

Fine-tuning actuarial values, one benefit at a time

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Estimating the impact of cost-sharing changes on the federal actuarial values (AVs) for ACA individual and small group plans is often a guessing game. As HHS limits the number of non-standardized plan options, this paper serves as a convenient reference to better estimate AV impacts driven by cost-sharing changes and to optimize issuers' product portfolio strategies.

Introduction

The 2024 Notice of Benefit and Payment Parameters¹ limits the number of non-standardized options for issuers offering qualified health plans (QHPs) through Federally-facilitated Exchanges (FFE) and State-based Exchanges on the Federal platform (SBE-FP). The number of non-standardized options per product type, metal level (excluding catastrophic), inclusion of pediatric and/or adult dental coverage, and inclusion of adult vision coverage in any service area will be limited to four non-standardized options for 2024 and two non-standardized options for 2025 and beyond.

The U.S. Department of Health and Human Services (HHS) AV Calculator (AVC) is a tool used to determine the AV of QHPs, as part of the Affordable Care Act (ACA) requirement for health plans to fall within a specified AV range for each metal level. The actuarial value, sometimes referred to as a paid-to-allowed ratio, measures the percentage of total healthcare expenses covered by a health plan for an average enrollee. Please see Figure 1 for the 2024 AV range for each metal level.

The AVC, required by HHS for QHPs to use since 2014, models the cost of essential health benefits (EHBs) covered by a plan, such as primary care visits, hospitalizations, and prescription drugs. It also considers cost sharing such as deductibles, copayments, and coinsurance.

FIGURE 1: 2024 AV RANGE BY METAL LEVEL

METAL LEVEL	AV RANGE
Platinum	88-92%
Gold	78-82%
Silver ²	68-72%
Silver 73	73-74%
Silver 87	87-88%
Silver 94	94-95%
Bronze ³	58-62%

AVC sensitivity analysis

Testing the impact of specific AVC input changes by plan can be a time-consuming, manual process. To assist with this process, we have compiled the tables in Figures 2 to 15 as a reference for the estimated impact to AV of changes to specific benefits and global inputs in the AVC for all standard metal level plans, including the silver cost-sharing reduction (CSR) plans. For each impact to the AV, only one benefit was changed at a time, while all other benefits were kept the same.

1 The full text of the Notice is available at <https://www.federalregister.gov/documents/2023/04/27/2023-08368/patient-protection-and-affordable-care-act-hhs-notice-of-benefit-and-payment-parameters-for-2024>.

2 Range is 70% to 72% for an on-exchange silver plan in the individual market.

3 Range is 58% to 65% for a bronze health plan that either covers and pays for at least one major service, other than preventive services, before the deductible, or meets the requirements to be a high-deductible health plan within the meaning of section 223(c)(2) of the Internal Revenue Code.

The starting benefits are the federal 2024 Standardized Plan Options Set One, as shown in Appendix A.⁴ The tables show the following information:

- **Impact of removing deductible applicability:** This measures the difference in AV between selecting *Subject to the Deductible* and *Not Subject to the Deductible* for each specific benefit, regardless of whether the base plan benefit actually is subject to deductible.
- **Impact of removing coinsurance applicability:** This measures the difference in AV between selecting *Subject to Coinsurance* and *Not Subject to Coinsurance* for each specific benefit if the base plan benefit is subject to coinsurance. We excluded benefits with copays, listed as “N/A,” because the AVC user guide specifies that copays paid in conjunction with coinsurance in the coinsurance range is not supported. Additionally, separate copay and coinsurance for a drug benefit is also not directly supported.
- **Impact of changing from a \$10 copay to a \$20 copay:** This measures the change in AV if a particular benefit not subject to coinsurance had a \$10 copay and changed to a \$20 copay. Please note that the base plan may have a starting copay other than \$10. The AV impact of a \$10 increase to a different starting copay could vary from the impact reflected in the table but usually will not be significantly different.
- **Impact of changing from a 10% coinsurance to a 20% coinsurance:** This measures the change in AV if a particular benefit without a copay had a 10% member coinsurance (90% insurer cost share) and changed to a 20% member coinsurance (80% insurer cost share). Please note that the base plan may have a starting member coinsurance other than 10%. The AV impact of a 10% increase to a different starting coinsurance could vary from the impact reflected in the table but usually will not be significantly different.
- **Impact of \$50 copay applying after a deductible:** This measures the change in AV if a particular benefit is subject to a deductible with a \$50 copay and changes to a \$50 copay that applies only after the deductible is met. The benefit is set so that it is not subject to coinsurance. Please note that the base plan may have a starting copay other than \$50. The AV impact could vary using different copays but this should give the user a general idea of the impact of having a copay apply only after the deductible has been met.
- **Impact of \$1,000 increase or decrease to deductible and maximum out-of-pocket (MOOP),** applying inpatient (IP) and skilled nursing facility (SNF) copays per day rather than admission, addition of \$1,000 health savings account (HSA) or health reimbursement arrangement (HRA) employer contribution, addition of copay maximum when specialty drug is subject to coinsurance, and copay limitations for inpatient and office visits, respectively, are also modeled. Note that, for the addition of the specialty drug copay maximum, we set the specialty coinsurance equal to the plan coinsurance and then measured the impact of applying the specialty drug copay maximum.

Note that all impacts to the AV displayed in Figures 2 to 15 have been rounded to two decimal places, meaning a 0.00% change might be nonzero, but rounds to 0.00%. Each of these benefit changes do not necessarily result in an AV-compliant plan; this exercise is to estimate differential AV changes and not (necessarily) to ensure compliance. The AV impacts shown are percentage point changes rather than percentage changes; in other words, if an AV changes from 70.0% to 71.0%, the AV impact shown would be 71.0% minus 70.0%, which equals 1.0%.

Based on Figures 2 to 15, the following benefit changes have the largest impact on AV:

- Adding an HSA/HRA employer contribution. This has the largest impact, on average, compared to all other AVC input changes that we measured. When including employer contributions to HSAs and HRAs that are integrated with group health plans, the AVC calculations assume that such contributions may only be used for cost sharing; thus, it would only be appropriate to input a contribution when this is known to be true. Note that we did not model HSA/HRA employer contributions for the silver CSR variants, which are only available in the individual market.
- Changing deductible or MOOP.
- Changing deductible applicability. The highest-impact services are emergency room services, primary care physician (PCP), outpatient (OP) facility, OP surgery, and preferred brand drugs.
- Copay changes. A \$10 copay increase has the highest impact for generic drugs, followed by PCP, specialist visit, lab OP and professional services, and OP surgery.

⁴ See <https://www.govinfo.gov/content/pkg/FR-2023-04-27/pdf/2023-08368.pdf>, page 111.

AVC strategy

All metal levels have a range of acceptable AVs. Most metal levels have a +/- 2 percentage point range, giving AVC users the option of configuring their plan benefits close to the low, middle, or upper end of the range. We present some potential strategies for each option:

- Low end of the AV range: This is expected to allow a benefit plan to be a low-cost option to the consumer compared to other benefit plans in the same metal level. The trade-off is leaner benefits, including higher deductibles and copays, which may be viewed as a barrier to using care by the consumer.
- Middle of the AV range: This gives the user the most flexibility from year to year. The AVC is updated every year, with some updates having larger impacts than others. Having a plan in the middle of the range makes it more likely to be in range the next year with few or no changes. This is also often the case at the low end of the AV range, as the AV tends to trend upward from year to year if benefits are kept the same.
- High end of the AV range: This can allow a benefit plan to stand out as a high-value option to the consumer. Marketable features like lower deductibles or out-of-pocket maximums can be touted compared to other benefit plans in the same metal level. The trade-off is that these plans have higher expected premiums.

Different issuers will employ different strategies for targeting particular segments of the AV range and may even use different strategies for multiple offerings within the same metal level to enable product differentiation.

AVC limitations

Because AV ranges correspond with specific metal levels, the AVC allows consumers to make plan design comparisons regarding the benefit richness of plans. It was not developed for pricing purposes, and the AV results generally should not be used directly for pricing.

AVs produced by the AVC may not match the AVs used in pricing, due to certain limitations of the AVC:

- There is limited flexibility in the cost-sharing inputs and the application of the cost-sharing parameters on services. Certain cost-sharing features are not supported by the AVC. For example, the only option that is available for member cost sharing before the deductible is met is a copay, including for services that are not subject to the deductible.
- There are limited benefit inputs. Separate inputs for some services, such as maternity, urgent care, home health, ambulance, and durable medical equipment (DME), are not explicitly included.
- Geographic area, demographics, reimbursement arrangements, and utilization management all have an impact on the cost of services, but the AVC does not include adjustments for them.
- Differences in actual or assumed mix of services as compared to the underlying AVC data may produce differences from expected AVs produced by the AVC.
- There occasionally are nonintuitive changes in AVs based on changes to plan parameters. For example, removing the \$75 deductible from the standard California 2024 silver 94 CSR plan decreases the AV instead of increasing the AV.⁵ In another example, subjecting x-rays and diagnostic imaging to the deductible on the standard federal 2024 silver 94 CSR plan results in an increase in AV instead of the expected decrease, as shown in Figure 12.

Many users of the AVC find it is increasingly difficult to develop a bronze plan with a lean enough plan design to meet the required range of bronze AVs. However, the availability of the expanded bronze option for certain bronze plans has provided additional flexibility in designing a plan that meets the requirements.

Actual pricing AVs (i.e., the ratio of plan paid costs to allowed costs), particularly in the individual market, may be significantly different from AVC AVs (e.g., some bronze plans designed with a 60% AV may actually have a pricing AV in the 70% to 75% range).

⁵ Covered California (July 13, 2023). Proposed 2024 California Enhanced Cost-Sharing Reduction Program, slide 15. Retrieved November 2, 2023, from <https://hbex.coveredca.com/stakeholders/plan-management/PDFs/Plan-Management-Advisory-Group-Files/7-23/Plan%20Advisory%20Master%20Deck%20-%20July%2013%202023.pptx> (PowerPoint download).

AV sensitivity analysis tables

FIGURE 2: PLATINUM AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY ⁶	IMPACT OF REMOVING COINSURANCE APPLICABILITY ⁷	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE ⁸
Emergency Room Services	0.00%	N/A	-0.02%	-0.28%	0.00%
All IP Hosp (inc. MH/SUD)	0.00%	N/A	0.00%	-0.03%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	0.00%	N/A	-0.16%	-0.26%	0.00%
Specialist Visit	0.00%	N/A	-0.13%	-0.20%	0.00%
MH/SUD	0.00%	N/A	-0.09%	-0.10%	0.00%
Imaging (CT/PET Scans, MRIs)	0.00%	N/A	-0.01%	-0.07%	0.00%
Rehabilitative ST	0.00%	N/A	0.00%	0.00%	0.00%
PT/OT	0.00%	N/A	-0.16%	-0.08%	0.00%
Lab OP and Prof Services	0.00%	N/A	-0.46%	-0.13%	0.00%
X-rays and Diagnostic Imaging	0.00%	N/A	-0.11%	-0.16%	0.00%
Skilled Nursing Facility	0.00%	N/A	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	0.00%	N/A	-0.16%	-0.23%	0.00%
OP Surg Phys/Surg Services	0.00%	N/A	-0.25%	-0.31%	0.00%
Generic Drugs	0.00%	N/A	-0.84%	-0.28%	0.00%
Preferred Brand Drugs	0.00%	N/A	-0.11%	-0.25%	0.00%
Non-Preferred Brand Drugs	0.00%	N/A	-0.01%	-0.03%	0.00%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	0.00%	0.00%

FIGURE 3: PLATINUM AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000 ⁹	N/A
Decreasing Deductible by \$1,000 ¹⁰	N/A
Increasing MOOP by \$1,000	-1.30%
Decreasing MOOP by \$1,000	1.89%
Apply IP Copay Per Day	-0.04%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	0.00%
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.00%
5 Days Maximum for IP Copay and Apply IP Copay per Day	-0.03%
PCP Cost-Sharing Applies After 5 Visits	0.15%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	0.00%

6 Deductible is \$0.

7 No services are subject to coinsurance.

8 Deductible is \$0.

9 No services are subject to the deductible.

10 Decreasing the deductible by \$1,000 would make the deductible negative.

FIGURE 4: GOLD AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY	IMPACT OF REMOVING COINSURANCE APPLICABILITY	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE
Emergency Room Services	1.21%	0.64%	-0.02%	-0.26%	0.03%
All IP Hosp (inc. MH/SUD)	0.01%	0.71%	0.00%	-0.28%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	1.68%	N/A	-0.26%	-0.05%	0.52%
Specialist Visit	0.92%	N/A	-0.34%	-0.15%	0.53%
MH/SUD	0.36%	N/A	-0.14%	-0.08%	0.19%
Imaging (CT/PET Scans, MRIs)	0.30%	0.17%	-0.02%	-0.07%	0.03%
Rehabilitative ST	0.01%	N/A	0.00%	0.00%	0.00%
PT/OT	0.09%	N/A	-0.23%	-0.06%	0.25%
Lab OP and Prof Services	0.86%	0.17%	-0.40%	-0.07%	0.65%
X-rays and Diagnostic Imaging	1.13%	0.32%	-0.11%	-0.09%	0.32%
Skilled Nursing Facility	0.00%	0.00%	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	0.71%	0.98%	-0.24%	-0.39%	0.44%
OP Surg Phys/Surg Services	2.36%	0.46%	-0.50%	-0.18%	1.05%
Generic Drugs	0.76%	N/A	-1.37%	-0.14%	1.25%
Preferred Brand Drugs	0.60%	N/A	-0.19%	-0.36%	0.33%
Non-Preferred Brand Drugs	0.07%	N/A	-0.01%	-0.04%	0.02%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	-0.02%	0.00%

FIGURE 5: GOLD AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000	-1.83%
Decreasing Deductible by \$1,000	3.05%
Increasing MOOP by \$1,000 ¹¹	N/A
Decreasing MOOP by \$1,000	0.64%
Apply IP Copay Per Day	0.00%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	6.47%
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.03%
5 Days Maximum for IP Copay and Apply IP Copay per Day	0.00%
PCP Cost-Sharing Applies After 5 Visits	0.72%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	-0.05%

¹¹ Increasing the MOOP by \$1,000 exceeds the MOOP limit.

FIGURE 6: STANDARD SILVER AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY	IMPACT OF REMOVING COINSURANCE APPLICABILITY	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE
Emergency Room Services	3.23%	0.01%	0.00%	0.00%	0.01%
All IP Hosp (inc. MH/SUD)	0.57%	0.00%	0.00%	0.00%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	2.34%	N/A	-0.19%	0.00%	0.04%
Specialist Visit	1.46%	N/A	-0.25%	0.00%	0.18%
MH/SUD	0.81%	N/A	-0.12%	0.00%	0.05%
Imaging (CT/PET Scans, MRIs)	0.95%	0.00%	0.00%	0.00%	0.01%
Rehabilitative ST	0.02%	N/A	0.00%	0.00%	0.00%
PT/OT	0.14%	N/A	-0.18%	0.00%	0.09%
Lab OP and Prof Services	1.54%	0.00%	0.00%	0.00%	0.02%
X-rays and Diagnostic Imaging	1.60%	-0.19%	-0.02%	0.00%	0.08%
Skilled Nursing Facility	0.00%	0.00%	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	3.32%	0.01%	0.00%	0.00%	0.03%
OP Surg Phys/Surg Services	3.64%	0.00%	0.00%	0.00%	0.02%
Generic Drugs	1.10%	N/A	-1.01%	0.00%	0.26%
Preferred Brand Drugs	2.37%	N/A	-0.14%	0.00%	0.10%
Non-Preferred Brand Drugs	0.27%	N/A	0.00%	0.00%	0.00%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	0.00%	0.00%

FIGURE 7: STANDARD SILVER AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000	-0.02%
Decreasing Deductible by \$1,000	0.32%
Increasing MOOP by \$1,000 ¹²	N/A
Decreasing MOOP by \$1,000	1.50%
Apply IP Copay Per Day	0.00%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	7.59%
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.00%
5 Days Maximum for IP Copay and Apply IP Copay per Day	0.00%
PCP Cost-Sharing Applies After 5 Visits	0.71%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	-0.13%

¹² Increasing the MOOP by \$1,000 exceeds the MOOP limit.

FIGURE 8: SILVER 73 AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY	IMPACT OF REMOVING COINSURANCE APPLICABILITY	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE
Emergency Room Services	2.73%	0.00%	0.00%	0.00%	0.00%
All IP Hosp (inc. MH/SUD)	0.27%	0.00%	0.00%	0.00%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	2.25%	N/A	-0.16%	0.00%	0.00%
Specialist Visit	1.35%	N/A	-0.20%	0.00%	0.00%
MH/SUD	0.73%	N/A	-0.10%	0.00%	0.00%
Imaging (CT/PET Scans, MRIs)	0.79%	0.00%	0.00%	0.00%	0.00%
Rehabilitative ST	0.01%	N/A	0.00%	0.00%	0.00%
PT/OT	0.11%	N/A	-0.14%	0.00%	0.00%
Lab OP and Prof Services	1.36%	0.00%	0.00%	0.00%	0.00%
X-rays and Diagnostic Imaging	1.38%	-0.26%	0.00%	0.00%	0.00%
Skilled Nursing Facility	0.00%	0.00%	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	2.56%	0.00%	0.00%	0.00%	0.00%
OP Surg Phys/Surg Services	3.28%	0.00%	0.00%	0.00%	0.00%
Generic Drugs	0.98%	N/A	-0.82%	0.00%	0.00%
Preferred Brand Drugs	1.96%	N/A	-0.11%	0.00%	0.00%
Non-Preferred Brand Drugs	0.22%	N/A	0.00%	0.00%	0.00%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	0.00%	0.00%

FIGURE 9: SILVER 73 AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000 ¹³	0.00%
Decreasing Deductible by \$1,000 ¹⁴	0.00%
Increasing MOOP by \$1,000	-1.65%
Decreasing MOOP by \$1,000	1.81%
Apply IP Copay Per Day	0.00%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	N/A ¹⁵
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.00%
5 Days Maximum for IP Copay and Apply IP Copay per Day	0.00%
PCP Cost-Sharing Applies After 5 Visits	0.59%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	-0.12%

13 The deductible is high relative to the MOOP, such that the resulting AV change is <0.01%.

14 Ibid.

15 This plan design is specifically for the individual line of business, which will not have an HSA/HRA employer contribution.

FIGURE 10: SILVER 87 AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY	IMPACT OF REMOVING COINSURANCE APPLICABILITY	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE
Emergency Room Services	0.39%	0.42%	-0.01%	-0.14%	0.02%
All IP Hosp (inc. MH/SUD)	0.00%	0.05%	0.00%	-0.02%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	1.14%	N/A	-0.21%	-0.06%	0.38%
Specialist Visit	0.61%	N/A	-0.22%	-0.11%	0.31%
MH/SUD	0.17%	N/A	-0.09%	-0.05%	0.09%
Imaging (CT/PET Scans, MRIs)	0.09%	0.12%	-0.01%	-0.04%	0.01%
Rehabilitative ST	0.00%	N/A	0.00%	0.00%	0.00%
PT/OT	0.06%	N/A	-0.13%	-0.03%	0.10%
Lab OP and Prof Services	0.53%	0.15%	-0.28%	-0.05%	0.36%
X-rays and Diagnostic Imaging	0.51%	0.13%	-0.08%	-0.07%	0.20%
Skilled Nursing Facility	0.00%	0.00%	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	0.23%	0.39%	-0.14%	-0.13%	0.16%
OP Surg Phys/Surg Services	1.59%	0.35%	-0.38%	-0.12%	0.65%
Generic Drugs	0.51%	N/A	-0.98%	-0.10%	0.64%
Preferred Brand Drugs	0.26%	N/A	-0.13%	-0.12%	0.22%
Non-Preferred Brand Drugs	0.01%	N/A	0.00%	-0.02%	0.01%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	0.00%	0.00%

FIGURE 11: SILVER 87 AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000	-1.51%
Decreasing Deductible by \$1,000 ¹⁶	N/A
Increasing MOOP by \$1,000	-1.43%
Decreasing MOOP by \$1,000	2.06%
Apply IP Copay Per Day	0.00%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	N/A ¹⁷
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.00%
5 Days Maximum for IP Copay and Apply IP Copay per Day	0.00%
PCP Cost-Sharing Applies After 5 Visits	0.39%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	-0.02%

¹⁶ Decreasing the deductible by \$1,000 would make the deductible negative.

¹⁷ This plan design is specifically for the individual line of business, which will not have an HSA/HRA employer contribution.

FIGURE 12: SILVER 94 AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY ¹⁸	IMPACT OF REMOVING COINSURANCE APPLICABILITY	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE ¹⁹
Emergency Room Services	0.00%	0.85%	-0.02%	-0.35%	0.00%
All IP Hosp (inc. MH/SUD)	0.00%	0.14%	0.00%	-0.05%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	0.00%	N/A	-0.16%	-0.25%	0.00%
Specialist Visit	0.00%	N/A	-0.13%	-0.20%	0.00%
MH/SUD	0.00%	N/A	-0.09%	-0.10%	0.00%
Imaging (CT/PET Scans, MRIs)	0.00%	0.20%	-0.02%	-0.08%	0.00%
Rehabilitative ST	0.00%	N/A	0.00%	0.00%	0.00%
PT/OT	0.00%	N/A	-0.17%	-0.08%	0.00%
Lab OP and Prof Services	0.00%	0.34%	-0.46%	-0.14%	0.00%
X-rays and Diagnostic Imaging ²⁰	-0.15%	0.40%	-0.11%	-0.16%	0.00%
Skilled Nursing Facility	0.00%	0.00%	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	0.00%	0.48%	-0.13%	-0.19%	0.00%
OP Surg Phys/Surg Services	0.00%	0.56%	-0.19%	-0.23%	0.00%
Generic Drugs	0.00%	0.70%	-0.84%	-0.28%	0.00%
Preferred Brand Drugs	0.00%	N/A	-0.11%	-0.27%	0.00%
Non-Preferred Brand Drugs	0.00%	N/A	-0.01%	-0.04%	0.00%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	0.00%	0.00%

FIGURE 13: SILVER 94 AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000 ²¹	N/A
Decreasing Deductible by \$1,000 ²²	N/A
Increasing MOOP by \$1,000	-1.31%
Decreasing MOOP by \$1,000	2.02%
Apply IP Copay Per Day	0.00%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	N/A ²³
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.00%
5 Days Maximum for IP Copay and Apply IP Copay per Day	0.00%
PCP Cost-Sharing Applies After 5 Visits	0.00%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	0.00%

18 Deductible is \$0.

19 Deductible is \$0.

20 We recognize that, with a \$0 deductible, there should be no impact to the AV if the deductible applicability is added or removed. However, the AVC does show an impact to the AV if the \$0 deductible applicability is added or removed for x-rays and diagnostic imaging.

21 No services are subject to the deductible.

22 Decreasing the deductible by \$1,000 would make the deductible negative.

23 This plan design is specifically for the individual line of business, which will not have an HSA/HRA employer contribution.

FIGURE 14: EXPANDED BRONZE AV SENSITIVITY ANALYSIS TABLE BY TIER 1 BENEFIT CATEGORY

TIER 1 BENEFIT	IMPACT OF REMOVING DEDUCTIBLE APPLICABILITY	IMPACT OF REMOVING COINSURANCE APPLICABILITY	IMPACT OF CHANGING FROM \$10 COPAY TO \$20 COPAY	IMPACT OF CHANGING FROM 10% COINSURANCE TO 20% COINSURANCE	IMPACT OF \$50 COPAY APPLYING AFTER DEDUCTIBLE
Emergency Room Services	3.94%	0.00%	0.00%	0.00%	0.00%
All IP Hosp (inc. MH/SUD)	0.41%	0.00%	0.00%	0.00%	0.00%
PCP (exc. Well Baby, Prev., X-rays)	2.18%	N/A	-0.18%	0.00%	0.00%
Specialist Visit	0.90%	N/A	-0.21%	0.00%	0.00%
MH/SUD	0.46%	N/A	-0.08%	0.00%	0.00%
Imaging (CT/PET Scans, MRIs)	0.78%	0.00%	0.00%	0.00%	0.00%
Rehabilitative ST	0.02%	N/A	0.00%	0.00%	0.00%
PT/OT	0.08%	N/A	-0.12%	0.00%	0.00%
Lab OP and Prof Services	1.57%	0.00%	0.00%	0.00%	0.00%
X-rays and Diagnostic Imaging	1.61%	-0.15%	0.00%	0.00%	0.00%
Skilled Nursing Facility	0.00%	0.00%	0.00%	0.00%	0.00%
OP Facility (e.g., ASC)	2.62%	0.00%	0.00%	0.00%	0.00%
OP Surg Phys/Surg Services	3.67%	0.00%	0.00%	0.00%	0.00%
Generic Drugs	0.56%	N/A	-0.92%	0.00%	0.02%
Preferred Brand Drugs	2.20%	N/A	0.00%	0.00%	0.00%
Non-Preferred Brand Drugs	0.20%	N/A	0.00%	0.00%	0.00%
Specialty High-Cost Drugs	0.00%	N/A	0.00%	0.00%	0.00%

FIGURE 15: EXPANDED BRONZE AV SENSITIVITY ANALYSIS TABLE FOR OTHER AVC INPUTS

CHANGE IN BENEFIT	CHANGE IN AV
Increasing Deductible by \$1,000 ²⁴	0.00%
Decreasing Deductible by \$1,000 ²⁵	0.00%
Increasing MOOP by \$1,000 ²⁶	N/A
Decreasing MOOP by \$1,000	1.72%
Apply IP Copay Per Day	0.00%
Apply SNF Copay Per Day	0.00%
Add \$1,000 HSA/HRA Employer Contribution	9.52%
Applying \$100 Max Copay on Specialty High-Cost Drugs Coinsurance	0.00%
5 Days Maximum for IP Copay and Apply IP Copay per Day	0.00%
PCP Cost-Sharing Applies After 5 Visits	0.84%
PCP Ded/Coins After 5 Copays and PCP Subject to Deductible	-0.10%

²⁴ The deductible is high relative to the MOOP, such that the resulting AV change is <0.01%.

²⁵ Ibid.

²⁶ Increasing the MOOP by \$1,000 exceeds the MOOP limit.

Next steps

Keeping up with the complexities, limitations, and annual changes in the AVC can be difficult. Milliman offers consulting support for benefit design modeling and pricing.

In addition, the AVC only allows users to calculate AVs one plan design at a time. To address this limitation, Milliman offers a batch version of the AVC that can be licensed. This tool allows the user to calculate and compare the AVs for multiple plan designs at the same time.

Caveats and Limitations

The analysis in this paper is based on data from a variety of sources, including the federal AV Calculator and our interpretation of guidance from the Centers for Medicare and Medicaid Services (CMS). We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, then the results of our analysis may likewise be inaccurate or incomplete.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Kathie Ely, Cameron Gleed, and Katrina Sevilla are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this report.



Milliman is among the world's largest providers of actuarial, risk management, and technology solutions. Our consulting and advanced analytics capabilities encompass healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

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Appendix A

2024 FEDERAL STANDARDIZED PLAN OPTIONS SET ONE²⁷

	EXPANDED BRONZE	STANDARD SILVER	SILVER 73 CSR	SILVER 87 CSR	SILVER 94 CSR	GOLD	PLATINUM
Actuarial Value	64.39%	70.01%	73.00%	87.03%	94.06%	78.02%	88.10%
Deductible	\$7,500	\$5,900	\$5,700	\$700	\$0	\$1,500	\$0
Annual Limitation on Cost Sharing	\$9,400	\$9,100	\$7,200	\$3,000	\$1,800	\$8,700	\$3,200
Emergency Room Services	50%	40%	40%	30%	25%*	25%	\$100*
Inpatient Hospital Services (Including Mental Health & Substance Use Disorder)	50%	40%	40%	30%	25%*	25%	\$350*
Primary Care Visit	\$50*	\$40*	\$40*	\$20*	\$0*	\$30*	\$10*
Urgent Care	\$75*	\$60*	\$60*	\$30*	\$5*	\$45*	\$15*
Specialist Visit	\$100*	\$80*	\$80*	\$40*	\$10*	\$60*	\$20*
Mental Health & Substance Use Disorder Outpatient Office Visit	\$50*	\$40*	\$40*	\$20*	\$0*	\$30*	\$10*
Imaging (CT/PET Scans, MRIs)	50%	40%	40%	30%	25%*	25%	\$100*
Speech Therapy	\$50*	\$40*	\$40*	\$20*	\$0*	\$30*	\$10*
Occupational, Physical Therapy	\$50*	\$40*	\$40*	\$20*	\$0*	\$30*	\$10*
Laboratory Services	50%	40%	40%	30%	25%*	25%	\$30*
X-rays/Diagnostic Imaging	50%	40%	40%	30%	25%*	25%	\$30*
Skilled Nursing Facility	50%	40%	40%	30%	25%*	25%	\$150*
Outpatient Facility Fee (Ambulatory Surgery Center)	50%	40%	40%	30%	25%*	25%	\$150*
Outpatient Surgery Physician & Services	50%	40%	40%	30%	25%*	25%	\$150*
Generic Drugs	\$25*	\$20*	\$20*	\$10*	\$0*	\$15*	\$5*
Preferred Brand Drugs	\$50	\$40*	\$40*	\$20*	\$15*	\$30*	\$10*
Non-Preferred Brand Drugs	\$100	\$80	\$80	\$60	\$50*	\$60*	\$50*
Specialty Drugs	\$500	\$350	\$350	\$250	\$150*	\$250*	\$150*

*Benefit category not subject to the deductible.

²⁷ See <https://www.govinfo.gov/content/pkg/FR-2023-04-27/pdf/2023-08368.pdf>, page 111.