Introduction

On January 21, 2016, CMS released the final methodology on the Actuarial Value and the final Actuarial Value Calculator (AVC) for 2017. CMS made few changes in the 2017 AVC. Most notably, they trended the underlying claims to calendar year.

Limitations of the Federal Actuarial Calculator

The AVC is known to have some limitations with respect to certain benefit designs. The most important limitations in the Final Actuarial Value Calculator for the Blue Rewards (Non-Standard) plans are:

- The AVC does not support the Rx OOPM Limit as dictated by Act 171.
- The AVC does not support Wellness (Safe Harbor) pharmacy drugs outside the deductible on HSA compliant plans.
- The AVC does not support certain MH/SA visits at no cost share before the deductible.
- The AVC does not support a copayment on Outpatient Surgery, Urgent Care, Emergency Medical Transportation, DME services nor Home Health Care.
- The AVC does not support Class I Pediatric Dental covered at no cost share.

Method Used to Calculate Adjustments

The objective of the adjustment process is to produce an estimate of the result the AVC would have produced with respect to the specific plan in question had it been able to measure all cost sharing elements for that plan. We created a model to calculate the ratio of expected benefits to allowed charges. See the description of the BCBSVT AV Model (BAVM) below. We used the BAVM to calculate both the complete benefit design and the benefit design for items supported by the AVC. We then applied the ratio of the two values to the AVC output for items supported by the AVC.

BCBSVT AV Model Methodology

BCBSVT uses a re-adjudication model to assess the impact of various deductible types, Rx limits, and out-of-pocket maximums to calculate the paid-to-allowed ratio for different benefit designs. The re-adjudication is performed using the same set of claims for all benefit plans. Claims data was taken from BCBSVT's data warehouse. The starting point of the analysis is allowed charges as determined by the BCBSVT claims adjudication system. The claims data includes benefit codes that enable us to identify the services and benefit structures (copays, deductibles, and coinsurance). The in-network claims from BCBSVT Insured Groups and Individuals expected to be in the Qualified Health Plans in 2017, representing 771,212 member months, are included in the analysis. Claims have been adjusted to reflect the network used for BCBSVT QHPs. Calendar year 2013 claims, trended to 2017 using 6.5% trend¹, were used in the model. The claims were categorized based on the cost sharing applied for each service, and one record was generated for each unique combination of member and service

¹ BCBSVT used the same trend that CMS used in the 2017 Final AV Calculator (see page 6 of https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Final-2017-AVC-Methodology-012016.pdf)

date. For all products, claims for preventive mandated benefits were kept separate. The model assumes these are paid in a manner consistent with the mandates.

The tables following the Actuarial Opinion show the relationship between the BAVM and the AVC.

A complete description of plan provisions is attached at the end of this document. The tables following the Actuarial Opinion contain information regarding the specific benefits that were calculated as adjustments to the AVC model.

Actuarial Opinion

The purpose of this calculation is to comply with the requirements of 45 CFR 156.135(b)(3). The Actuarial Values were determined based on the plans' benefits and coverage data, the standard population, utilization and continuance tables published by HHS for purposes of valuation of Actuarial Value. These calculations are not intended to be used for other purposes.

I am a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United Stated promulgated by the American Academy of Actuaries, and have the education and experience necessary to perform the work.

In my opinion, each of the plans described herein meets the AV requirements in the metal tiers for calendar year 2017.

The adjustments for plan design features unable to be determined directly through application of the AV calculator were developed in accordance with generally accepted actuarial principals and methodologies, Actuarial Standards of Practice established by the Actuarial Standards Board, and applicable laws and regulations, and are appropriate for the purpose intended.

Data used for the analysis were taken from the BCBSVT claims adjudication system, and normalized to the data underlying the AV calculator. This data was reviewed for reasonableness and consistency, but an audit was not performed.

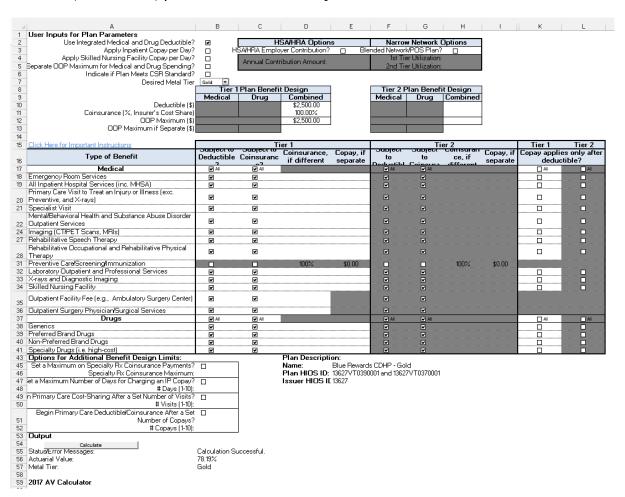
Paul A. Schultz, F.S.A., M.A.A.A.

Chief Actuary

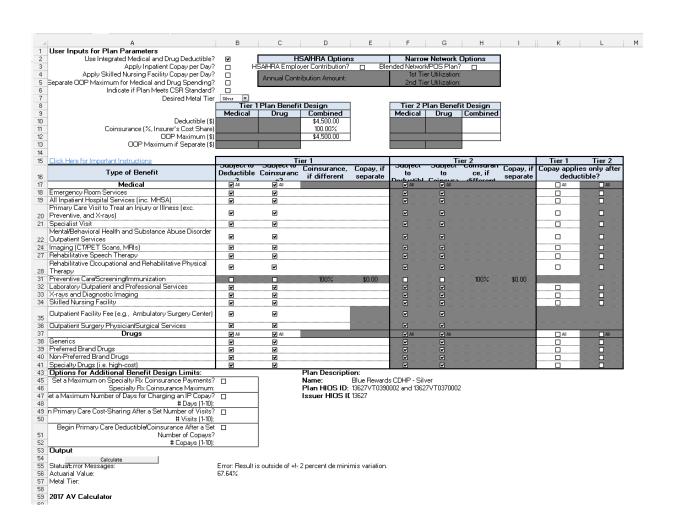
Blue Cross and Blue Shield of Vermont

Blue Rewards CDHP Plans

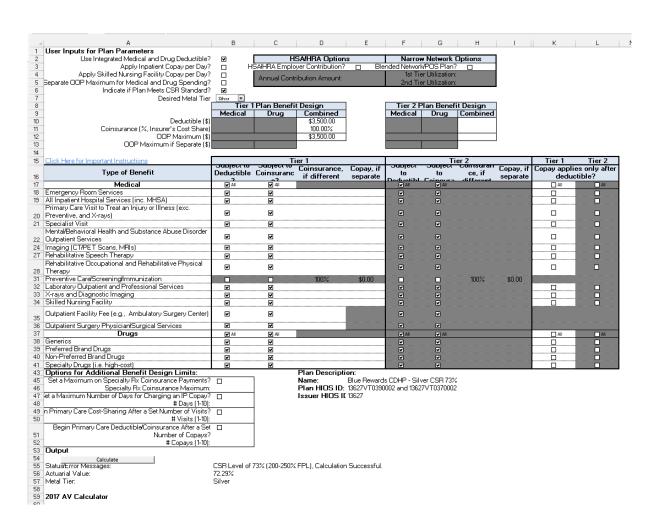
Plan : Blue Rewards (Non-Standard) CDHP Plan - Gold			
Items supported by the AV Calculator	Deductible	\$2,500	
	Coinsurance	0%	
	ООРМ	\$2,500	
AVC Output for items supported by the AVC (a) 78			78.2%
BCBSVT Model Output for items supported by the AVC		(b)	80.5%
BCBSVT Model Output for complete benefit design		(c)	81.2%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	78.8%



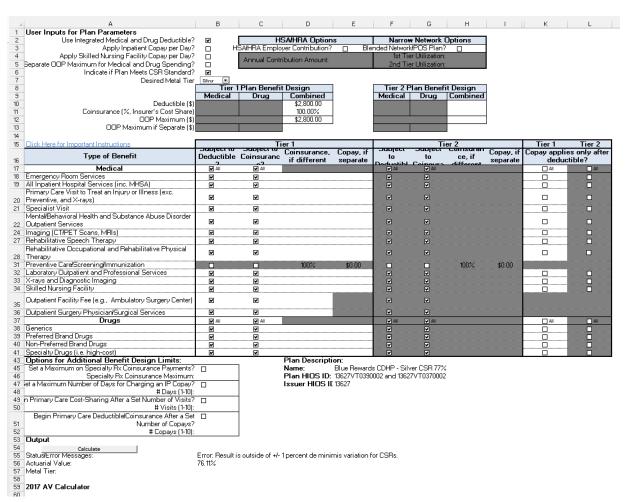
Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver			
Items supported by the AV Calculator	Deductible	\$4,500	
	Coinsurance	0%	
	ООРМ	\$4,500	
AVC Output for items supported by the AVC (a) 67.6%			
BCBSVT Model Output for items supported by the AVC		(b)	72.3%
BCBSVT Model Output for complete benefit design		(c)	73.7%
Adjustment to the AVC	Estimated AVC value	$(d)=(c)/(b)^*(a)$	69.0%



Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 73% CSR			
Items supported by the AV Calculator	Deductible	\$3,500	
	Coinsurance	0%	
	ООРМ	\$3,500	
AVC Output for items supported by the AVC (a) 72.3%			
BCBSVT Model Output for items supported by the AVC		(b)	76.0%
BCBSVT Model Output for complete benefit design		(c)	77.0%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	73.2%

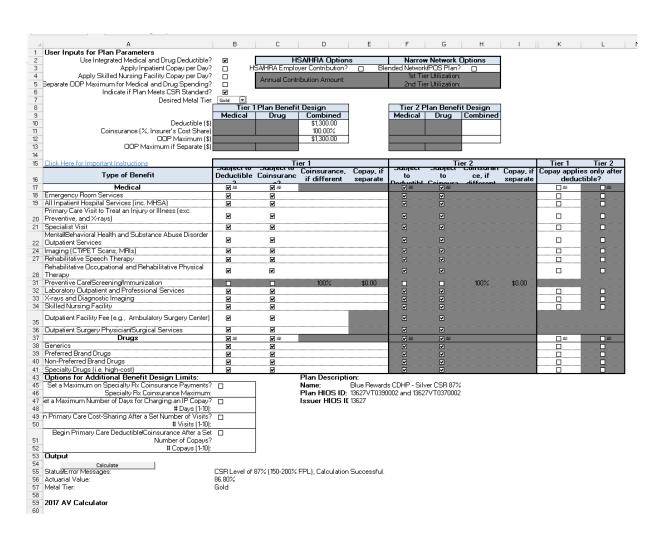


Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 77% CSR			
Items supported by the AV Calculator	Deductible	\$2,800	
	Coinsurance	0%	
	ООРМ	\$2,800	
AVC Output for items supported by the AVC (a) 76.			
BCBSVT Model Output for items supported by the AVC		(b)	79.1%
BCBSVT Model Output for complete benefit design		(c)	79.7%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	76.7%



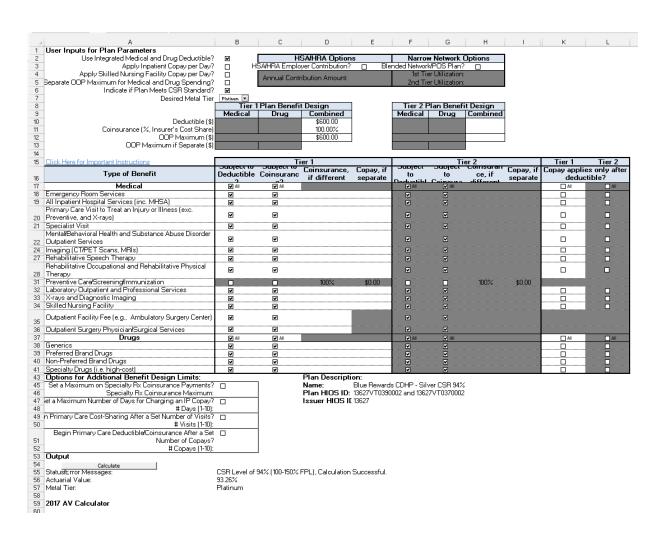
Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 87% CSR			
Items supported by the AV Calculator	Deductible	\$1,300	
	Coinsurance	0%	
	ООРМ	\$1,300	
AVC Output for items support	orted by the AVC	(a)	86.8%
BCBSVT Model Output for items supported by the AVC		(b)	87.6%
BCBSVT Model Output for complete benefit design		(c)	87.7%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	86.9%

Items not supported by the AV Calculator for this plan are Wellness (Safe Harbor) pharmaceuticals not subject to the deductible.

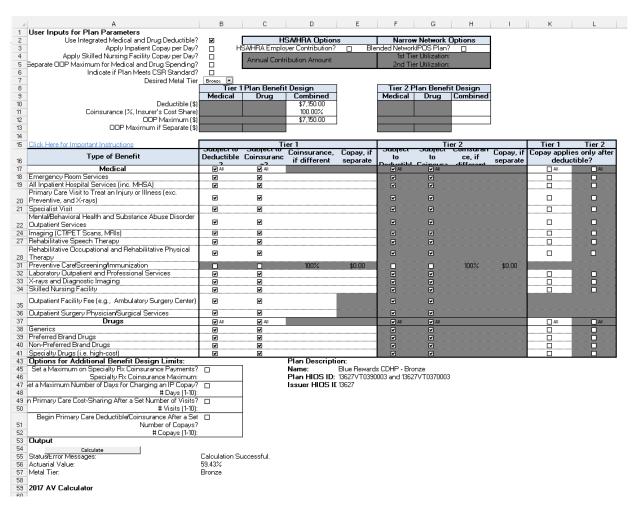


Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 94% CSR			
Items supported by the AV Calculator	Deductible	\$600)
	Coinsurance	0%	
	ООРМ	\$600)
AVC Output for items support	(a)	93.3%	
BCBSVT Model Output for items supported by the AVC		(b)	93.3%
BCBSVT Model Output for complete benefit design		(c)	93.3%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	93.3%

Items not supported by the AV Calculator for this plan are Wellness (Safe Harbor) pharmaceuticals not subject to the deductible.



Plan : Blue Rewards (Non-Standard) CDHP Plan - Bronze			
Items supported by the AV Calculator	Deductible	\$7,150	
	Coinsurance	0%	
	ООРМ	\$7,150	
AVC Output for items supported by the AVC (a)			59.4%
BCBSVT Model Output for items supported by the AVC		(b)	64.6%
BCBSVT Model Output for complete benefit design		(c)	66.9%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	61.6%



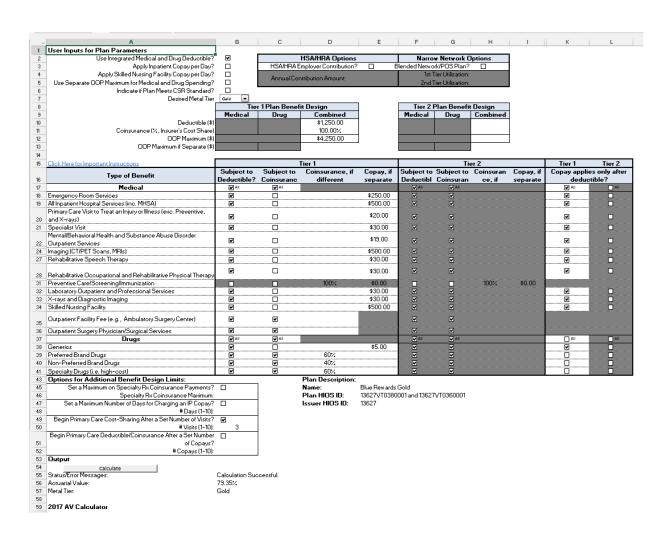
Blue Rewards Copayment Plans

Items not supported by the AV Calculator for these plans are

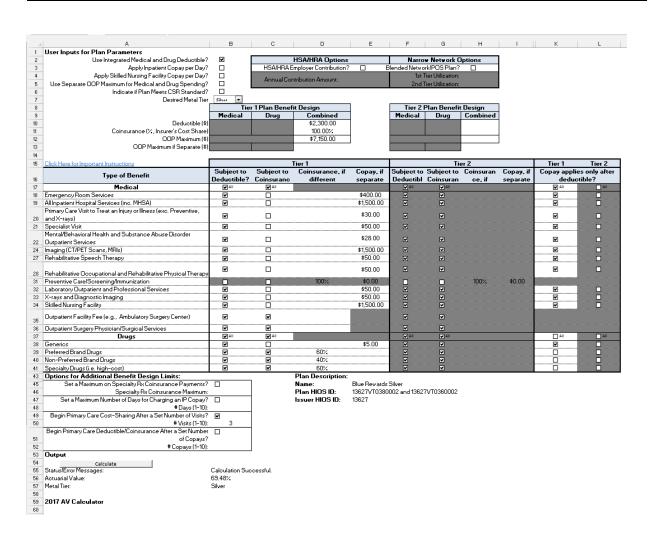
- Pharmacy MOOP of \$1,300
- Three Mental Health office visits at no cost share before the deductible
- Class I Pediatric Dental at no cost share
- Copayment on Outpatient Surgery, Urgent Care, Emergency Medical Transportation,
 DME services and Home Health Care

For Mental/Behavioral Health and Substance Abuse Disorder Outpatient Services, we blended the Office Visit copayment and the Outpatient Facility copayment based on the frequency of services from the continuance tables in the AVC to calculate the input needed in the AVC.

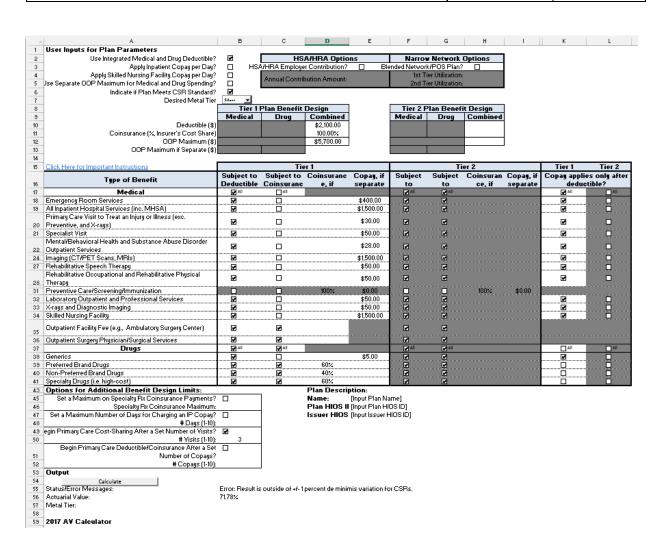
Plan: Blue Rewards (Non-Standard) Copayment Plan - Gold				
	Deductible	\$1,250		
Items supported	Coinsurance	0%		
by the AV Calculator	ООРМ	\$4,250		
	Copayments after the deductible	See print below		
	PCP visits at no cost share before the deductible	3		
AVC Output for items supported by the AVC		(a)	79.4%	
BCBSVT Model Output for items supported by the AVC		(b)	82.5%	
BCBSVT Model Output for complete benefit design		(c)	84.2%	
Estimated AVC value		(d)=(c)/(b)*(a)	81.0%	



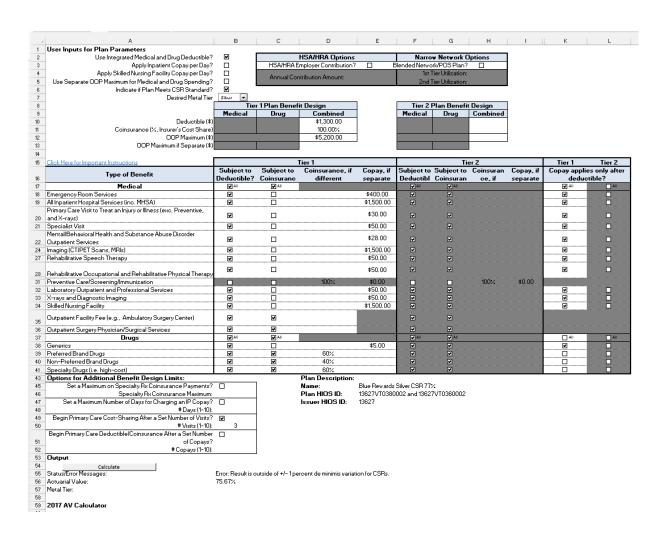
Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver			
	Deductible	\$2,300	
Items supported	Coinsurance	0%	
by the AV Calculator	ООРМ	\$7,150	
	Copayments after the deductible	See print below	
	PCP visits at no cost share before the deductible	3	
AVC Output for items supported by the AVC		(a)	69.5%
BCBSVT Model Output for items supported by the AVC		(b)	74.2%
BCBSVT Model Output for complete benefit design		(c)	76.4%
Estimated AVC value		(d)=(c)/(b)*(a)	71.6%



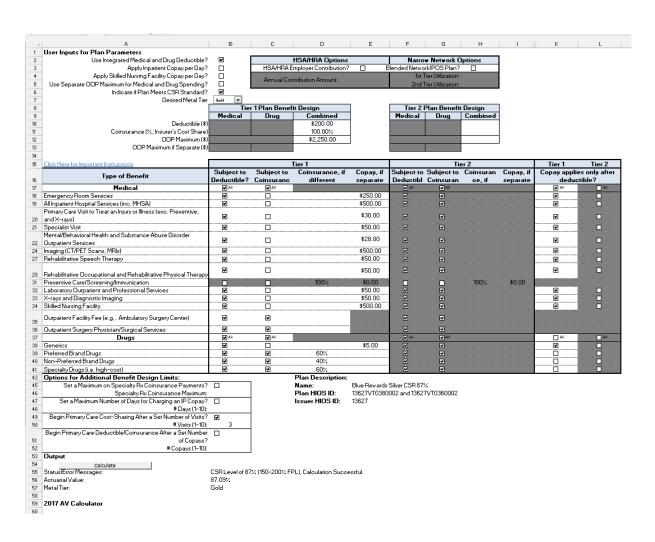
Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 73%			
	Deductible	<mark>\$2,100</mark>	
Items supported	Coinsurance	0%	
by the AV Calculator	ООРМ	\$5,700	
	Copayments after the deductible	See print below	
	PCP visits at no cost share before the deductible	3	
AVC Output for items supported by the AVC		(a)	<mark>71.8%</mark>
BCBSVT Model Output for items supported by the AVC		(b)	<mark>75.7%</mark>
BCBSVT Model Output for complete benefit design		(c)	<mark>77.7%</mark>
Estimated AVC value		(d)=(c)/(b)*(a)	<mark>73.6%</mark>



Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 77%			
	Deductible	\$1,300	
Items supported	Coinsurance	0%	
by the AV Calculator	ООРМ	\$5,200	
	Copayments after the deductible	See print below	
	PCP visits at no cost share before the deductible	3	
AVC Output for items supported by the AVC		(a)	75.7%
BCBSVT Model Output for items supported by the AVC		(b)	79.5%
BCBSVT Model Output for complete benefit design		(c)	80.8%
Estimated AVC value		(d)=(c)/(b)*(a)	76.9%

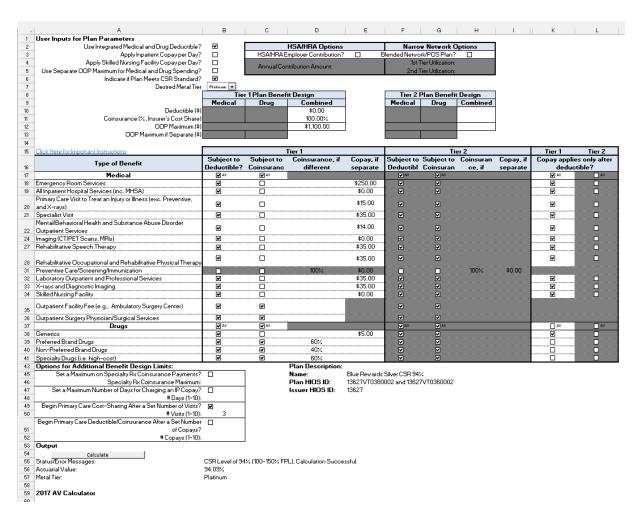


Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 87%			
	Deductible	\$200	
Items supported	Coinsurance	0%	
by the AV Calculator	ООРМ	\$2,250	
Calculator	Copayments after the deductible	See print below	
	PCP visits at no cost share before the deductible	3	
AVC Output for items supported by the AVC		(a)	87.1%
BCBSVT Model Output for items supported by the AVC		(b)	90.2%
BCBSVT Model Output for complete benefit design		(c)	90.3%
Estimated AVC value		(d)=(c)/(b)*(a)	87.2%



Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 94%

The inclusion of Mental Health office visits in the three PCP or Mental Health Office visits at no cost share before the deductible benefit and copays on Urgent Care, Emergency Medical Transportation, DME services and Home Health Care are not supported by the AVC for this plan. The difference between the AVC benefit of three PCP visits at no cost share before the deductible and the BCBSVT benefit of three PCP or MHSA visits at no cost share is immaterial² and the addition of copays on Urgent Care, Emergency Medical Transportation, DME services and Home Health Care is also immaterial; therefore we are using the AVC directly for this plan.



 $^{^2}$ The AV calculator produces an AV of 94.13% for a plan with identical inputs other than MHSA cost sharing which is set to no cost sharing, therefore the waiving of cost sharing on up to three MHSA visits for those not having 3 or more PCP visits is not expected to have any material impact.

Appendix – Complete Benefit Designs

	Gold	Silver	73% AV	77% AV	87% AV	94% AV
Deductible/OOP Max	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Medical Ded	\$1,250	\$2,300	<mark>\$2,100</mark>	\$1,300	\$200	\$0
Rx Ded	Combined	Combined	Combined	Combined	Combined	Combined
Integrated Ded	Yes	Yes	Yes	Yes	Yes	Yes
Medical OOPM	\$4,250	\$7,150	\$5,700	\$5,200 \$2,250		\$1,100
Rx OOPM	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,100
Integrated OOPM	Yes	Yes	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family, Embedded Individual OOPM of \$7,150	Aggregate, 2x Family	Aggregate, 2x Family			
Medical Deductible waived for:	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I
Drug Deductible waived for:	N/A	N/A	N/A	N/A	N/A	N/A
Service Category						
Preventive	\$0	\$0	\$0	\$0	\$0	\$0
PCP Office Visit	3 visits per member combined PCP/MH at					
MH/SA Office Visit	no cost share before deductible then \$20 copay	no cost share before deductible then \$30 copay	no cost share before deductible then \$30 copay	no cost share before deductible then \$30 copay	no cost share before deductible then \$30 copay	no cost share before deductible then \$15 copay
Specialist Office Visit	\$30	\$50	\$50	\$50	\$50	\$35
Urgent Care	\$30	\$50	\$50	\$50	\$50	\$35
Ambulance	\$30	\$50	\$50	\$50	\$50	\$35
DME	\$30	\$50	\$50	\$50	\$50	\$35
ER	\$250	\$400	\$400	\$400	\$250	\$250
Radiology (MRI, CT, PET)	\$500	\$1,500	\$1,500	\$1,500	\$500	\$0
Outpatient	\$500	\$1,500	\$1,500	\$1,500	\$500	\$0
Inpatient	\$500	\$1,500	\$1,500	\$1,500	\$500	\$0
Rx Generic	\$5	\$5	\$5	\$5	\$5	\$5
Rx Preferred Brand	40%	40%	40%	40%	40%	40%
Rx Non-Preferred Brand	60%	60%	60%	60%	60%	60%

	Gold	Silver	73% AV	77% AV	87% AV	94% AV	Bronze
Deductible/OOP Max	CDHP	CDHP	CDHP	CDHP	CDHP	CDHP - Not HSAQ	CDHP - Not HSAQ
Medical Ded	\$2,500	\$4,500	\$3,500	\$2,800	\$1,300	\$600	\$7,150
Rx Ded	Combined	Combined	Combined	Combined	Combined	Combined	Combined
Integrated Ded	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical OOPM	\$2,500	\$4,500	\$3,500	\$2,800	\$1,300	\$600	\$7,150
Rx OOPM	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300
Integrated OOPM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family	Aggregate, 2x Family, Embedded Individual OOPM of \$7,150	Aggregate, 2x Family	Aggregate, 2x Family	Aggregate, 2x Family	Aggregate, 2x Family	Aggregate, 2x Family, Embedded Individual OOPM of \$7,150
Medical Deductible waived for:	Preventive Care	Preventive Care	Preventive Care	Preventive Care	Preventive Care	Preventive Care	Preventive Care
Drug Deductible waived for:	Wellness Scripts	Wellness Scripts	Wellness Scripts	Wellness Scripts	Wellness Scripts	Wellness Scripts	Wellness Scripts
Service Category							
Preventive	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PCP Office Visit	0%	0%	0%	0%	0%	0%	0%
MH/SA Office Visit	0%	0%	0%	0%	0%	0%	0%
Specialist Office Visit	0%	0%	0%	0%	0%	0%	0%
Urgent Care	0%	0%	0%	0%	0%	0%	0%
Ambulance	0%	0%	0%	0%	0%	0%	0%
DME	0%	0%	0%	0%	0%	0%	0%
ER	0%	0%	0%	0%	0%	0%	0%
Radiology (MRI, CT, PET)	0%	0%	0%	0%	0%	0%	0%
Outpatient	0%	0%	0%	0%	0%	0%	0%
Inpatient	0%	0%	0%	0%	0%	0%	0%
Rx Generic	\$5	\$15	\$15	\$15	\$15	\$15	\$25
Rx Preferred Brand	40%	40%	40%	40%	40%	40%	40%
Rx Non-Preferred Brand	60%	60%	60%	60%	60%	60%	60%