deductible and maximum out of pocket limit.

HSA plans offer flexibility for consumers in two ways. First, the HSA funds can be spent on a greater scope of health services and supplies. Individual plans offered in the ACA marketplace are required to cover ten essential health benefits<sup>2</sup>. HSA funds can be spent on these benefits as well as on additional health services or medical supplies that are not covered by standard ACA individual insurance plans, including adult vision care, adult dental care, hearing aids, infertility treatment, over-the-counter (OTC) medical supplies, and medical management programs. Second, HSA funds can be saved and invested for future medical expenses. A traditional health plan has a benefit coverage period of one year. When the benefit year is over, the cost sharing limits reset, and no benefit is carried forward. With an HSA plan, the cost sharing limits still reset each year, but the remaining HSA funds can be saved and applied in the future. This flexibility to save HSA funds is particularly attractive to individuals who expect to be relatively healthy during the benefit year. Although this flexibility is valuable to many consumers, our analysis does not quantify the value of these two features of HSA plans.

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<sup>1</sup> Paragon. The HSA Option. Retrieved September 29, 2022, from <https://paragoninstitute.org/the-hsa-option/>. The HSA contribution levels and plans modeled in this paper are different from the June 2022 version of Paragon’s proposal. The HSA plans in this paper are based on Paragon’s revised draft of their proposal which is expected to be published in November 2022. We understand that the proposed HSA plans are illustrative and may change again in the future.

<sup>2</sup> Healthcare.gov. What Marketplace Health Insurance Plans Cover. Retrieved September 29, 2022, from <https://www.healthcare.gov/coverage/what-marketplace-plans-cover/>.

In this report, we are providing quantitative analysis to compare the net benefit between selected HSA and non-HSA plan pairings for individuals at different healthcare expenditure levels. We use the claim probability distributions within the 2023 federal Actuarial Value Calculator to estimate claim expenditures for each plan, and then we calculate the net benefit difference between the plans. The net benefit difference compares the combined impact of the HSA plan's contribution and higher cost sharing to the impact of the non-HSA plan's lower cost sharing. We also briefly discuss reasons why the actual percentage of individuals who save with an HSA could be higher or lower.

Milliman does not advocate for or against healthcare policies. Our analysis of the potential benefits of the HSA plan options should not be interpreted as support for or disapproval of this policy proposal.

Further, our analysis is limited in scope to comparing expected costs between specific pairings of HSA and non-HSA plans using a claim probability distribution based on 2018 individual and small group claims experience for all plan design types. There are additional items that should be considered when evaluating a proposal to add HSA plans to the individual market. These considerations include but are not limited to the following items: (a) the behavior and healthcare needs of those who actually enroll in the HSA plans may be significantly different from the experience data underlying this model's claim probability distribution; (b) some individuals who select an HSA plan may not be able to satisfy the higher deductible level, which could result in bad debt issues for providers and carriers; (c) carriers may have challenges setting premium rates for HSA plans, given the fixed HSA benefit, the morbidity level and behavior pattern of individuals who enroll in HSA plans, and the individual market's rating requirements and risk adjustment transfer program; and (d) premium subsidies in the individual market are currently enhanced and the net pricing of any new HSA plans could change if the level of subsidies change in the future. We expand upon these four considerations later on in the report. Therefore, this is not a comprehensive analysis of all factors that could affect individual plan selection choice or a health plans' decisions on whether to offer and how to price these plans. We are not providing commentary on other parts of Paragon's policy proposal.

## Key findings

The key findings addressed in this report are as follows:

- In an HSA plan, the HSA contributions would partially offset the higher out-of-pocket expense, provide greater flexibility in healthcare spending, and afford an opportunity to accumulate funds for future benefit years. The HSA plan tends to provide a better net benefit than the non-HSA plan for most individuals. However, the relatively fewer individuals who end up with the higher claim levels will tend to have significantly more out-of-pocket expense under the HSA plan, owing to its higher deductible and out-of-pocket maximum, and this financial outcome could outweigh the other benefits for these individuals.
- Using the claim probability distributions within the 2023 federal AV Calculator, we estimate that approximately two out of three individuals would benefit by choosing an HSA plan over a comparable non-HSA plan. The savings vary based on income range, as follows:
  - Three out of four individuals with incomes in the range of 200% to 250% federal poverty level (FPL) would benefit by choosing an HSA plan over a comparable non-HSA plan. Of

2022 enrollees who were CSR eligible, 7% fall in this income range, based on open enrollment data from the federal marketplace<sup>3</sup>.

- Two out of three individuals in the 100% to 150% and 150% to 200% FPL income ranges would benefit when choosing the HSA plan over the non-HSA plan. Of 2022 enrollees who were CSR eligible, 67% were in the 100% to 150% FPL income range and 26% were in the 150% to 200% FPL income range.

## Analysis and methodology

We compared the net benefit difference between an HSA plan and a non-HSA plan. Both plans have a similar actuarial value, as measured by a modified 2023 federal AV Calculator<sup>4</sup>. The net benefit difference depends on the HSA contribution, the plan's cost-sharing terms (deductible, out-of-pocket maximum, and coinsurance percentage), premium differences, and the actual claim costs.

We used a claim probability distribution to model the net benefit value for individuals between the pairs of HSA and non-HSA plans that Paragon provided. For this comparison, we assumed that the premiums will be the same between the two plans, as each plan has an equivalent actuarial value using the modified 2023 federal AV Calculator. We discuss later in this report why the premiums may be different in practice.

We also assumed that individuals behave the same whether or not they receive an HSA. In practice, individuals who receive an HSA contribution may be more motivated to make healthcare decisions that preserve their HSA contributions. These healthcare decisions may include searching for lower cost providers or services as well as practicing healthier behaviors such as improving diet or exercise. Individuals with HSA funds may inadvertently defer too much care. For example, an individual who defers a cancer screening may have higher healthcare cost in the future, in addition to a worse health outcome. Our analysis does not account for any changes in behavior as a result of having HSA funds.

To help explain the net benefit difference calculation, the table in Figure 1 shows a pair of HSA and non-HSA plans from Paragon's policy proposal. The benefits and provider network are assumed to be identical except for the cost-sharing and HSA contribution differences noted. We calculated the net benefit difference as the HSA plan's HSA contribution less the HSA plan's out-of-pocket spend plus the non-HSA plan's out-of-pocket spend. We calculated the net benefit difference for all claim spending amounts. Then, we used the claim probability distribution table from the 2023 federal AV Calculator to quantify the percentage of individuals who would benefit under the HSA and the non-HSA plans.

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<sup>3</sup> 2022 Open Enrollment Data available here: <https://www.cms.gov/research-statistics-data-systems/marketplace-products/2022-marketplace-open-enrollment-period-public-use-files>

<sup>4</sup> Note that Milliman modified the 2023 federal AV Calculator to fully value the HSA contribution as a 100% incurred expense for the plan year. By design and according to its intended use, the unmodified AV Calculator accrues toward AV only the portion of the HSA contribution that is expected to be used toward member cost sharing on essential health benefits. See the Discussion of Assumptions and Additional Notes section below for a detailed explanation.

**Figure 1: Silver CSR 87% Plan 1 Comparison – 150% to 200% FPL**

	<b>Non-HSA</b>	<b>HSA</b>
<b>Deductible</b>	\$1,500	\$7,500
<b>Coinsurance</b>	0%	0%
<b>Maximum Out-of-Pocket</b>	\$1,500	\$7,500
<b>HSA Contribution</b>	\$0	\$1,630
<b>Modified Actuarial Value</b>	87.7%	87.7%

The impact of modifying the AV Calculator to value the full benefit of the HSA contribution is demonstrated in the table in Figure 2.

**Figure 2: Actuarial Value of Silver CSR 87% HSA Plan 1**

	<b><u>Original AVC</u></b> <b>No HSA Contribution</b>	<b><u>Original AVC</u></b> <b>With HSA Contribution to Match Non-HSA AV</b>	<b><u>Modified AVC</u></b> <b>With HSA Contribution Adjusted to Match Non-HSA AV</b>
<b>Deductible</b>	\$7,500	\$7,500	\$7,500
<b>Coinsurance</b>	0%	0%	0%
<b>Maximum Out-of-Pocket</b>	\$7,500	\$7,500	\$7,500
<b>HSA Contribution</b>	<b>\$0</b>	<b>\$3,330</b>	<b>\$1,630</b>
<b>Actuarial Value (AV)</b>	66.5%	<b>87.7%</b>	79.6%
<b>Modified AV</b>			<b>87.7%</b>

When identifying an equivalent HSA contribution for the selected plan pairings' cost sharing parameters, we first solved for the claim amount where the net out-of-pocket expense under the two plans is the same. If a member has \$3,130 in annual claims, which is equal to the non-HSA deductible of \$1,500 plus the HSA plan's HSA contribution of \$1,630, then the individual would have the same net benefit under both plans—a net outlay of \$1,500. At this claim amount, the outlay would be the same for the member under the non-HSA plan. The net benefit difference between the two plans for this claim amount would be \$0. Furthermore, an individual would benefit from choosing the HSA plan if their annual claims are under \$3,130, and would be worse off if claims are above \$3,130. Using the 2023 federal AV Calculator claim probability tables<sup>5</sup>, we see that 67% of individuals (about two out of three) in the 150% to 200% FPL income range are expected to have annual claims under \$3,130 and would benefit from selecting the HSA plan.

We then calculated the annual claim amount where the maximum net benefit difference occurs. If annual claims are at or below the non-HSA deductible of \$1,500, then the net benefit difference of choosing the HSA over the non-HSA is at its maximum of \$1,630, which is equal to the HSA contribution. About half of

<sup>5</sup> For this Silver 87 plan, we use the gold plan combined medical and pharmacy claim probability distribution. For the Silver 73 plan, we use silver. For the Silver 94, we use the platinum.

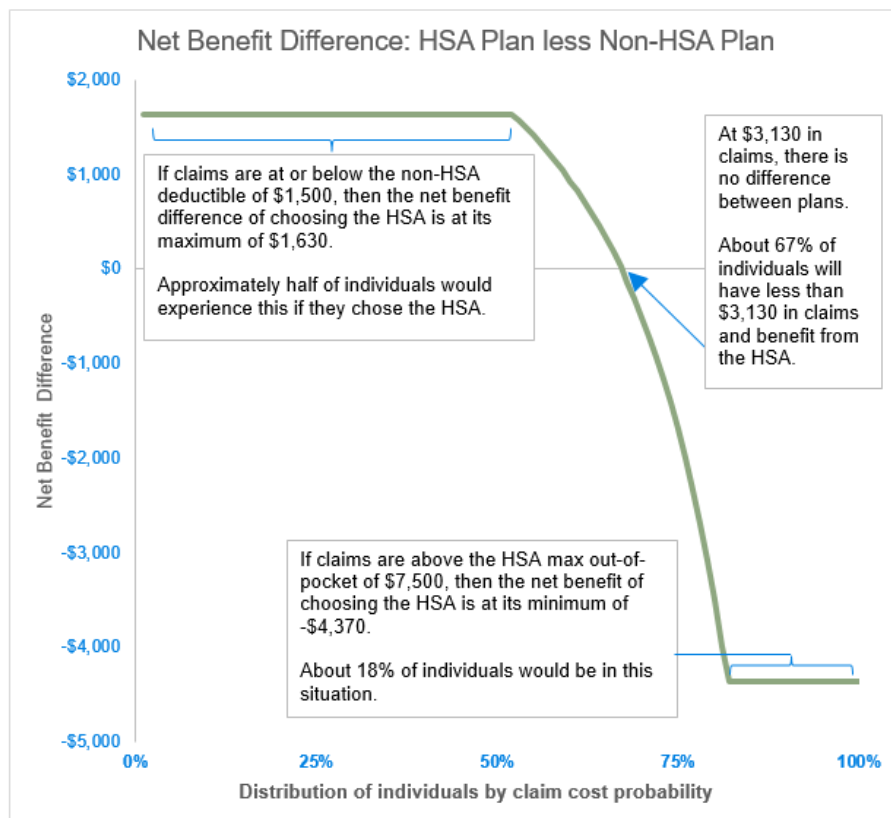
individuals would be in this situation according to the federal AV Calculator’s underlying claim probability distributions.

The minimum net benefit difference happens when claims are above the HSA plan’s maximum out of pocket limit of \$7,500. When claims are at this level, an individual with the HSA plan would pay \$4,370 more out of pocket compared to the non-HSA plan. About 18% of individuals would be in this situation, and they would be better off with the non-HSA plan.

While the HSA plan tends to provide a better net benefit than the non-HSA plan for most individuals, the relatively fewer individuals who end up with the higher claim levels will tend to have significantly more out of pocket expense under the HSA plan, owing to its higher deductible and out-of-pocket maximum. In this example, the average net benefit difference for the 67% of individuals who would be better off with the HSA is around \$1,500. Balancing this, the average net benefit difference for the 33% of individuals who benefit from a non-HSA plan is around \$3,000.

The graph in Figure 3 illustrates the key values in the net benefit difference calculation. The silver CSR 87% Plan 1 results from Figure 3 match the scenario shown in the fifth rows of the tables in Figures 4 and 5.

**Figure 3: Silver CSR 87% Plan 1 Comparison – 150% to 200% FPL**



In Paragon’s proposal, there are four pairs of silver plan designs for each of the three CSR tiers (73%, 87%, and 94%). These plan pairs each have nearly identical actuarial values calculated using the modified 2023 federal AV Calculator (within 0.05% difference).

We calculated the net benefit difference for all 12 plan pairs using the 2023 federal AV Calculator claim probability distribution. The 12 plan pair plan designs are shown below in the table in Figure 4. The table in Figure 5 presents the net benefit difference metrics for each scenario. Figure 5 supports the first two observations from the key findings above. It is important to note that these simulations are run over a single year and a wider variation is expected over a multi-year period.

**Figure 4: HSA and Non-HSA Benefit Designs**

Plan	Income (% Federal Poverty Level)	CPD and CSR Level	Non-HSA Plan				HSA Plan				
			Deductible	Coinsurance	Max Out of Pocket	Actuarial Value	Deductible	Coinsurance	Max Out of Pocket	HSA Contribution	Modified Actuarial Value
1	200 to 250%	Silver	\$4,200	0%	\$4,200	74%	\$7,500	0%	\$7,500	\$630	74%
2		Silver CSR	4,475	0%	4,475	73%	7,500	0%	7,500	565	73%
3		73%	2,200	20%	7,250	74%	6,000	20%	7,500	570	74%
4		73%	2,475	20%	7,250	73%	6,000	20%	7,500	510	73%
1	150 to 200%	Gold	1,500	0%	1,500	88%	7,500	0%	7,500	1,630	88%
2		Silver CSR	1,615	0%	1,615	87%	7,500	0%	7,500	1,580	87%
3		87%	390	20%	3,000	88%	6,000	20%	7,500	1,590	88%
4		87%	550	20%	3,000	87%	6,000	20%	7,500	1,515	87%
1	100 to 150%	Platinum	475	0%	475	95%	7,500	0%	7,500	2,155	95%
2		Silver CSR	580	0%	580	94%	7,500	0%	7,500	2,085	94%
3		94%	200	20%	570	95%	4,700	20%	7,500	1,955	95%
4		94%	200	20%	760	94%	4,050	20%	7,500	1,795	94%

**Figure 5: Net Benefit Difference for Each Plan Pair**

Plan	Income	CPD	Single Year Time Horizon								
			% of Individuals w/ Positive Net Benefit under HSA	Max Net Benefit Difference	Claim Threshold for Max	% of Individuals w/ Max Net Benefit Difference	Min Net Benefit Difference	Claim Threshold for Min	% of Individuals w/ Min Net Benefit Difference	Average Value when HSA is beneficial	Average Value when Non-HSA is beneficial
1	200 to 250%	Silver	77%	\$630	\$4,200	75%	-\$2,670	\$7,501	16%	\$620	-\$2,100
2		Silver CSR	78%	\$565	\$4,475	76%	-\$2,460	\$7,501	16%	\$560	-\$2,000
3		73%	\$570	\$2,200	63%	-\$2,470	\$6,000	9%	\$530	-\$1,400	
4		75%	\$510	\$2,475	65%	-\$2,310	\$6,000	9%	\$480	-\$1,400	
1	150 to 200%	Gold	67%	\$1,630	\$1,500	52%	-\$4,370	\$7,500	18%	\$1,500	-\$3,000
2		Silver CSR	68%	\$1,580	\$1,615	54%	-\$4,305	\$7,500	18%	\$1,400	-\$3,000
3		87%	\$1,590	\$390	29%	-\$2,910	\$13,500	11%	\$1,200	-\$2,000	
4		87%	\$1,515	\$550	33%	-\$2,985	\$13,500	11%	\$1,200	-\$2,000	
1	100 to 150%	Platinum	65%	\$2,155	\$475	33%	-\$4,870	\$7,501	18%	\$1,700	-\$3,200
2		Silver CSR	65%	\$2,085	\$580	36%	-\$4,835	\$7,501	18%	\$1,700	-\$3,200
3		94%	\$1,955	\$200	24%	-\$4,975	\$18,705	7%	\$1,500	-\$2,700	
4		94%	\$1,795	\$200	24%	-\$4,945	\$21,302	6%	\$1,400	-\$2,400	

The percentage of individuals who would save with an HSA plan could be higher or lower than what we have modeled in this analysis for a variety of reasons. Two of the reasons are as follows: 1) the actual provider reimbursement levels will vary from what is assumed in the claim probability distribution, and 2) the morbidity of the individuals selecting the plans will vary from what is assumed in the claim probability distribution.

Provider reimbursement can vary significantly between carriers and geographies and directly impacts claim costs. To test our modeling, we calculated results under scenarios where reimbursement is 20% lower and 20% higher than what is implicit in the 2023 federal AV Calculator. As shown in the table in Figure 6, if reimbursement is lower, then the percentage of individuals who would save under the HSA plan would be



greater. Conversely, if reimbursement is higher, then the percentage of individuals who would save under the HSA plan would be lower.

**Figure 6: Scenario Testing – Provider Reimbursement**

Plan	Income	CPD	-20%	Baseline	+20%
			% of Individuals w/ Positive Net Benefit under HSA	% of Individuals w/ Positive Net Benefit under HSA	% of Individuals w/ Positive Net Benefit under HSA
1	200 to 250%	Silver	81%	77%	74%
2		Silver	81%	78%	75%
3		CSR 73%	76%	73%	71%
4			78%	75%	72%
1	150 to 200%	Gold	71%	67%	64%
2		Silver	72%	68%	64%
3		CSR 87%	66%	62%	58%
4			67%	62%	58%
1	100 to 150%	Platinum	69%	65%	61%
2		Silver	69%	65%	61%
3		CSR 94%	68%	64%	60%
4			67%	63%	59%

The morbidity level of the individuals will also influence the percentage who save with an HSA. For our analysis, we used the 2023 federal AV Calculator's claim probability distribution, which is based on individual and small group market data from 2018 calendar year. We selected this claim probability distribution for our model as it is publicly available and reflects the population in those marketplaces, including a heavy contribution from the individual marketplace enrollment. The individual market is primarily under age 65 though the average age tends to be older than the average age in the employer-sponsored group market. An individual's expectation of future morbidity impacts plan selection. If an individual expects to have lower claims, then the individual may be more likely to opt for an HSA plan, with a higher deductible and an HSA contribution. Similarly, if an individual expects to utilize significant medical services, then the individual may be more likely to choose a lower deductible option. As a result of this plan selection dynamic, if relatively healthier people choose the HSA plan, then the actual percentage of individuals who choose an HSA and benefit may be higher than what is shown in Figure 5 above.

Revisiting the results of Figure 5, a key observation about the HSA and non-HSA plan pairings is that when the *average* net benefit value is similar among the pair, then the *distribution* of the difference between their net benefit value can be significant. Going back to the plan pairing shown in Figures 1 and 2 above, four different members may experience the net benefit value outcome very differently depending on their ultimate claim levels. It can be difficult for individuals to guess their future claim expenses when making enrollment decisions, especially when they do not already have chronic conditions with continuing health care expenses. Therefore, individuals will need to weigh the benefits of accumulating HSA contributions over time against the chance of a high-cost health care episode.

**Figure 7: Illustrative Net Benefit Value for Four Individuals**  
**Silver CSR 87% Plan 1 Comparison – 150% to 200% FPL**

Illustrative Member	Total Claim Expense	Plan Benefit		Member Net OOP Expense (Savings)	
		When Selecting non-HSA Plan	When Selecting HSA Plan	When Selecting non-HSA Plan	When Selecting HSA Plan
Person A	\$500	\$0	\$1,630	\$500	(\$1,130)
Person B	\$2,000	\$500	\$1,630	\$1,500	\$370
Person C	\$5,000	\$3,500	\$1,630	\$1,500	\$3,370
Person D	\$15,000	\$13,500	\$9,130	\$1,500	\$5,870

## Discussion of assumptions underlying the net benefit difference calculation

For this analysis, we are assuming premium rates will be the same for the HSA plan and the non-HSA plan within each plan pair. In practice the premium rates may be different. We do not opine as to whether HSA plans will have higher or lower premiums than the non-HSA plans. Here are four reasons why the HSA plan premiums may be different, with additional reasons possible as well.

1. Health plans use their own pricing models, rather than the federal AV Calculator, to evaluate plan design richness. Marketplace offerings have consistently shown that identical AVs do not imply the same premium. Given that pricing models can vary from the federal AV Calculator, the premiums may vary between the two plan design types.
2. The risk adjustment transfer associated with each plan may be different. It is possible that members who select the HSA plan may have lower induced utilization given there is a higher deductible, while members who select the non-HSA plan with a lower deductible may have higher induced utilization. As a result of the plans having utilization differences, the plans may have different risk adjustment transfers, which could then drive premium differences.
3. Administrative expenses. The HSA plan may have an additional expense load in order to fund the HSA service, including the administrative activities pertaining to use of funds for qualifying health care expenses outside the scope of essential health benefits.
4. Network differences. Health plans may offer different provider networks for the HSA plan options, and these networks may have a different provider reimbursement level and care management methods.

The original 2023 federal AV Calculator was designed to value the HSA benefit only to the extent the HSA contribution is expected to be used during the year for cost sharing on essential health benefits (EHBs). Any amounts that would go towards non-EHB qualifying health care expenses or rolled over to the next year are not part of the AV. In this way, the AV Calculator values the HSA contribution in the same way as a health reimbursement arrangement (HRA) contribution, which is a benefit for which unused dollars are not rolled over to the next year, and also implicitly assumes no dollars are used for non-EHB benefits. This observation is not a criticism of the AV Calculator, as the AV Calculator's intended use is specifically to measure benefit value during the current benefit year on EHBs. Further, Milliman is not opining on the value of HSA contributions within plan designs. We recognize that there may be other ways to value the HSA contribution.

We modified the 2023 federal AV Calculator to count the full HSA contribution as a benefit<sup>6</sup>. This modification values the HSA contribution as a 100% paid benefit under the assumption that it can be applied to non-EHB qualifying health care expenses or rolled over to the next benefit year. As a result of the modification, the HSA contributions can be lower than what they would need to be without the modification in order to result in actuarial values that are equivalent to those of the non-HSA plan pairs<sup>7</sup>.

For this analysis, we used the 2023 federal AV Calculator<sup>8</sup> as the source for the claim probability distributions (without any modification). We think this is an appropriate source for this analysis, as it uses 2018 individual and small group nationwide claims data that is trended forward to 2023. We have also tested the net benefit difference using a claim probability distribution developed using the commercial Milliman Health Cost Guidelines™ and arrived at similar results.

The federal AV Calculator is updated each year and may produce materially different results in the future. If the federal AV Calculator changes, the plan designs and the results of this analysis may change as well.

## Additional challenges when evaluating HSA plans

The focus of this paper is to evaluate the net benefit difference between HSA plans and non-HSA plans using the claim probability distribution within the 2023 federal AV Calculator. There are other important items that should be considered when evaluating a proposal to add HSA plans to the individual market. We have listed four items and explain these ideas briefly. There are naturally additional considerations beyond these four items.

- (a) The behavior and healthcare needs of those who actually enroll in the HSA plans may be significantly different from the experience data underlying this model's claim probability distribution.

Generally, individuals who select HSA plans expect to have relatively lower medical costs for the upcoming year. These individuals may be less likely to have chronic, high-cost healthcare needs. Individuals selecting HSA plans may also have a preference for saving their HSA funds. As a result of this saving behavior, they may shop for lower cost covered medical services, choose alternative healthcare options or behaviors to help mitigate future care needs (such as non-covered therapy, diet, sleep, and exercise), or inadvertently defer care that may be ultimately beneficial and cost effective in the long run.

The experience data underlying the 2023 federal AV Calculator is based on individual and small group market experience from calendar year 2018. These individuals, for the most part, did not enroll in HSA plans. For example, only a small percentage (9%) of enrollment in the individual

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<sup>6</sup> We modified the 2023 federal AV Calculator's visual basic code module AVC\_12\_HSA as follows:

Unmodified lines of code

```
[line 18] HSA_VALUE = computeRowVal(gMaxdCol.Rng(1), HSA_ROW) * gBENECOINS_DEDUCT
```

```
[line 22] HSA_ADJ = Application.Min(BENEPAY, HSA_VALUE)
```

```
[line 24] HSA_MOD_AV = (vAV * AV_DENOM + HSA_ADJ) / AV_DENOM
```

Modified lines of code

```
[line 18] HSA_VALUE = AVCalcTab.Range("nrHSA_CNTRBTN").value
```

```
[line 22] HSA_ADJ = HSA_VALUE
```

```
[line 24] HSA_MOD_AV = (vAV * AV_DENOM + HSA_ADJ) / (AV_DENOM + Application.Max(0, HSA_ADJ - BENEPAY))
```

<sup>7</sup> Note that health plans will sometimes modify the inputs to the AV Calculator when substantiating the compliance of a plan with the metallic level requirements. Any adjustments have to be disclosed as part of the rate filing. The modifications we made in this analysis are not intended to be used to support rate filings.

<sup>8</sup> See the 2023 federal AV Calculator methodology at: <https://www.cms.gov/sites/default/files/2022-04/Final-2023-AV-Calculator-Methodology.pdf>

marketplace chose HSA-eligible plans during this time, and it is likely that the HSA-eligible plans did not include an HSA contribution<sup>9</sup>. Therefore, the claim probability distribution underlying the 2023 federal AV Calculator primarily reflects the behavior of individuals enrolled in non-HSA plans.

One variable that influences healthcare spending is income<sup>10</sup>. If individuals have higher incomes, they may have a greater ability to utilize healthcare services. Those who are lower income may have less flexibility and may prioritize other essential needs, such as food and shelter, over healthcare. The individual health insurance market has a relatively lower income level compared to the employer-sponsored insurance market, as the enrollees in the individual market usually do not have higher paying jobs that provide employer-sponsored health insurance. For example, 53% of individuals signing up for coverage were eligible for a CSR plan, meaning their income level was at or below 250% of the federal poverty level (\$33,975 for an individual and \$69,375 for a family of four<sup>11</sup>). If the income level of HSA enrollees is higher than the average individual marketplace member, then there may be higher healthcare spending than what is modeled in Figure 3.

(b) Some individuals who select an HSA plan may not be able to satisfy the higher deductible level, which could result in bad debt issues for providers and carriers.

Although many individuals are expected to financially benefit with an HSA plan, a significant minority may have higher claim costs (as illustrated in Figure 3). If these individuals expected to have lower healthcare costs, it is possible that some individuals with surprise medical conditions during the policy year may not be able to afford the relative higher costs under their HSA plan. As a result, there may be additional medical debt and financial disputes that would be a burden to the individuals, the providers, and carriers. This situation could lead to additional adverse situations, such as reputational harm to the stakeholders involved with the HSA plans. It may also affect the carrier's ability to form a low-cost provider network and thereby affect the pricing of the HSA plan.

(c) Carriers may have challenges setting premium rates for HSA plans, given the fixed HSA benefit, the morbidity level and behavior pattern of individuals who enroll in HSA plans, and the individual market's rating requirements and risk adjustment transfer program.

There are many considerations that go into setting premium rates. Adding an HSA plan with a fixed HSA contribution as a plan benefit to a carrier's portfolio of plans may present some additional pricing challenges, including a greater degree of adverse selection (which is already present as a challenge in the individual market). A full discussion of what is involved in setting premium rates is outside the scope of this paper.

(d) Premium subsidies in the individual market are currently enhanced. The net pricing of any new HSA plans could change if the level of subsidies changes in the future.

Individuals are price sensitive when shopping for insurance plans. Many individuals in the individual market now receive subsidies to lower their premiums. Based on the 2022 open enrollment individual marketplace data, 91% of individuals were eligible for an after premium tax subsidy. These subsidies have been enhanced from 2021 through 2025 as a result of Congress passing the American Rescue Plan Act of 2021 and the Inflation Reduction Act of 2022.

<sup>9</sup> HSA enrollment data available here at: <https://www.cms.gov/files/zip/2014-2022-oep-deductibles-and-hsa-enrollment.zip>

<sup>10</sup> "Healthcare Expenditure and Economic Performance: Insights From the United States Data", Viju Raghupathi and Wullianallur Raghupathi, *Frontiers in Public Health*; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7237575/>

<sup>11</sup> FPL thresholds for 2022 are available here at: <https://www.healthcare.gov/glossary/federal-poverty-level-fpl/>

## Caveats and Limitations

### Authors

The authors of this report, Mike Hamachek and Scott Jones, are members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to perform the analysis supporting this report.

The authors would like to thank Ben Diederich and Doug Norris for their peer review. The authors would also like to thank Jason Karcher and Jeffrey Lin for their contributions.

### Advocacy

Milliman is not advocating for or endorsing any specific policy changes to the individual or small group health insurance marketplace programs in this report.

### Use of report

The data and exhibits in this report are provided to support the conclusions contained herein, limited to the scope of work specified by Paragon, and may not be suitable for other purposes.

### Data reliance

In performing this analysis, we relied upon information obtained from Paragon, and other publicly available information, including the 2023 federal AV Calculator. We have not audited or verified this data and information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. In that event, the analysis may not be suitable for its intended purpose.

### Uncertainty

Differences between our projections and actual net benefit differences between plans depend on the extent to which future experience conforms to the assumptions made for the analyses. It is certain that actual experience will not conform exactly to the assumptions used in these analyses.

If this policy were implemented, there will likely be many plans available and the plans will likely be different from the plans that are modeled in this paper. Individuals may choose a plan based in part on their expected health expenditures, meaning relatively healthier members may choose an HSA plan over a non-HSA plan. As a result of this plan selection, the raw claim distributions for HSA and non-HSA plans may emerge to be different over time. The risk adjustment transfer program is intended to compensate for the morbidity differences between plans, though this transfer may not completely adjust for morbidity differences between the plans. An analysis of risk adjustment transfers is outside the scope of this paper.

### Variability of results

Any projection of future insurance costs involves assumptions. While our analysis will be based on sound actuarial principles, it is important to note that variation from the projected result is not only possible, but, in fact, probable. While the degree of such variation cannot be quantified, it could be in either direction from the projections. Such uncertainty is inherent in any set of actuarial projections.

### Modeling

Milliman has built and relied upon certain models to estimate the values included in this report. The net benefit difference model was developed specifically to make the estimates that form the key findings of this report, and its use is appropriate in the limited application to which it was put. For this model, we have relied upon a claim probability distribution from the 2023 federal Actuarial Value Calculator. We have reviewed both models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose, and compliance with generally accepted actuarial practice. The models included in this report, including all input, calculations, and output, may not be appropriate and should not be used for any other purpose.

### Consulting Agreement

The terms of the Consulting Services Agreement between Milliman and Paragon apply to this report and its use.

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