

State: VermontGMCB **Filing Company:** BCBSVT
TOI/Sub-TOI: H16G Group Health - Major Medical/H16G.001C Any Size Group - Other
Product Name: 2019 Vermont Individual and Small Group Rate Filing
Project Name/Number: /

Filing at a Glance

Company: BCBSVT
Product Name: 2019 Vermont Individual and Small Group Rate Filing
State: VermontGMCB
TOI: H16G Group Health - Major Medical
Sub-TOI: H16G.001C Any Size Group - Other
Filing Type: GMCB Rate
Date Submitted: 05/11/2018
SERFF Tr Num: BCVT-131497882
SERFF Status: Submitted to State
State Tr Num:
State Status:
Co Tr Num:

Implementation: On Approval
Date Requested:
Author(s): Jude Daye, Martine Brisson-Lemieux
Reviewer(s):
Disposition Date:
Disposition Status:
Implementation Date:

State Filing Description:

State: VermontGMCB **Filing Company:** BCBSVT
TOI/Sub-TOI: H16G Group Health - Major Medical/H16G.001C Any Size Group - Other
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General Information

Project Name: Status of Filing in Domicile:
Project Number: Date Approved in Domicile:
Requested Filing Mode: Review & Approval Domicile Status Comments:
Explanation for Combination/Other: Market Type: Group
Submission Type: New Submission Group Market Size: Small
Group Market Type: Employer, Other Explanation for Other Group Market Type:
Overall Rate Impact: Filing Status Changed: 05/11/2018
State Status Changed:
Deemer Date: Created By: Jude Daye
Submitted By: Jude Daye Corresponding Filing Tracking Number:
PPACA: Non-Grandfathered Immed Mkt Reforms

PPACA Notes: null
Exchange Intentions: To be sold on Vermont Health Connect or directly to consumers effective 01/01/2019.

Filing Description:
May 11, 2018

Agatha Kessler
Health Policy Director
Green Mountain Care Board
144 State Street
Montpelier, Vermont 05620

Subject:Blue Cross and Blue Shield of Vermont - NAIC # 53295
2019 Vermont Individual and Small Group Rate Filing

Dear Ms. Kessler:

Attached for the Green Mountain Care Board's review and approval is Blue Cross and Blue Shield of Vermont's 2019 Vermont Individual and Small Group Rate Filing.

The average increase for plans other than Silver Level Exchange plans – that is, the average increase that will actually be experienced by Vermont individuals and small businesses – is 5.3 percent.

Increases for specific plans range from 3.5 percent to 6.8 percent, except for the Catastrophic plan, which is increasing by 1.2 percent. Silver Level Exchange plans will increase an average of 16.0 percent, with increases for specific plans ranging from 14.6 percent to 18.9 percent. Across all plans, the average increase is 7.5 percent.

Please let me know if we can answer any questions or provide further information during your review.

Sincerely,

Ruth Greene

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cc:Tom Crompton/GMCB
 Sebastian Arduengo/GMCB
 Paul Schultz/BCBSVT
 Martine Lemieux/BCBSVT

Company and Contact

Filing Contact Information

Jude Daye, Executive Assistant dayej@bcbsvt.com
 445 Industrial Lane 802-371-3244 [Phone]
 Montpelier, VT 05601

Filing Company Information

BCBSVT	CoCode: 53295	State of Domicile: Vermont
PO BOX 186	Group Code:	Company Type: Hospital
Montpelier, VT 05601	Group Name:	Service Corp
(802) 371-3450 ext. [Phone]	FEIN Number: 03-0277307	State ID Number:

Filing Fees

Fee Required? Yes
 Fee Amount: \$150.00
 Retaliatory? No
 Fee Explanation:

SERFF Tracking #:

BCVT-131497882

State Tracking #:

Company Tracking #:

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Rate Information

Rate data applies to filing.

Filing Method: Experience Rated
Rate Change Type: Increase
Overall Percentage of Last Rate Revision: 9.210%
Effective Date of Last Rate Revision: 01/01/2018
Filing Method of Last Filing: Experience Rated
SERFF Tracking Number of Last Filing: BCVT-131037743

Company Rate Information

Company Name:	Company Rate Change:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
BCBSVT	Increase	7.483%	7.483%	\$26,021,143	52,591	\$347,729,947	18.874%	1.247%

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Rate Review Detail

COMPANY:

Company Name: BCBSVT
 HHS Issuer Id: 13627

PRODUCTS:

Product Name	HIOS Product ID	HIOS Submission ID	Number of Covered Lives
BCBSVT EPO (Individual)	13627VT034		8876
BCBSVT EPO (Small Group)	13627VT032		9783
BCBSVT EPO Blue Rewards (Individual)	13627VT038		2215
BCBSVT EPO Blue Rewards (Small Group)	13627VT036		987
BCBSVT EPO Blue Rewards CDHP (Individual)	13627VT039		1875
BCBSVT EPO Blue Rewards CDHP (Small Group)	13627VT037		4304
BCBSVT EPO CDHP (Individual)	13627VT035		1922
BCBSVT EPO CDHP (Small Group)	13627VT033		1907

Trend Factors:

FORMS:

New Policy Forms: N/A
 Affected Forms: N/A
 Other Affected Forms: N/A

REQUESTED RATE CHANGE INFORMATION:

Change Period: Annual
 Member Months: 819,824
 Benefit Change: Increase
 Percent Change Requested: Min: 1.247 Max: 18.874 Avg: 7.483

PRIOR RATE:

Total Earned Premium: 347,729,947.00
 Total Incurred Claims: 310,100,594.00
 Annual \$: Min: 244.08 Max: 671.15 Avg: 539.98

REQUESTED RATE:

Projected Earned Premium: 373,751,090.00
 Projected Incurred Claims: 333,270,119.00
 Annual \$: Min: 248.56 Max: 717.12 Avg: 580.39

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Product Name: 2019 Vermont Individual and Small Group Rate Filing
Project Name/Number: /

Supporting Document Schedules

Satisfied - Item:	Actuarial Memorandum
Comments:	
Attachment(s):	BCBSVT 2019 Vermont Individual and Small Group Rate Filing - Actuarial Memorandum.pdf
Item Status:	
Status Date:	

Bypassed - Item:	Actuarial Memorandum and Certifications
Bypass Reason:	Part III Actuarial Memorandum is the same as the Actuarial Memorandum in the previous section.
Attachment(s):	
Item Status:	
Status Date:	

Bypassed - Item:	Civil Union Rating Requirements
Bypass Reason:	Not required.
Attachment(s):	
Item Status:	
Status Date:	

Satisfied - Item:	Consumer Disclosure Form
Comments:	
Attachment(s):	BCBSVT 2019 VISG Filing - Plain Language Summary.pdf
Item Status:	
Status Date:	

Satisfied - Item:	Filing Compliance Certification
Comments:	
Attachment(s):	Filing Compliance Certification.pdf
Item Status:	
Status Date:	

Bypassed - Item:	Third Party Filing Authorization
Bypass Reason:	BCBSVT does not use a Third Party to submit filings.
Attachment(s):	
Item Status:	
Status Date:	

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BCVT-131497882

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Satisfied - Item:	Unified Rate Review Template
Comments:	
Attachment(s):	Unified_Rate_Review_Template_BCBSVT_2019.xlsm Unified_Rate_Review_Template_BCBSVT_2019.pdf UnifiedRateReviewSubmission_BCBSVT_2019_2018051014240.xml
Item Status:	
Status Date:	

Satisfied - Item:	Exhibits
Comments:	
Attachment(s):	BCBSVT 2019 Vermont Individual and Small Group Rate Filing - Exhibits.pdf BCBSVT 2019 Vermont Individual and Small Group Rate Filing - Exhibits.xlsx
Item Status:	
Status Date:	

Satisfied - Item:	Attachments A, B & C
Comments:	
Attachment(s):	Attachment A - Standard Plan AV Certification - 2019.pdf Attachment B - Blue Rewards AV Certification - 2019.pdf Attachment C - Memorandum from Senior Management for CTR.pdf
Item Status:	
Status Date:	

Satisfied - Item:	Rate Data Templates
Comments:	
Attachment(s):	RateTablesPY19_BCBSVT.pdf RateTablesPY19_BCBSVT.xls RateTablePY19_BCBSVT.xml
Item Status:	
Status Date:	

Satisfied - Item:	Actuarial Data Set
Comments:	
Attachment(s):	Actuarial Memo Dataset (2019 issues) - BCBSVT.pdf Actuarial Memo Dataset (2019 issues) - BCBSVT.xlsx
Item Status:	
Status Date:	

SERFF Tracking #:

BCVT-131497882

State Tracking #:

Company Tracking #:

State:	VermontGMCB	Filing Company:	BCBSVT
TOI/Sub-TOI:	H16G Group Health - Major Medical/H16G.001C Any Size Group - Other		
Product Name:	2019 Vermont Individual and Small Group Rate Filing		
Project Name/Number:	/		

Attachment Unified_Rate_Review_Template_BCBSVT_2019.xlsm is not a PDF document and cannot be reproduced here.

Attachment UnifiedRateReviewSubmission_BCBSVT_2019_2018051014240.xml is not a PDF document and cannot be reproduced here.

Attachment BCBSVT 2019 Vermont Individual and Small Group Rate Filing - Exhibits.xlsx is not a PDF document and cannot be reproduced here.

Attachment RateTablesPY19_BCBSVT.xls is not a PDF document and cannot be reproduced here.

Attachment RateTablePY19_BCBSVT.xml is not a PDF document and cannot be reproduced here.

Attachment Actuarial Memo Dataset (2019 issues) - BCBSVT.xlsx is not a PDF document and cannot be reproduced here.

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2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

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1. GENERAL INFORMATION

1.1. Company Identifying Information

Company Legal Name: Blue Cross and Blue Shield of Vermont
State: Vermont
HIOS Issuer ID: 13627
Market: Combined
Effective Date: January 1, 2019

1.2. Company Contact Information

Primary Contact Name: Paul A. Schultz, FSA, MAAA
Primary Contact Telephone Number: 1-(802)-371-3763
Primary Contact Email Address: schultzp@bcbsvt.com

1.3. Scope and Purpose

The purpose of this rate filing is to provide the rates and a description of the rate development for the ACA-compliant plans for the Vermont Individual and Small Group merged market that Blue Cross and Blue Shield of Vermont (BCBSVT) proposes to offer for the 2019 benefit year. This rate filing applies to plans both On-Exchange and Off-Exchange.

This filing is intended to comply with the following laws:

- Vermont State Law 8 V.S.A. § 4062
- Vermont State Law 8 V.S.A. § 4512
- Vermont State Law 33 V.S.A. § 1806
- Vermont State Law 33 V.S.A § 1811
- Vermont State Law 33 V.S.A. § 1812.
- DFR Order establishing tier rate structure and multipliers (Docket No. 13-002-I)
- Vermont Agency of Human Services Health Benefits Eligibility and Enrollment Rule, Parts 1 and 2
- Green Mountain Care Board, Rule 2.000
- Federal Regulation 45 C.F.R. Part 147
- Federal Regulation 45 C.F.R. Part 153
- Federal Regulation 45 C.F.R. Part 154
- Federal Regulation 45 C.F.R. Part 155
- Federal Regulation 45 C.F.R. Part 156
- Federal Regulation 45 C.F.R. Part 158
- Federal Regulation 26 IRC § 223

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1.4. Proposed Rate Increase(s)

The average increase for plans other than Silver Level Exchange plans - that is, the average increase that will actually be experienced by Vermont individuals and small businesses - is 5.3 percent.

Increases for specific plans range from 3.5 percent to 6.8 percent, except for the Catastrophic plan, which is increasing by 1.2 percent. Silver Level Exchange plans will increase an average of 16.0 percent, with increases for specific plans ranging from 14.6 percent to 18.9 percent. Across all plans, the average increase is 7.5 percent.

1.5. Reason for Rate Increase(s)

The starting point of any renewal rate analysis is an assessment of actual to expected experience results. The basis for this rate filing is calendar year 2017 experience. While the claims experience matched the expectation embedded within the 2018 filing, our current estimate of 2017 risk adjustment is significantly better than expected, leading to a 1.3 percent decrease in 2019 rates.

Medical and pharmacy trend had by far the largest impact on rates. The 2018 filing included assumptions for trend from 2017 to 2018, including a medical utilization trend that was reduced to 1.0 percent from the 2.0 percent filed by BCBSVT and considered by the GMCB's consulting actuary to be the best estimate. The 2019 filing reexamines these assumptions. Restating the expected trend from 2017 to 2018 had a 1.3 percent impact on rates:

2017 to 2018 Trend Component	Approved 2018	Filed 2019	2019 Rate Impact
Medical Utilization	1.0%	2.0%	0.8%
Medical Unit Cost	2.6%	2.6%	-0.1%
Pharmacy	8.9%	13.3%	0.7%
Dental	10.3%	7.2%	0.0%
Vision	0.0%	0.0%	0.0%
Total			1.3%

The two largest impacts are the restoration of medical utilization trend to 2.0 percent and the significant increase in pharmacy trend, driven by specialty pharmaceutical utilization. See section 3.4.7 for a detailed discussion of trend assumptions.

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An additional year of projected trend applies from 2018 to 2019. The overall anticipated increase in rates due to the additional year of projection is 6.0 percent:

2018 to 2019 Trend Component	Filed 2019	2019 Rate Impact
Medical Utilization	2.0%	1.5%
Medical Unit Cost	2.7%	2.1%
Pharmacy	13.3%	2.3%
Dental	7.2%	0.0%
Vision	0.0%	0.0%
Total		6.0%

Population changes have a 1.4 percent impact on rates, driven by an observed increase in average claims costs due to the loss of healthy members that is not expected to be fully offset by an increase in risk adjustment receivable, along with a 0.5 percent increase for the ongoing aging of the single risk pool.

Benefit changes made by the Department of Vermont Health Access for standard plans and by BCSBVT for non-standard plans almost exactly offset the impacts of benefit leverage. Altogether, factors related to plan design, actuarial value and induced utilization marginally decreased rates by 0.3 percent.

Administrative charges and other fees increase premiums by 1.0 percent. The main contributor to this total is a 0.6 percent increase in premiums due to BCSBVT administrative costs, which nonetheless continue to be less than seven percent of total premium.

Restoration of the contribution to reserves to its necessary level adds 1.5 percent to rates.

The Tax Reform legislation passed in late 2017 eliminated federal income tax requirement for the BCSBVT legal entity starting with the 2018 tax year. These savings have been fully passed through to customers via a reduction in premium rates through two mechanisms: the contribution to reserves was decreased by 0.5 percent and the estimate for the federal insurer fee was reduced by 0.6 percent because it was no longer necessary to account for the disadvantageous tax impact of the fee. The premium savings due to Tax Reform totals 1.1 percent.

Two changes at the federal level had a nearly offsetting rate impact. The federal insurer fee was suspended for 2019. Because this tax was in force in 2018, this leads to a 2.0 percent reduction in 2019 rates. However, recent federal legislation also eliminated the penalty associated with the individual mandate. As a result, it is expected that a number of healthy individuals will choose to forgo coverage and leave the single risk pool. This is expected to exert an upward pressure of 2.2 percent on premium rates.

BCSBVT has embarked on numerous efforts to mitigate premium increases. In addition to passing 100 percent of federal income tax savings to consumers, BCSBVT has continued to work closely

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with its pharmacy benefit manager to improve network pricing and maximize rebates. These pharmacy initiatives have similar impacts totaling a 2.3 percent decrease in premium. Additionally, BCBSVT is working closely with our network providers and OneCare Vermont to maximize our collaborative clinical reach focusing on reducing the overall medical costs. We expect these efforts to exert a downward pressure of just over one percent on medical utilization trend, driving a 0.8 percent rate reduction. Altogether, BCBSVT rate mitigation is leading to a reduction of rates of 4.2 percent, or a projected \$15.7 million.

1.6. Historical Financial Results

BCBSVT has been offering QHP products since the start of the program in 2014. Prior to offering QHPs, BCBSVT offered Individual and Small Group products. All Vermonters that were previously purchasing Individual and Small Group products were required to move to a QHP in 2014. The State allowed individuals and small groups to remain in their 2013 products through the first quarter of 2014. All financial information below includes only the QHP experience in 2014.

	CY 2014	CY 2015	CY 2016	CY 2017	Cumulative
Member Months	638,492	768,293	835,541	820,156	3,062,482
Filed Contribution to Reserve	1.0%	1.0%	2.0%	2.0%	1.6%
Approved Contribution to Reserve*	-0.1%	1.0%	0.8%	1.0%	0.7%
Actual Contribution to Reserve	1.0%	-1.4%	-3.2%	-0.5%	-1.2%

*Includes explicit cuts to CTR as well as reductions to actuarial factors that were beyond those recommended by the Board's contracted actuary.

The actual contribution to reserve was calculated by restating financial results to include the impacts of Transitional Reinsurance, Risk Adjustment and other prior year events in the year they were incurred, rather than the year when they were booked.

The contribution to reserve necessary to have maintained the December 31, 2013 level of Risk Based Capital (RBC) over this four year period solely for increases in claims was 1.6 percent per year.

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1.7. Health Care Reform

All Payer Model

The All Payer Model agreement between the State and CMS began a formal pilot year program on January 1, 2017. The pilot year served as a test year for a Medicaid risk contract with OneCare Vermont, LLC (“OneCare”), an Accountable Care Organization (“ACO”). Additionally, the 2017 statewide medical spend experience serves as a baseline year for measurement of performance of the five-year agreement officially beginning in 2018. Under this new model, Medicare, Medicaid, and Commercial payers all enter into risk sharing agreements with the ACO, focusing on transitioning to value based reimbursement methodologies. All beneficiaries keep their current benefit and provider choice – there are no network or benefit restrictions. Through deployment of new care models, the All Payer Model requires that the ACO strive to reduce cost and meet three health improvement goals: improved access to primary care, reduced deaths from suicide and drug overdose, and reduced prevalence and morbidity of chronic disease.

BCBSVT is a proponent of health care payment reform and the goals of the All Payer Model. In preparation for the All Payer Model, BCBSVT continued testing a shared savings ACO program in 2017. BCBSVT did not experience savings during 2017 through the shared savings program, but the pilot period served to establish the necessary operations and communications work between BCBSVT and OneCare Vermont (OneCare).

In 2018, BCBSVT entered into its first shared-risk/shared-savings ACO program with OneCare. The BCBSVT ACO program is aligned with Medicaid’s program and the All Payer Model agreement. Importantly, the agreement between BCBSVT and OneCare aligns the ACO expected spend target with GVCB approved premiums. If actual medical spend is higher or lower than medical component of the premium, the ACO will share in 50 percent of the savings or risk to a maximum of 6 percent.

BCBSVT’s agreement with OneCare is an annual agreement with three additional one-year option years. In expectation of a 2019 program, BCBSVT is working closely with our network providers and OneCare to maximize our collaborative clinical reach focusing on reducing overall medical costs. Savings across the entire single risk pool for this initiative has been reflected in this filing (see section 3.4.7.1). It would be inappropriate to include an expectation of additional savings due to ACO operations, as this would undermine the alignment of target to premium. Any actual savings generated by BCBSVT risk contracts will be reflected through experience in future rate filings.

Cost Share Reduction Funding and the Vermont Silver Solution

As part of the Affordable Care Act, the federal Cost Share Reductions (CSR) program is available to benefit low income Vermonters. The CSRs reduce out-of-pocket expenses through lower deductibles, copayments and out-of-pocket maximums if the member enrolls in a Silver Level Plan. These plans, which must meet specific metal actuarial values (AVs), have historically been available at the same premium as the non-CSR Silver plans. The federal government administered the program directly through the carrier, rather than the beneficiary, and used monthly advance payments with an annual reconciliation process to reimburse issuers for the difference between claims incurred by enrollees and the estimated payments.

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On October 12, 2017, the federal government stopped funding plans for the claims incurred within the CSR program. Vermont carriers were not permitted to resubmit rates to recoup the CSR benefits expected to be utilized by members for 2018.

In preparation for the ongoing lack of federal CSR funding, Vermont passed Act 88¹, an act allowing silver-level nonqualified health benefit plans to be offered outside the Vermont Health Benefit Exchange (sometimes referred to as the “Silver Solution”). This Act allows issuers to “load” Silver plans by including the estimated CSR cost into the premium for Silver Level Exchange Plans and offer non-loaded off exchange “Reflective Silver Plans.” This strategy, used by the majority of states, takes advantage of the federal advanced premium tax credit program to offset the loss of CSR funding and protect all Vermont Exchange enrollees.

Vermont State Legislature

The rates submitted reflect current law coverage, benefits and cost sharing amounts in place for 2019. The Vermont legislature is currently in session, and there are a number of bills being considered that could impact the 2019 rates described in this filing. If any of these bills pass and become effective for the 2019 plan year, BCBSVT expressly reserves the right to amend these submitted rates to reflect any changes required by new law.

Other Marketplace Issues

The federal government has taken steps to introduce alternatives to ACA-compliant plans into the individual and small group markets. These alternatives, most notably Association Health Plans and Short Term Limited Duration plans, could significantly disrupt the single risk pool.

Federal and state regulation is still pending for these alternatives. While their availability in 2019 remains uncertain, various actuarial studies suggest that these plans could have a detrimental impact on rates for the ACA-compliant plans. We have chosen not to adjust 2019 rates for the emergence of these alternative plans, as the absence of regulation makes their potential impact on the single risk pool unclear. Depending on the timing and content of expected regulation, it is more likely that these plans will have an impact on the single risk pool beginning in 2020.

¹ <https://legislature.vermont.gov/assets/Documents/2018/Docs/ACTS/ACT088/ACT088%20As%20Enacted.pdf>

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2. PROPOSED BENEFITS

2.1. Description of Benefits

BCBSVT will be offering two types (Standard and Non-Standard) of plans to the Individual and Small Group market in 2019. These plans include coverage for all Essential Health Benefits (EHBs). All plans are on the Exclusive Provider Organization (EPO) network and offer members access to a nationwide network of providers, including 92 percent of the providers in Vermont.

BCBSVT Standard Plans: BCBSVT is providing rates for the Standard Plans with benefits as approved by the Green Mountain Care Board, which are outlined in Exhibit 1A - "State of Vermont Standard Plan Designs." The form filings for these products can be found under BCVT-131415918 for Non-CDHP plans and BCVT-131416317 for CDHP Plans.

BCBSVT Blue Rewards (Non-Standard) Plans: BCBSVT is providing rates for two health and wellness-based non-standard products that we have named Blue Rewards and Blue Rewards CDHP. Please see Exhibit 1B - "Blue Rewards (Non-Standard) Plan Designs" for details on the benefit structure. The form filings for these products can be found under BCVT-131416286 for Non-CDHP plans and BCVT-131416310 for CDHP Plans. BCBSVT Blue Rewards plans also offer a wellness program with incentives up to \$300 per year for each adult member for completing a health assessment, having a physical exam, participating in a workshop or challenge, or having a routine eye or dental exam or clinically appropriate screening. BCBSVT is introducing a new Blue Rewards Silver CDHP plan effective January 1, 2019.

Reflective Silver Plans

As described in section 1.7, pursuant to Act 88, BCBSVT will be offering silver plans off-exchange only for the 2019 plan year. These plans will be "reflective" of the on-Exchange plans and only have a \$5 copayment, 5% coinsurance or \$25 deductible difference from the on-Exchange plan.

Uniform Compliance

All of the renewing benefits are in compliance with 45 CFR §147.106. Specifically, all renewing benefits continue to be offered on BCBSVT's Exclusive Provider Organization (EPO) network and continue to cover the same service area. Some cost sharing levels were modified to maintain the same metal tier levels. Each product covers the same benefits as covered for plan year 2018.

2.2. AV Metal Values

Standard plans are designed by the State of Vermont and offered by all issuers of QHPs. Please see *Attachment A - Standard Plans AV Certification - 2019* for the certification provided by the State.

Blue Rewards (Non-Standard) plans are designed by BCBSVT. The metal values included in the Unified Rate Review Template (URRT) were calculated using an alternate methodology, as allowed by 45 CFR §156.135. Multiple benefit designs offered in BCBSVT's Non-Standard plans are not supported by the AV Calculator. Please see *Attachment B - Blue Rewards (Non-Standard) Plans AV Certification - 2019*, for the actuarial certification, which includes the process used to develop the AV Metal Values.

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3. EXPERIENCE RATING

3.1. Experience Period Premium and Claims

The experience period used is 2017 experience of Blue Cross and Blue Shield of Vermont (BCBSVT) Individual and Small Group markets. This population will be referred to as the Single Risk Pool.

We used claims incurred January 1, 2017 through December 31, 2017 and paid through March 31, 2018. Both the paid claims and the allowed charges were completed using BCBSVT's monthly reserving models that underlie the financial statement reserves (best estimates before margin). These methods are subject to review by independent auditors and examination by Vermont Department of Financial Regulation (DFR). For the purpose of calculating completion factors, the reserving method categorizes claims by reporting/payment process (Local, BlueCard, Pharmacy, Medicare Supplement, etc.). Completion factors are calculated separately for each category. We also included an estimate of IBNR for the outstanding pharmacy rebates.

The paid claims and allowed charges come directly from claim records in BCBSVT's data warehouse. For Fee-for-Service claims, we combined plan payment with member cost sharing to calculate the allowed charges. For claims under a capitation arrangement, we combined capitation paid to the provider with the member cost sharing to generate allowed charges.

The table below shows details underlying the Incurred Claims and Allowed Claims (from URRT, Section I of Worksheet 1) for the Experience Period.

	Incurred Claims	Allowed Claims
Claims incurred and paid through December 31, 2017	\$372,876,941	\$456,629,973
Estimate of IBNR as of March 31, 2018 for Claims	\$1,558,026	\$1,825,602
Estimate of IBNR as of March 31, 2018 for Pharmacy Rebates	(\$2,345,740)	(\$2,345,740)
Total Claims	\$372,089,227	\$456,109,835
Member Months	819,824	819,824
Total Per Member Per Month (PMPM)	\$453.86	\$556.35

The experience period total allowed charges PMPM are \$556.35.

In the experience period, the earned premium was \$408,055,901. BCBSVT will not be required to pay Minimum Loss Ratio (MLR) rebates for the 2017 calendar year.

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3.2. Benefit Categories

Medical claims are initially categorized into two categories based on the type of claim form the provider submitted: UB-04/CMS 1450 (Facility Inpatient/Outpatient) or HCFA/CMS 1500 (Professional/Other). Facility claims are then divided into the Inpatient and Outpatient categories in Worksheet 1, Section II of the URRT by the place of service listed on the UB-04 claim form.

Professional and Other medical claims are subdivided based on whether the provider is a medical professional or medical supplier as submitted on the HCFA 1500 claim form.

The prescription drug benefit category was populated for claims processed through our pharmacy benefit manager.

The capitation benefit category was populated with claims that run through our internal capitation system. The capitation category uses “Benefit Period” as a utilization description and the units represent the number of capitations in a given year.

3.3. Index Rate

The Index Rate is equal to the experience period allowed charges for EHB. As shown in section 3.1, the total allowed charges per member per month in the experience is \$556.35. In 2017, BCBSVT removed an exclusion for routine circumcision (see section 3.8.3 for details). Those services are not considered EHB and must be removed from the experience to calculate the Index Rate.

	PMPM
Allowed Claims in section 1 of worksheet 1 of URRT	\$556.35
Allowed Claims for Non-EHB	\$0.08
Experience Index Rate	\$556.27

The experience index rate for 2017 is \$556.27.

To calculate the Projected Period Index Rate, we first excluded pharmacy rebates, BlueCard fees, and payments to the Blueprint program. These claims are not dependent on benefits and are not subject to the projection factors described in the following sections. They will be added back into the Projected Period Index Rate (as described in section 3.4.6.).

BCBSVT has access to the detailed claims information underlying capitated claims. Since capitated payments are routinely adjusted to target 100 percent of FFS claims, using the FFS equivalent represents the expected payment better than does the capitation.

These adjustments are included in the “Other” factor in the section 2 of worksheet 1 of the URRT.

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	Total Dollars	PMPM
Allowed Claims in section 1 of worksheet 1 of URRT	\$456,109,835	\$556.35
Remove BlueCard Fees	(\$1,612,162)	(\$1.97)
Remove Pharmacy Rebates	\$10,456,519	\$12.75
Remove Payments to Blueprint Program	(\$3,086,284)	(\$3.76)
Replace Capitation with FFS equivalent	\$565,236	\$0.69
Line A of Exhibit 5	\$462,433,145	\$564.06

3.4. Projection Factors

The 2017 Tax Cuts and Jobs eliminated the penalty associated with the individual mandate for plan years 2019 and beyond. The elimination of the penalty is expected to impact both enrollment and claims cost as some healthy members will choose to forgo insurance. The removal of the penalty impacts our membership projection (section 3.4.2.), morbidity of the population insured (section 3.4.3.) and the administrative costs (section 3.8.5.1). The premium impact totals 2.2 percent, which is within the best estimate range suggested by a study published jointly by the GMCB and DFR². We will describe each of the impact separately.

3.4.1. Change in the Definition of Small Group

As of the first renewal date on or after January 1, 2016, the Vermont definition of Small Group changed to include groups with 51-100 employees. All small groups in the experience period were already part of the single risk pool, therefore the factor (1+b₁ on Exhibit 5) to adjust for the change in the definition of Small Group is 1.000.

3.4.2. Membership Projections

As of March 2018, BCBSVT had 53,664 members enrolled in the single risk pool, either individually through Vermont Health Connect or directly as individuals or small group employees.

We used this information as the starting point to project the 2019 enrollment and the distribution by plan, including movement between plans and into the new proposed plans.

An adjustment was made to the starting point enrollment for the expected membership losses due to the elimination of the individual mandate. We assumed that all members that receive a premium subsidy as well as all members that are enrolled through their small group employer will remain in the market. That leaves the individual members that do not receive a premium subsidy as the population that could consider dropping their insurance due to the elimination of the mandate. We believe within this population those who do not use their benefit or only have preventive care services will leave the market. Over the last three calendar years we observed an average of 11.8 percent of member months in this sub-population (or 2 percent of the overall population) fall into the category of using no benefits or preventive care only benefits. Applying

² <http://gmcboard.vermont.gov/sites/gmcb/files/Individual%20Mandate-%20impact%20in%20Vermont.pdf>

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this factor to our 2019 starting point results in an expected loss of 1,073 members, or a 2019 projected enrollment of 52,591.

Experience has shown us that over time we will see movement to less expensive plans due to rate increases in the market. We expect this will result in movement from Gold to Silver and to some extent from Silver to Bronze.

As described in section 1.7, Vermont is now offering Off-Exchange silver plans (also called Reflective plans). Members that are not eligible for subsidies are expected to move from the On-Exchange Silver plans to the Reflective plans.

BCBSVT filed a Blue Rewards Silver CDHP benefit design as part of the form filing submitted to DFR in March. This plan is very similar to plans that were very popular in Small Group prior to 2014. We assumed that some members in either the Blue Rewards Gold CDHP or in other Silver plans would enroll in the new Blue Rewards Silver CDHP.

Based on these factors, our best estimate for the 2019 BCBSVT Individual and Small Group population by plan and market can be found on Exhibit 2A.

The total member months expected to be covered by this filing is 643,968.

This projected membership was also used to adjust our Index Rate for demographics, morbidity, benefit changes, and other allowable adjustments described below.

3.4.3. Changes in the Morbidity of the Population Insured

Our experience period is based on calendar year 2017. Using March 2018 enrollment, we grouped members into broad categories of Active and Canceled. Canceled members can be further divided into two categories: voluntary cancelation and cancelation due to death. Voluntary cancelations can be further broken down by aging out, cancellations from normal group turnover, and individual cancellations. Individuals aging out are captured in our demographic adjustment (see section 3.4.5). In past filings, we assumed that group turnover leads to the hiring of similarly-situated individuals and therefore, we only adjusted for the impact of individual cancellations. In 2018, we experienced far larger than typical cancelations in the Small Group segment. To reflect this, we are also adjusting for Small Group members leaving BCBSVT. If all members in a group canceled, we are excluding them under the assumption that the entire group moved to a different carrier. If members that canceled were part of a group that is still with BCBSVT, we assumed that group turnover will lead to the hiring of similarly-situated individuals; therefore, an adjustment is not needed for such members.

We split the experience claims costs based on these categories in order to compare the different populations. We adjusted the allowed charges from the experience period to reflect the average claims cost of members who did not voluntarily terminate or are part of a small group still enrolled with BCBSVT prior to the end of calendar year 2017.

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	Voluntary Cancellation in the Individual Market	Members in Groups that are no longer with BCBSVT	All Other Members	Total
Experience Period Allowed	\$37,911,937	\$39,657,452	\$384,863,755	\$462,433,145
Member Months	68,283	84,643	666,898	\$819,824
PMPM	\$555.22	\$468.53	\$577.10	\$564.06

The factor (1+b₉ on Exhibit 5) to adjust for the change in pool morbidity is $\$577.10/\$564.06 = 1.0231$.

We also adjusted the projected allowed charges (1+b₃ on Exhibit 5) for the impact of members that were new to the single risk pool in 2018. We assumed that these members would have claims levels similar to members enrolled the same line of business in 2017. The impact of the Newly Insured is 1.0005, as shown on Exhibit 2B.

The claims impact of eliminating the individual mandate penalty (1+b₇ on Exhibit 5) represents the increase in the allowed charge PMPM when the expected low cost individuals leave the market. As discussed in section 3.4.2, approximately 2 percent of member months came from members that had no claims or had preventive care only claims within the individual market not receiving premium assistance. This leaves the BCBSVT pool with 2 percent less member volume with very nearly the same expected total claims. Therefore an adjustment of 1.02 has been used as the claims impact of eliminating the individual mandate.

3.4.4. Changes in Benefits

The impact of benefit changes (1+c₁ line on Exhibit 5), represents the anticipated change in the average utilization of services due to the change in average cost sharing in the projection period compared to the experience period. To calculate this factor, we first calculated the PMPM allowed charges by metal level. To ensure that high claims were not skewing the relationship between metals, we removed claims above \$500,000 and replaced these by the average PMPM for claims above that threshold. We then compared the PMPM by metal to the average to get allowed charge relativities. Using the experience member months and the projected membership by metal, we calculated an average allowed charge relativity for each and compared the two averages to calculate the impact of changes in benefits. The impact of the movement between benefits is 1.0075, as shown on Exhibit 2C.

3.4.5. Changes in Demographics

To develop the change in demographic factor (factor 1+c₃ on Exhibit 5), we used the age-gender factors from the SOA's report Health Care Cost - From Birth to Death³. In previous filings, we applied these factors to both the experience membership and the projected membership and compared the average factors. In 2018, we experienced a higher than historical shift in the

³ <https://www.soa.org/Research/Research-Projects/Health/research-health-care-birth-death.aspx>

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demographics of the single risk pool. This has already be accounted for in the $1+b_9$ factor (section 3.4.3). To avoid double-counting for this shift but to also reflect the expected future aging of the population, we used the three year average increase in age-gender factor for the period from 2014 through 2017 as our projected annual increase due to changes in demographics.

Year	Average Age-Gender Factor	Annual Increase
2014	1.2476	
2015	1.2512	1.0028
2016	1.2575	1.0051
2017	1.2666	1.0072
2018	1.2880	1.0169

The demographic adjustment ($1+c_3$ on Exhibit 5) is 1.0101, which reflects two years of aging from the experience period to the projection period at the average annual increase from 2014 to 2017.

3.4.6. Other Adjustments

The buildup of the Projected Index Rate also includes a factor to reflect new pharmacy contracts, a factor to reflect the impact of selection on allowed costs, a factor to reflect the impact of the elimination of the individual mandate, and adjustments for non-system claims⁴.

Changes in Provider Network ($1+c_2$)

Since the experience period claims and the projection period claims are both on the EPO network, the factor for the change in provider networks (factor $1+c_2$ on Exhibit 5) is 1.000

Changes in Pharmacy Contracts ($1+c_5$)

BCBSVT established a new contract with its pharmacy benefit manager, ESI, with discount improvements effective January 1, 2018, that will impact the projected pharmacy allowed charges. To calculate this factor, we applied the contracted discounts and dispensing fees for each type of drug (Generic, Brand and Specialty) to calendar year 2017 claims for both the experience period and the projected period contract provisions. The contract adjustment factor for each type of drug, calculated by taking the ratio of the projected pharmacy claims under each contract, was applied to the projected pharmacy claims (see Exhibit 3G for details). The adjusted projected pharmacy claims were then added to the projected medical claims to calculate the overall impact of the contract changes, as shown on Exhibit 3H. The total impact of the change in pharmacy contracts is 0.9875, as shown on line $1+c_5$ of Exhibit 5.

Impact of Selection ($1+c_6$)

Subscribers will make financial decisions that are right for them. Typically, this manifests itself in healthier subscribers selecting low-cost plans while less healthy subscribers select richer benefits. While we do not reflect selection in the plan-level adjustments, as per the

⁴ Non-system claims are payments that are not processed through the claims adjudication system.

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instructions, it can be demonstrated that total premium will be understated without adjusting the index rate to spread the impact of selection across all plans (see Exhibit 2D). This is due to the plan share of allowed costs being greater for richer plan designs, which demonstrably experience antiselection in excess of benefit richness adjustments. The top section of Exhibit 2D shows the build-up of paid claims from allowed charges using actual plan-level adjustments described in Section 3.8 of this Memorandum. The bottom section of the same exhibit demonstrates the impact on total paid claims of using benefit richness adjustments that instead reflect actual 2017 single risk pool experience. The ratio of weighted average projected paid claims calculated via each of these two approaches produces a factor that must be included in the index rate so that application of the various plan-level adjustments results in the correct total paid claims across all plans. The total impact of selection is 1.0132, as shown in Exhibit 2D.

Impact of VHC Adjustments (1+b₈)

VHC has made significant strides in improving the accuracy of their membership data. The observed impact on 2016 data for retro cancellations and 2017 data for claims without membership is immaterial, and we do not expect further improvements. The total factor on line 1+b₈ of Exhibit 5 is therefore 1.000.

Non-System Claims (e₁ - e₇)

Other costs were added in the buildup of the Projected Index Rate to account for non-system claims (Items e₁-e₅ on Exhibit 5). As previously explained in section 3.3, these non-system claims are claims that are independent from the benefits.

- Pharmacy Rebates (e₁):

The experience period pharmacy rebates are estimated to be \$12.75 PMPM. This number is a combination of actual rebates and estimates using our contractual rebate guarantee since we have not yet received the details underlying the rebate payment for part of the 2017 calendar year. Pharmacy rebates are expected to trend at the same rate as Brand Drugs. As shown on Exhibit 3G, the projected cost trend for Brand drugs is 12.3 percent, which brings projected pharmacy rebates to \$16.09 PMPM prior to adjusting for the new formulary BCBSVT started using on January 1, 2018.

As of January 1, 2018, BCBSVT moved this line of business from its current formulary to ESI's National Preferred Formulary. With this new formulary, we expect rebates to increase significantly. To estimate the increase in rebates, ESI provided a projected rebate amount for each brand drug. Using our experience brand drug scripts, we calculated the projected total amount of additional rebates. These additional rebates of \$1.94 PMPM were then trended using the Brand cost trend of 12.3 percent for a total of \$2.44 PMPM. The total projected rebates are therefore \$18.53 PMPM.

- Blueprint Payments (e₂):

BCBSVT participates in the Vermont Blueprint for Health⁵ program. The Vermont Blueprint for Health Manual, effective January 1, 2016, details the funding for both portions of the program: Community Health Teams (CHT) and Patient Centered Medical Homes (PCMH). We do not expect the funding for either CHT or PCMH to change in 2019. Therefore, we assumed that the experienced PMPM of \$3.76 would continue to 2019.

⁵ <http://blueprintforhealth.vermont.gov/>

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- Interplan Teleprocessing System (ITS) (e₃):
The BlueCard® Program gives BCBSVT members healthcare coverage wherever they go across the country and around the world. The fees associated with this program are independent of the amount of the claims and therefore solely dependent on utilization of BlueCard participating providers. As described below, we believe that the medical annual utilization trend, before the impact of the cost containment strategy, is 2.0 percent; therefore, these fees are expected to increase at 2.0 percent. The experience period fees (\$1.97 PMPM) are projected to grow to \$2.05 PMPM in 2019.
- Vermont Vaccine Purchasing Program Payments (e₄):
The Vermont Vaccine Purchasing Program⁶ offers health care providers state-supplied vaccines at no charge by collecting payments from health plans, insurers and other payers. This assessment is now based on a PMPM charge, which is a change from the previous year when it was based on claims. We applied the 2018 rates of \$8.15 per child and \$0.72 per adult to the experience period membership. On March 23, 2018, the Vermont Vaccine Purchasing Program released a memo explaining that they ended the fiscal year 2017 with an unobligated balance much higher than anticipated. On April 5, 2018, they amended the remaining 2018 rates⁷ to be \$0.01 PMPM and noted that “For planning purposes, we would like payers to be aware that the 2019 assessment rate is expected to remain somewhat below normal. The 2019 assessment rate will be set in the fall of 2018.” We estimate that the 2019 rates will be 60 percent of the original 2018 rates. The average PMPM for the experience period of \$1.65, was multiplied by 0.60 to calculate the projected period PMPM of \$0.99.
- Net Cost of Reinsurance (e₅):
BCBSVT uses reinsurance to protect itself against very high claims. Included in the Projected Index Rate is the net cost (reinsurance premium less expected reinsurance claims) of reinsurance. This PMPM cost of \$1.36 was calculated in BCBSVT Large Group Rating Program Filing (SERFF #BCVT-131424513).
- OneCare Coordination Fee (e₆):
BCBSVT is paying OneCare VT a PMPM care coordination fee for attributed BCBSVT members to directly support ACO providers, including community providers, as they deploy new care models. This model mirrors the investment Medicaid has made in the ACO provider network and supports the comprehensive care models being tested within the ACO program. The monthly PMPM for members attributed to OneCare is \$3.25. This fee will be included as a claims expense in the risk sharing calculation that is subject to a 50 percent shared risk/savings. As of March 2018, 37.4 percent of the Single Risk Pool was attributed to OneCare. The projected PMPM is therefore \$0.61 = \$3.25 x 0.5 x 0.374.
- ESI Additional Administration Fees (e₇):
ESI offers additional services to BCBSVT for clinical management programs. These programs include prior authorizations, step therapy, quantity reviews, copay reviews, and pharmacy vaccination programs, as well as ESI’s RationalMedSM program, which protects patients against

⁶ <http://www.vtvaccine.org/>

⁷ [http://www.vtvaccine.org/vtvaccine.nsf/documents/2018AssessmentRateChangeNoticeAndLetterFromTheCommissioner.html/\\$File/2018%20VVPP%20Committee%20Recommendation%20letter%20and%20Notice%20of%20Assessment.pdf](http://www.vtvaccine.org/vtvaccine.nsf/documents/2018AssessmentRateChangeNoticeAndLetterFromTheCommissioner.html/$File/2018%20VVPP%20Committee%20Recommendation%20letter%20and%20Notice%20of%20Assessment.pdf)

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potentially harmful drug interactions. The total PMPM in the experience period was \$0.56 PMPM for these services, and is projected to be the same in 2019 since the contractual rates will remain the same.

3.4.7. Trend Factors (cost/utilization):

The source of the data is BCBSVT's data warehouse, except where noted below. To ensure accuracy of claims information, the data used has been reconciled against internal reserving, enrollment, and other financial reports. Claims incurred between January 1, 2015 and December 31, 2017, completed through March 31, 2018, were used in the analysis. Completion factors, based on best estimates from financial reporting before margin for conservatism, are applied to estimate the ultimate incurred claims for each period shown in the exhibits.

The data includes claims from the Single Risk Pool and the non-QHP experience for groups with 51-100 employees that joined the Single Risk Pool in 2016, when Vermont changed the definition of Small Group to include groups with 51-100 employees. Over the past few years, we have experienced membership retroactivity, primarily associated with members enrolled through VHC. This retroactivity causes some claims to no longer be associated with active membership. The data excludes claims that are no longer associated with active enrollment.

3.4.7.1. Medical Trend Development

Using the historical contracted reimbursement schedules, we calculated network factors that represent the various contracts. Using these factors, we can modify the claims to reflect only one contract. From there, we can observe the historical cost increases using all claims information.

Medical trend is composed of three pieces: cost, utilization and intensity. In our analysis, we combine utilization and intensity within the utilization metric and analyze the unit cost separately. Historical experience is normalized for contract changes and then analyzed to derive a utilization trend in the absence of unit cost changes. Future unit cost trends are developed on a discrete basis, using the most recent round of contract negotiations as a starting point. The overall trend is the product of these two components.

Unit Cost

Unit cost trends were largely derived from observations of recent contracting and provider budgetary changes. During calendar year 2017, about 53 percent of total medical claims dollars occurred at Vermont facilities and providers impacted by the hospital budget review process of the GMCB. The starting point of our calculation assumes that the GMCB will approve hospital budgets for October 1, 2018 and October 1, 2019 that support identical commercial increases as those approved for October 1, 2017, with the exception of hospitals that publicly announced⁸ a different intended commercial rate increase. Based upon those assumptions, the provider contracting and actuarial departments worked together to assess the impact such an increase would have on contract negotiations specific to the EPO network used for Qualified Health Plans.

⁸ <http://gmcboard.vermont.gov/sites/gmcb/files/A17N99%20NARR.pdf>

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Similarly, we assumed for other providers within the BCBSVT service area that overall 2018 and 2018 budget increases would be identical to those implemented during calendar 2017, with the exception that if we have learned more recent information from our early negotiations with providers, the more recent information is reflected. Again, the provider contracting and actuarial departments worked closely together to assess the impact these increases would have on contract negotiations specific to the EPO network used for Qualified Health Plans.

Finally, unit cost increases for providers outside the BCBSVT service area were derived from the Fall 2017 Blue Trend Survey, which is a proprietary and confidential dissemination of the Blue Cross and Blue Shield Association.

The results of the analysis are summarized in the below chart:

Annual Reimbursement Changes due to Budget Increases and Contracting Season	Percent of Total Allowed Medical Claims in Experience	Cost Trend from 2017 to 2018	Cost Trend from 2018 to 2019	Total Annual Cost Trend
Vermont facilities and providers impacted by GMCB’s Hospital Budget Review	53.2%	2.3%	2.1%	2.2%
Other facilities and providers	46.8%	2.9%	3.5%	3.2%
Total	100.0%	2.6%	2.7%	2.7%

Utilization & Intensity

Historical utilization trend patterns were examined by first normalizing for unit cost increases. Contract changes for the entirety of the experience period were measured explicitly for each facility within our service area, as well as the three largest physician groups.

Increases were measured for fee schedules and other chargemasters by applying each schedule to a market basket of services. The market basket was defined by using Current Procedural Terminology (CPT) codes & CPT modifier combinations that were present in each of the effective periods the schedules covered. Using the same experience period data used throughout the trend analysis, total allowed costs for the selected combinations of CPT and CPT modifier were compared under each schedule to estimate the percentage increase. For contracts under Diagnosis Related Group (DRG) arrangements, we compared the charge for the 1.000 DRG service for each period. Finally, for services under a discount of charge arrangement, we used the contracted chargemaster increase provided by our Provider Contracting department.

This accounted for about 84 percent of allowed claims dollars during the experience period. Costs for other claims are primarily for out-of-area services. Contracting changes for these claims were derived from the Fall 2017 Blue Trend Survey, which is a proprietary and confidential dissemination of the Blue Cross and Blue Shield Association.

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Claims were normalized to the December 2017 contract at each unique provider by applying a factor equal to the product of the impact of each contracting change from the experience month through December 2017. The derived trend for other claims was assumed to be continuous. Please see Exhibit 3A for an illustration of this approach.

Shown on page 1 of Exhibit 3B is the resulting array of allowed PMPM claims costs, before and after normalization for contract changes. Inpatient and Outpatient claims were grouped together since we have observed a shift from Inpatient to Outpatient.

Utilization is influenced by the richness of a product and, when benefits get richer over time, the utilization will increase. To adjust for this phenomenon, we calculated the average induced utilization factor based on the actuarial values of the plans in the experience and adjusted each month to reflect the benefits in place in December 2017.

Utilization is also influenced by age. Using SOA's report Health Care Cost - From Birth to Death factors, we calculated the average age-gender factors for the members included in the development. We adjusted each month in to reflect the age-gender factor evident in December 2017.

Since early 2014, BCBSVT implemented many new programs to combat fraud, waste and abuse (FWA). As shown in the table below, the return of FWA programs has increased drastically in the past four years for ACA-Compliant Individual and Small Group business.

Calendar Year	Percent of claims recovered as part of FWA programs
2014	0.09%
2015	0.75%
2016	1.05%
2017	1.10%

This increase in recoveries is skewing the trend calculation downward. We have therefore adjusted the claims to reflect 2017 recovery rates. We expect that the percentage of claims recovered through these programs will remain at approximately one percent of total allowed claims through 2019. We have accordingly not adjusted the trend for future improvements in FWA efforts.

Given that our standard methodology produced atypically high utilization trends, we removed all claims from members who exceeded \$250,000 in allowed medical claims a calendar year. As the utilization component includes intensity, an increase in high cost claimants can disproportionately impact the year-over-over and regression calculations. Exhibit 3B, Page 4 shows the resulting array of allowed PMPM claims costs after this adjustment.

Using the array of PMPM claims costs, adjusted for contract, benefits, aging, FWA programs and high claimants, shown on Exhibit 3B, Pages 5 to 11, we performed 24-month regression, 36-month regression and time series calculations. Certain time series methods, such as those

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assuming no trend or those for which there is not sufficient historical data⁹, are not included, as these are inappropriate for use in trend development and/or for the data available.

We have selected an overall utilization trend of 2.0 percent.

We approached our trend utilization selection two different ways. First, we looked at facility and professional claims separately and then at all claims combined.

When observing facility and professional separately, we believe that 1.0 percent for facility and 4.0 percent for professional are reasonable trend selections. When taking a weighted average of those trends, the total utilization trend calculates to 1.945 percent.

For facility claims, the two year trend was 1.0 percent after removing claimants in excess of \$250,000. The regressions and Holt-Winters and Damped Trend Seasonal time series all range between 0.0 percent and 1.2 percent. The regression results, which in past years have been the basis of our trend selections, are at the high end of that range. We believe that a 1.0 percent trend is the best representation of future increases in facility claims utilization and intensity. Increasing utilization and intensity of facility services is corroborated by hospital actual-to-budget narratives. The impact of low cost trend changes are counteracted to some extent by increasing utilization and intensity, which is acknowledged as a main driver of hospital budget overages.

Professional claims utilization has been ramping up over the last year. This is expected as care continues to be shifted to more appropriate setting. For example, we observed a 7.0 percent increase in professional mental health services, much of which is likely replacing inpatient and ER visits. The calendar year 2017 over calendar year 2016 PMPM was 4.0 percent and the average of the regressions and time series results averaged 4.1 percent. We have accordingly selected a professional utilization trend of 4.0 percent.

When selecting overall utilization trend, 2.0 percent is aligned with observations of year-over-year results, regressions and time series results performed on the overall PMPMs. The results of the regressions, Holt-Winters and Damped Trend Seasonal time series range from 1.3 percent to 2.3 percent with an average of 1.9 percent.

Finally, the resulting overall utilization trend derived from the selected facility and professional trends is 1.945 percent. This is very closely aligned with observations, regressions, and time series results for overall utilization trend, and virtually matches our selected overall utilization trend assumption of 2.0 percent. Because of the close synchronicity of our two methods, we believe 2.0 percent is an appropriate medical utilization trend.

The components of increasing utilization trend have been corroborated by our Chief Medical Officer. Primary drivers include pharmaceuticals dispensed in a medical setting, office visits and preventive services, and diagnostic services, including outpatient labs, x-rays and high-dollar imaging. Medical pharmaceutical claims are up some 14.3 percent year-over-year, driven by high-cost cancer, rheumatoid arthritis and immunodeficiency medications. Similar to retail

⁹ The seasonal additive, seasonal multiplicative, single moving average, and single exponential smoothing methods cannot be used since they assume zero trend. The double moving average method requires three times the amount of historical data as projection periods, and therefore should not be used for this analysis.

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specialty drugs, innovation and utilization for these expensive therapies is not expected to subside in the near future. Office visits and preventive services increased by 3.6 percent and 7.5 percent respectively from 2016 to 2017. Primary drivers included professional mental health services, as noted above, and a significant increase in colonoscopy screenings, both of which we see as positive developments toward moving care to the most appropriate clinical setting and providing clinically appropriate preventive care that will reduce health care spend in the long term. Finally, diagnostic services were up nearly seven percent from 2016 to 2017, likely driven by the increase in office and preventive visits. We anticipate that each of these primary drivers of medical utilization trend will continue to escalate in the immediate future.

The selected 2.0 percent overall utilization trend is lower than the trend calculated by our standard methodology, but is in the range of trends produced by the time series analysis. A 2.0 percent utilization trend is consistent with our filing assumption from last year, and is lower than the utilization trend observed for other Vermont insured populations.

Cost Containment Strategy

BCBSVT is working closely with our network providers and OneCare Vermont to maximize our collaborative clinical reach focusing on reducing the overall medical costs. Using many programs, we have two specific goals for 2019. We target reducing overall inpatient admissions by four percent by reducing readmissions, and we also target reducing emergency room visits by five percent. This will be achieved through enhanced collaborative care coordination support to our members with a goal of redirecting care to primary care providers when appropriate.

Using calendar year 2017 data, we estimated that 101 inpatient admissions with an average cost of \$30,300 would be replaced by office visits, outpatient labs and non-specialty scripts. The average replacement cost for all these services is \$3,400, with \$2,200 of that for medical claims. The additional expected scripts are added to the projected total days supply on Exhibit 3G (see section 3.4.7.2 for details). We estimated that 764 emergency visits with an average cost of \$1,741 would be replaced by a PCP visit with an average cost of \$107, for a total savings of \$1.25 million. The total projected savings of \$4.08 million create a reduction of medical claims of 1.1 percent. This reduces the medical utilization trend from 2018 to 2019 to 0.9 percent. Please see Exhibit 3C for details.

Overall Medical Trend

After adjusting the utilization trend from 2018 to 2019 for the savings expected from the cost containment strategy, the overall medical trend assumption is 4.1 percent.

3.4.7.2. Pharmacy Trend Development

With the emergence of new and expensive specialty drugs, as well as the increasing shift to generics as more brand drugs come off patent, we analyzed the components of trend (cost and utilization) separately for Brands, Generics, and Specialty drugs. We have projected the generic dispensing rate (GDR) based on the brand drugs that are scheduled to lose patent in the next few years. Specialty drugs are very high cost drugs with low utilization. Because of their relative infrequency, it is more appropriate to look at the overall PMPM trends for these drugs rather than separate cost and utilization components. The overall pharmacy trend is then calculated by combining the separate projections.

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Non-Specialty Drugs Utilization

Exhibit 3D provides the monthly and the 12-month rolling data, along with the corresponding year-over-year and exponential regression trends, for non-specialty drugs utilization. The number of days supply, rather than the number of scripts, is used to normalize for changes in the days supply per script (e.g. increased use of 90-day fills). Because there are several popular brand drugs that have become generic during the experience period, or will become generic during the projection period, we have combined the data for generic and brand drugs for the purpose of analyzing utilization patterns.

As described above, utilization trends should be adjusted for changes in benefits and aging. We adjusted each month to reflect benefit and aging adjustment. Using the array of PMPM after adjustments, we performed 24-month and 36-month regressions.

The regression results are higher than the most recent year over year results. We believe that they are skewed due to the significant seasonal increase in pharmacy utilization in the fourth quarter of each year. We therefore selected 2.1 percent, the calendar year 2017 PMPM over calendar year 2016 PMPM results, as the non-specialty drugs utilization trend.

This year, instead of projecting a Generic Dispensing Rate, we separated the drugs into seven categories:

- Generics: Drugs that have been generic since at least January 2015
- New Generics: Generic drugs that have been in the market for less than 36 months (January 2015 to December 2017)
- Brands going Generic: brands that are expected to become available in generic form in the projection period, based on a list from our pharmacy benefit manager
- Vaccines
- Over the Counter (OTC)
- Compounds
- All other Brands

As shown on Exhibit 3G, each category days supply is trended forward at the same rate of 2.1 percent.

As discussed in the previous section, BCBSVT is working closely with our network providers and OneCare Vermont towards reducing inpatient admissions. It is expected that avoided admissions would be replaced by office visits, labs and prescription drugs. We added the additional generic and brand days supply expected to result from this initiative to the experience days supply, then applied trend to the projection period.

Generic Cost Trend

To ensure that the generic cost trend is not skewed by the arrival of new generic drugs, we performed a 24-month regression on monthly Average Wholesale Price (AWP) per days supply on non-new generics only.

Brands that are going generic will be subject to the generic discounts. We do not expect that the AWP for these drugs will significantly change from the experience period due to the lack of

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generic competition for the main drugs in this category. We adjusted the price to reflect the different experienced effective discounts between brands and generics.

Exhibit 3E, page 1, shows monthly cost per days supply and the 24 and 36-months regressions. We select the 24-month regression result of 3.5 percent for the generic cost trend.

Brand Cost Trend

To ensure that the brand cost trend is not skewed by brands going generic, vaccines, over the counter and compound drugs AWP, we performed a 24-month regression on monthly AWP cost per days supply on the all other brand category only.

Over the counter drugs are not expected to follow the overall Brand cost trend. Based on historical data, we selected a 0.0 percent cost trend for OTC drugs.

Exhibit 3E, page 2, shows monthly cost per days supply and the 24 and 36-months regressions. We selected the 24-month regression result of 12.3 percent for the brand cost trend.

Specialty Drugs

The introduction of certain new specialty drugs requires an adjustment to the trend calculation for specialty drugs. The high cost and variable utilization of the drugs skews the specialty trend, making it lower than we believe is warranted. Other high-cost or high-utilization drugs have also entered the market recently, such as Orkambi, a treatment for cystic fibrosis with an annual cost of almost \$250,000, and PCSK9 inhibitors like Repatha, used to treat high cholesterol in patients with the genetic disease familial hypercholesterolemia (FH). To accurately capture the effect of these new drugs on specialty trend, we removed their claims from the experience to calculate a trend rate to apply to these non-excluded claims. We trended those claims forward at the calculated rate for 24 months, then added back in our projections of claims for the new treatments (Orkambi, Ocrevus, and PCSK9 inhibitors). We used the total restated projected claims to calculate a restated specialty trend.

In previous filings, we excluded hepatitis C claims and added them in discretely based on projected claimants. On January 1, 2018, BCBSVT expanded its prior approval criteria for hepatitis C drugs. Given the change in criteria, the methodology used in previous filings is no longer appropriate for projecting the number of claimants. Due to the difficulty in estimating claimants with the expanded criteria, hepatitis C claims were not excluded from the standard specialty regression in this filing. Given that hepatitis C drug claims are in the entire experience period used to develop the specialty trend, their inclusion does not unduly impact specialty trend.

In July 2015, we renewed our contract with our pharmacy benefit manager ESI and our discount off AWP for specialty drugs increased. We adjusted months prior to July 2017 to reflect the new contract.

For the same reasons stated in the medical trend section, we adjusted each month to reflect aging. Using the array of PMPM claims costs after adjustments, we performed 24-month regressions on monthly and rolling 12 data.

Exhibit 3F, Page 1 shows the calculation of specialty trend both for all specialty drugs and for specialty drugs excluding the new treatments described above. For our regressions, we chose 24

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points of 12-month rolling data to capture the most recent history of drug costs. Rolling 12-month regressions are more appropriate for specialty drugs because of the low-frequency, high-cost nature of these drugs. Removing the large swings in specialty drug spend associated with the new treatments results in a 20.1 percent trend for the remaining specialty drugs.

PCSK9 inhibitors such as Repatha and Praluent are used to treat high cholesterol. BCBSVT's current policy is to approve PCSK9 inhibitors for the treatment of familial hypercholesterolemia (FH), a genetic disease characterized by very high levels of cholesterol in the blood. Current incidence studies suggest that 200 persons per 100,000 lives are diagnosed with FH after failure of one high-dose statin for 60 days. Another indication for these drugs is for patients who have had a heart attack and then failed two different high-dose statins for 60 days. Based on current membership, we project 19 members will use a PCSK9 inhibitor in 2019. With an annual cost of about \$13,975, the projected total is \$0.27 million.

Orkambi is a drug used in the treatment of cystic fibrosis. In particular, it is used to treat a specific mutation of the disease that is found in roughly 50 percent of cystic fibrosis patients. Orkambi is prescribed to patients age 12 and older. In previous filings, we assumed that 50 percent of our members diagnosed with cystic fibrosis who are at least age 12 would take Orkambi. Only six members in the experience period had claims for Orkambi. Given the length of time the drug has been available, we expect we will see no change in utilization. Orkambi has an annual cost of \$253,000, and we project that 6 members will continue to use it. The projected cost for those members is therefore \$1.5 million.

Ocrevus is a drug used in the treatment of multiple sclerosis (MS). We estimate 15 percent of our members currently taking medication for MS would move to Ocrevus. We therefore excluded 15 percent of the average annual cost of MS medications from specialty claims to reflect this shift, and added in the estimated cost of Ocrevus. No adjustment was made to the experience used to develop the non-exclusion specialty trend, since only a proportion of claims are removed.

To calculate the effective trend, we started with the pharmacy claims from the calendar year 2017 and removed the claims for PCSK9 inhibitors, Orkambi and MS medications. We then trended the remaining claims at a 20.1 percent rate for 24 months, added the incremental cost of PCSK9 inhibitors, Orkambi, and Ocrevus for a total restated projected claim amount. Using this method, the restated effective specialty drug trend is 20.3 percent. See Exhibit 3F, Page 3 for details.

Overall Pharmacy Trend

Exhibit 3G summarizes the trends calculates our total allowed pharmacy trend as 13.3 percent. Note that changes in pharmacy contracts are discussed separately in section 3.4.6.

3.4.7.3. Vision and Dental Trend Development

Dental Trend

The pediatric dental benefit was a new benefit provided by BCBSVT in 2014 as part of the Essential Health Benefits (EHB). The allowed PMPM trend has been high and continues to increase as members become more familiar with the benefit.

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Calendar Year	PMPM	Trend
2014	\$1.49	
2015	\$1.65	11.0%
2016	\$1.85	12.1%
2017	\$1.94	4.9%

We blended the 2017 and 2016 increases with a 2:1 ratio. The total projected trend is therefore 7.2 percent. For the purpose of the index rate build up, we split the total projected trend equally between cost and utilization.

Vision Trend

The pediatric vision benefit was also introduced in 2014 as part of the EHB. Some groups had previous vision coverage but members previously in an individual product did not get vision benefits through BCBSVT. The allowed PMPMs have been very consistent since 2014 and we believe that they will continue to be consistent in the future. The total projected trend for pediatric vision is 0.0 percent.

Calendar Year	PMPM
2014	\$0.11
2015	\$0.11
2016	\$0.10
2017	\$0.10

3.4.7.4. Overall Total Trend

To adjust the Experience Period Index Rate for the trend factors described above, we started with the experience period claims and applied cost and utilization to Medical, Pharmacy, Dental and Vision claims. The resulting factors (1+d₁ and 1+d₂ on Exhibit 5) are calculated on Exhibit 3H.

3.5. Credibility of Experience

BCBSVT’s experience period had 819,824 member months and is therefore fully credible.

3.6. Credibility manual rate development

Since BCBSVT’s experience is fully credible, no manual rate was needed in the development of rates for the experience period claims.

3.6.1. Source and Appropriateness of Experience Data Used: Not Applicable

3.6.2. Adjustments Made to the Data: Not Applicable

3.6.3. Inclusion of Capitation Payments: Not Applicable

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3.7. Market Adjusted Index Rate

The Market Adjusted Index Rate (line H of Exhibit 5) is \$646.29. This is calculated by adjusting the Projected Index Rate (line F of Exhibit 5, \$662.94) for allowable market-wide modifiers described below.

3.7.1. Projected Risk Adjustment Transfer PMPM:

On April 27, 2018, CMS published an Interim Summary Report on Risk Adjustment for the 2017 benefit year¹⁰. The BCBSVT data included in the report represents claims incurred in 2017 and paid through December 31, 2017. We received information from Lewis & Ellis on May 2, 2018 that MVP's interim submission included four quarters of data, which we have interpreted to mean that the data submissions are consistent between the two carriers. The final 2017 report will include supplemental diagnosis files and will also include the impact of claims runout. We estimated the impact of the BCBSVT supplemental diagnosis file and claims runout by comparing the original CMS-generated Risk Adjustment Transfer Elements Extract (RATEE) file used in the Interim Summary Report to the Plan Liability Risk Score (PLRS) factor within the RATEE report generated on May 1, 2018 by CMS with claims paid and supplemental diagnoses through April 18, 2018. The impact of claims runout and supplemental diagnoses for MVP was estimated based on the relationship of their final PLRS score in the 2016 Final Summary Report relative to the MVP PLRS in the 2016 Interim Summary Report¹¹.

A large amount of membership disenrolled from BCBSVT during the 2018 annual enrollment period. Presumably, some portion of these members enrolled in an MVP individual or small group plan. Two adjustments were made to the estimated 2017 risk adjustment transfer to reflect the shift in membership in our projection of the 2018 risk adjustment transfer. We assumed that the members that were in BCBSVT in 2017 and are no longer with BCBSVT in 2018 have migrated to MVP, and will have the same risk scores in 2018 as they experienced in 2017. Also, the state average monthly premium factor was adjusted to reflect the changing market share between the two carriers.

The 2019 risk adjustment assumes that the market-wide PLRS and membership are the same in 2019 as in the adjusted 2018 projection. The 2019 projection assumes the market-wide premium PMPM will increase by a factor of 1.075, the average premium increase across all plans in this filing, which results in a 2019 risk adjustment transfer of \$8.62M or \$13.66 PMPM.

The approach to calculate the projected 2018 transfer was necessarily something of a blunt instrument due to the significant delay in the CMS release of the interim payment report. We did examine a number of more complex methodologies that produced results of a transfer to BCBSVT ranging from \$5.7 million to \$13.6 million. The methodology we selected for the filing produces an estimate near the midpoint of this range, and we therefore believe that the result is reasonable and appropriate.

¹⁰ <https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs/Downloads/Interim-RA-Report-BY2017.pdf>

¹¹ Information received from Lewis & Ellis on April 25, 2017 indicated that the MVP data included in the 2016 interim report also included four quarters of data.

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Since the Market Adjusted Index Rate is on an allowed claims basis, we adjusted the net projected risk adjustment payment by the average paid to allowed ratio (from Exhibit 6C).

As described in the Final Notice of Benefits and Payment Parameters for 2019 rule, the per capita risk adjustment user fee, used to fund the HHS-risk adjustment program, is \$1.80 per enrollee per year. See 83 Fed. Reg. 16930 (April 17, 2017).

The overall market-wide adjustment (line g₁ of Exhibit 5) for the risk adjustment program is -\$16.65 PMPM as shown on Exhibit 4.

3.7.2. Exchange User Fees

BCBSVT does not expect Vermont Health Connect to charge a user fee for 2019.

3.8. Plan Adjusted Index Rates

3.8.1. Plan Adjustment - Actuarial Value and Cost Sharing adjustment

This plan adjustment, as shown on Exhibit 6A, is informed by two factors:

- Benefit Richness Adjustment
- Paid to Allowed Ratio

The experience used to calculate the benefit richness adjustment and the paid to allowed ratio is our calendar year 2017 data trended to calendar year 2019 using the trend factors described in section 3.4.7. The model re-adjudicates claims by starting with the allowed charges and applying appropriate cost sharing for each service. For plans that have an aggregate deductible, subscribers that had a 2-person or family contract were pooled together to determine the impact of the family deductible and out-of-pocket on the paid to allowed ratio. The model generates the projected average paid claims for each benefit, which is used to calculate a paid to allowed ratio. The model is calibrated to 2017 experience, and is able to reproduce the experience paid to allowed ratio to within 0.1 percent.

3.8.1.1. Benefit Richness Adjustment

The Benefit Richness Adjustment is the counterpart of the Change in Benefit projection factor (1+c₁ line on Exhibit 5) described in Section 3.4.4. This factor represents the different projected utilization for each plan based solely on benefit design.

For this factor, we summarized the data described above by subscribers within each metal level and re-adjudicated the claims for each plan to calculate a subscriber level paid to allowed ratio. We then applied the HHS Induced Utilization formula ($IU=AV^2-AV+1.24$) to the base paid to allowed ratio.

These factors were normalized using the projected membership to ensure that the total adjustment was 1.000. The plan level adjustment for benefit richness is calculated by applying the benefit richness adjustment by base benefit and applying a factor of 1.000 for non-system claims and market-wide adjustments. See Exhibit 6B for details.

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3.8.1.2. Paid to Allowed Ratio

To calculate the paid to allowed ratio, we adjusted the starting allowed charges described in the previous section by the benefit richness adjustment and re-adjudicated the benefits for each plan across the entire single risk pool. The paid to allowed ratios include the impact of family deductibles and out of pocket maximums, and reflect the impact of federal Cost Sharing Reductions. They do not reflect the impact of Vermont cost sharing reductions, as this program continues to be funded by Vermont and is not part of the Silver Solution. We then added the additional EHB paid and allowed, and the non-system claims and market-wide adjustment amounts in both paid and allowed. Finally, we calculated the overall expected paid to allowed ratio. Please see details in Exhibit 6C.

In the URRT, the Paid to Allowed Average Factor is the weighted average expected claims cost, including non-EHB benefit and excluding market-wide adjustments (\$537.66) divided by projected allowed charges (\$663.04). As shown in Section 3 of Worksheet 1 of the URRT, the paid to allowed average factor is 81.1 percent.

3.8.2. Provider Network, Delivery System and Utilization Management adjustment: Not Applicable

3.8.3. Adjustment for benefits in addition to the EHBs:

As of January 1, 2017, BCBSVT removed an exclusion for routine circumcision. Based on recent information from the American Academy of Pediatrics, there is new evidence that “the health benefits of newborn male circumcision outweigh the risks, but the benefits are not great enough to recommend universal newborn circumcision.”¹² On the basis of this evidence, our Medical Directors have recommended that we add coverage for this procedure. Based on the experience period claims and expected trend, we estimate the additional cost to be \$0.10 PMPM of allowed charges. Applying the same paid to allowed ratio to this benefit as to the EHB benefit, we calculate an adjustment of 1.0002, as shown on Exhibit 6A.

3.8.4. Impact of specific eligibility categories for the catastrophic plan

This plan adjustment includes two components of the impact of the specific eligibility categories for the catastrophic plan. Both of these adjustments are based on the eligible population. The eligible population includes Vermont residents that are under age 30 and residents age 30 and over who are granted a hardship exemption by Vermont Health Connect. We used our current enrollment in the Catastrophic plan as a proxy for eligibility and adjusted the projected members that would qualify under the hardship rule to account for the increase in premiums. We project that 98.6 percent of the population eligible for this product will be under age 30.

To adjust for the eligible population, we first calculated the adjustment for the impact on the pricing actuarial value of the expected lower allowed charges of the group eligible to enroll in the catastrophic plan. This was calculated by splitting the experience used to calculate the Pricing Actuarial Value into two populations (Under and Over 30) and re-adjudicating for the catastrophic benefit. Using the projected eligible members as weights, we calculated that the overall expected allowed charges are 0.5656 of the total allowed charges. We then adjusted the

¹² <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/newborn-male-circumcision.aspx>

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paid to allowed ratio based on the weighted average paid to allowed ratio from both populations. This factor is 0.9214.

These factors were applied to the EHB portion of the Projected Period Index Rate. Because this adjustment doesn't impact the Non-System claims and Market Wide Adjustment, we calculated the Expected Claims cost and backed into the plan level adjustment for the impact of eligibility.

The total adjustment for the specific eligibility categories for the catastrophic plan is 0.4938. See Exhibit 6D for details.

3.8.5. Adjustment for distribution of the administrative costs

3.8.5.1. Administrative Expense Load:

BCBSVT Administrative Expense load was not initially calculated as a percent of premium adjustment. This adjustment is the sum of the following fees:

BCBSVT Base Administrative Charges

To develop the Base Administrative Expenses PMPM, we used calendar year 2017 data from both individual and small group members. The starting PMPM for the base administrative charges is \$35.02 PMPM. The single risk pool population is comprised of individuals who can choose to enroll through the Vermont Health Connect (VHC) website or directly with BCBSVT, and small groups that enroll directly with BCBSVT. The experience period base administrative for individuals was \$39.83 PMPM compared to \$31.83 PMPM for members in small groups.

For this filing, we have removed expenses totaling \$0.32 PMPM that were incurred due to one-time, non-recurring events, as these fees are not expected to continue into the projection period.

The remaining charges (\$34.70 PMPM) are projected to 2019 using a 2.5 percent annual trend. This projection factor is intended to make reasonable but modest provision for increases in overall operating costs PMPM. We assume that personnel costs (wages and benefits) will increase by 3 percent annually, the budgeted wage increase for 2018, over the projection period. Other operating costs are assumed to remain flat. We have calculated that 83.5 percent of our administrative costs are for salaries and benefits. We are therefore increasing our projected administrative expenses by the weighted average of 2.5 percent per annum.

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Administrative trend calculation		BCBSVT Totals	Percent of Total
Employee costs:	$A = a_1 + a_2$	\$44,807,919	59.2%
Salaries and taxes	a_1	\$32,968,684	
Benefits	a_2	\$11,839,235	
Purchased services	B	\$21,959,698	29.0%
Other operating costs	C	\$8,867,317	11.7%
Total Administrative Expenses	$D = A + B + C$	\$75,634,934	100.0%
BCBSVT Personnel Cost	$E = A / (A + C)$		83.5%
Projected Personnel Cost Increase	F		3.0%
Projected Administrative Cost Increase	$G = (E \times (1+F) + (1-E)) - 1$		2.5%

In 2018, BCBSVT experienced a large membership decrease. To calculate the impact of a smaller membership base, we calculated a total enterprise administrative charge PMPM and adjusted by the ratio of 2017 and projected 2019 membership. The latter was estimated as March 2018 enterprise membership less the 1,073 members assumed to drop coverage due to the elimination of the penalty associated with the individual mandate (see section 3.4.2.). We assumed that variable costs represent half of that increase, and therefore applied an increase of 3.4 percent to the base PMPM to account for the reduction in membership.

Calculation of impact of membership losses		Total BCBSVT Enterprise
Total CY 2017 Administrative Expenses	A	\$75,634,934
Total CY 2017 Member Months	B	2,424,372
CY 2017 PMPM	$C = A / B$	31.20
Projected Member Months	D	2,268,552
Projected PMPM before adjustment for variable cost	$E = A / D$	\$33.34
Variable Cost PMPM	$F = 0.5 \times (E - C)$	\$1.07
Projected PMPM after adjustment for variable cost	$G = C + F$	\$32.27
Increase in PMPM due to Membership Losses	$H = G / C - 1$	3.43%

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To calculate the projected based administrative charges, we multiplied the experience PMPM, net of non-recurring expenses, by 2.5 percent for two years for trend and by 3.4 percent for the impact of membership losses.

Projected Administrative Charges Calculation		PMPM
Experience Base Administrative Charges	A	\$35.02
Exclusion of non-recurring expenses	B	(\$0.32)
Trend Projection (2 years)	C	1.0507
Impact of Membership losses	D	1.0343
Projected Base Administrative Charges (Exhibit 7A)	$E = (A-B) \times C \times D$	\$37.72

The projected base administrative charges PMPM of \$37.72 is 6.5 percent of premium.

Charges for Outside Vendors

- **CBA Dental and VSP Vision**
These benefits are being administered by third party administrators. The administrative fees are charged for eligible members only. The ratio of eligible members to total members, based on the projected single risk pool split between adult and child, was applied to get the per member per month charge.
- **Health Equity**
All single risk pool members are eligible for HRA and/or HSA Integration service. For plans with an HSA-compatible benefit design, we offer a service to integrate with the mechanics of depositing monies into and paying for claims out of Health Savings Accounts (HSA). All plans are also eligible for this service with Health Reimbursement Accounts (HRA). To calculate these fees, we used the experience of members that are already enrolled in this program and compared it to all members enrolled in the single risk pool in the first quarter of 2018.
- **Blue Rewards Program**
Under this program, BCBSVT will reward members with credits via a debit card for the following wellness activities:
 - Completing an online health assessment
 - Participate in the workshop or challenge
 - Having a physical exam or appropriate screenings
 - Having a routine eye or dental exam

Based on participation projection from the Marketing and Product department, we estimate that the cost of this program to be \$6.81 PMPM for Blue Rewards plans only.

The total of all administrative charges outlined in this section is 6.9 percent of premium. The details of the administrative charges are on Exhibit 7A.

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3.8.5.2. Profit (or Contribution to Reserves) & Risk Margin:

Contribution to Reserves

As directed by BCBSVT management, the filed rates include a 1.5 percent contribution to reserves (CTR). A contribution to reserves is required in order to maintain an adequate level of surplus. Surplus is a critical consumer protection that is required by the Vermont Department of Financial Regulation. In the event of unforeseen adverse events that may otherwise impact BCBSVT’s ability to pay claims, surplus allows subscribers to receive needed care and providers to continue to receive payments.

A memo from BCBSVT senior management regarding the requested level of CTR can be found as Attachment C.

Other Risk Margin

Under the ACA, enrollees who are receiving Advance Premium Tax Credits (APTC) have a three-month grace period to pay premiums, while enrollees who are not receiving APTC have a one-month grace period. For both these populations, the State requires the insurer to pay for claims incurred in the first month of the grace period even if premium is never collected. This uncollected premium is considered bad debt. To ensure that BCBSVT collects enough premium from the total pool to cover the 30-day grace periods, we need to include a risk margin for bad debt. We have added a margin of 0.10 percent, which is both the 4-year average and the actual 2017 amount of uncollected premium due to the grace periods.

Bad Debt	Uncollected Premium	Total Billed Premium	Percent of Billed Premium
2014	\$646,000	\$255,227,839	0.25%
2015	\$800,840	\$334,014,191	0.24%
2016	\$207,098	\$386,247,850	0.05%
2017	\$415,186	\$408,055,901	0.10%
Total	\$2,069,124	\$1,383,545,781	0.10%

Details of Contribution to Reserve and Risk Margin for Bad Debt by product are on Exhibit 7B.

3.8.5.3. Taxes and Fees:

The proposed rates include on average 1.2 percent in taxes and fees. These taxes and fees are imposed by both the state and federal government.

Green Mountain Care Board Billbacks

Based on information provided by the GMCB on April 11, 2018, BCBSVT estimates that the total GMCB billback to BCBSVT for 2019 will be \$1,238,000. Based on 2018 projected premium, the Vermont Individual and Small Group market will be allocated 83.84 percent of the total GMCB billback amount for BCBSVT. We assume that this percentage allocation will remain the same into 2019, leading to a projected 2019 Individual and Small Group billback of \$1,037,939. Using the projected membership of 631,092 member months, the 2019 calendar year PMPM for GMCB billback comes to \$1.92.

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Health Care Claims Tax

The Health Care Claims Tax (HCCT) levied by the State of Vermont totals 0.999 percent of claims. This consists of 0.8 percent of claims for the HCCA tax and 0.199 percent of claims for the VITL assessment.

Patient-Centered Outcomes Research Institute Fee

This fee is part of the Affordable Care Act and applies to all plan years ended after September 30, 2012 and before October 1, 2019. Therefore, the fee does not apply to this filing.

Federal Insurer Fee

The Federal Insurer Fee is intended to help pay for some provisions in the Affordable Care Act. This fee is only applicable to fully insured groups. Enacted on January 22, 2018, Section 4003 of Division D of H.R. 195 temporarily suspended the Federal Insurer Fee for 2019 only.

Details of the Taxes and Fees by product are on Exhibit 7C.

3.8.6. AV Pricing Values

As described in the 2019 Unified Rate Review Instructions, the AV Pricing Value “represents the cumulative effect of adjustments made by the issuer to move from the Market Adjusted Index Rate to the Plan Adjusted Index Rate”. These adjustments are described in detail in preceding parts of Section 3.8. See Exhibit 7D for details by product.

3.8.7. Calibration

Age, Tobacco, and Geographic factors are not allowed in Vermont. Therefore no calibration is required.

3.8.8. Projected Loss Ratio

The MLR calculation will be performed at the combined market level with a minimum requirement of 80 percent. We project that the overall Loss Ratio, using the federally prescribed MLR methodology for the combined market, will be 91.8 percent. See Exhibit 8 for details.

3.9. Consumer Adjusted Premium Rate Development

The Consumer Adjusted Premium rates are displayed on Exhibit 9B. Since rate factors for age, tobacco and geography are not allowed in Vermont, the only adjustment is the application of rating tier factors. Vermont has predetermined the tier factors for plans for Individuals and Small Groups.

We observed that using the same contract conversion factor on all plans does not produce the same total premium when multiplying members and PMPM and when multiplying contracts and rates. This is due to not all plans having the same distribution in each tier and not all plans receiving the same annual rate increase.

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To correct this, we are calculating the contract conversion factor in two steps. First, we calculate preliminary rates by tiers by using the simple ratio of average number of members to subscribers to calculate average tier factors for all plans except Catastrophic. We then compare the total premium from multiplying members by PMPM to the premium totaled by multiplying contracts by rates, and adjust the contract conversion factor to ensure that we collect the total required annual premium. We are calculating a contract conversion factor specifically for the catastrophic plan and one for all other plans.

Please see Exhibit 9A for details calculation of the contract conversion factor.

The Consumer Adjusted Premium Rates are shown on Exhibit 9B.

3.10. Small Group Plan Premium Rates

All Small Groups must renew on January 1, 2019 according to the combined market rules. BCBSVT will not file small group rates for Q2-Q4 2019.

4. ADDITIONAL INFORMATION

4.1. Terminated Products

BCBSVT will not be terminating any product prior to January 1, 2019.

4.2. Plan Type

Our plan type is EPO.

4.3. Warning Alerts

There are no warning alerts in the Unified Rate Review Template.

5. RELIANCE AND ACTUARIAL CERTIFICATION

5.1. Reliance

For the metallic AV values of the standard plans we relied upon the certification provided by Julie A. Peper, FSA, MAAA, Principal and Senior Consulting Actuary with Wakely Consulting. (Attachment A)

5.2. Actuarial Certification

The purpose of this rate filing is to provide the rates and a description of the rate development for the plans that Blue Cross and Blue Shield of Vermont (BCBSVT) is proposing to offer to the Vermont individual and small group market in 2019. These calculations are not intended to be used for any other purpose. This memorandum documents the methodology used to calculate the AV Metal Value for each Qualified Health Plan offered by BCBSVT in 2019, the appropriateness of the essential health benefit portion of premium upon which advanced payment of premium tax

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credits (APTCs) are based, that the Index Rate is developed in accordance with federal regulations, and that the Index Rate along with allowable modifiers are used in the development of plan specific premium rates.

I, Paul A. Schultz, 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 States promulgated by the American Academy of Actuaries, and have the education and experience necessary to perform the work described herein.

In my opinion, the projected Index Rate is in compliance with all applicable State and Federal Statutes and Regulations (including 45 CFR 156.80 and 147.102), has been developed in compliance with the applicable Actuarial Standards of Practice, is reasonable in relation to the benefits provided and the population anticipated to be covered, and is neither excessive nor deficient. The calculations and results are appropriate for the purpose intended.

The Index Rate and only the allowable modifiers as described in 45 CFR 156.80(d)(1) and 45 CFR 156.80(d)(2) were used to generate plan level rates. The percent of total premium that represents essential health benefits included in Worksheet 2, Sections III and IV, was calculated in accordance with actuarial standards of practice.

I have relied upon the certification of AV Metal Value provided by the State for Standard Plans, and attached hereto. Metal AVs for Blue Rewards (Non-Standard) Plans were determined using the AV calculator, or in accordance with the requirements of 45 CFR 156.135(b)(3), as described in the attached actuarial certification.

Data used in this filing were reviewed for reasonableness, but no audit was performed.

The Part I Unified Rate Review Template does not demonstrate the process used by the issuer to develop the rates. Rather, it represents information required by Federal regulation to be provided in support of the review of rate increases, for certification of qualified health plans for federally facilitated exchanges, and for certification that the Index Rate is developed in accordance with Federal regulation, is used consistently, and is only adjusted by the allowable modifiers.



Paul A. Schultz, F.S.A., M.A.A.A.
Chief Actuary
Blue Cross and Blue Shield of Vermont
May 11, 2018

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING PLAIN LANGUAGE SUMMARY

Blue Cross and Blue Shield of Vermont (BCBSVT) is committed to the health of Vermonters, outstanding member experiences and responsible cost management for all of the people whose lives we touch. By pooling the populations covered by our products, we protect individuals from the unaffordable and potentially ruinous costs associated with significant illnesses or injuries. Our products promote preventive care, health maintenance and health improvement, and we have in place strong care management programs that support members who require medical care and assure that they have access to high value care while avoiding unnecessary costs.

BCBSVT also works with providers to dampen cost increases through reimbursement strategies that include incentives to both provide and properly manage care. BCBSVT's vision is a transformed health care system in which every Vermonter has health care coverage, and receives timely, effective, affordable care. None of this work is possible unless BCBSVT remains financially strong, and that requires that we be allowed to charge rates that cover the cost of the health care of the populations we serve.

The purpose of this rate filing is to provide the rates and a description of the rate development for Vermont individual and small group plans that Blue Cross and Blue Shield of Vermont (BCBSVT) is proposing to offer effective January 1, 2019.

There are 32,570 contracts (53,664 members) currently enrolled in a BCBSVT Individual or Small Group plan impacted by this filing.

BCBSVT collaborated with stakeholders to propose, develop, and implement the Silver Solution, a strategy to offset the federal defunding of the cost-sharing reduction (CSR) program with additional federal advanced premium tax credits and avoid additional premium rate increases on Vermonters.

The average increase for plans other than Silver Level Exchange plans - that is, the average increase that will actually be experienced by Vermont individuals and small businesses - is 5.3 percent.

Increases for specific plans range from 3.5 percent to 6.8 percent, except for the Catastrophic plan, which is increasing by 1.2 percent. Silver Level Exchange plans will increase an average of 16.0 percent, with increases for specific plans ranging from 14.6 percent to 18.9 percent. Across all plans, the average increase is 7.5 percent.

Medical and pharmacy trend continues to be the largest driver of premium increases. Amounts providers are paid, Vermonters' use of services and more expensive services, and utilization of specialty medications and other retail pharmaceuticals all continue to escalate. These combine to drive a rate increase of 7.4 percent.

Two changes at the federal level had a nearly offsetting rate impact. The federal insurer fee was suspended for 2019, leading to a 2.0 percent reduction in 2019 rates. However, recent federal legislation also eliminated the penalty associated with the individual mandate. As a result, it is expected that a number of healthy individuals will choose to forgo coverage and leave the covered population. BCBSVT estimates that this will exert an upward pressure of 2.2 percent on premium rates, which is within the best estimate range of a study commissioned by Vermont regulators.

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BCBSVT targets a contribution to reserves (CTR) that allows us to maintain an adequate level of surplus within an established, moderate target range. Surplus is a critical consumer protection that is required by the Vermont Department of Financial Regulation. The Green Mountain Care Board cut CTR in the 2018 filing to 0.5 percent, which is below the level necessary to contribute adequately to surplus. Restoration of CTR to adequate levels increases 2019 premiums by 1.5 percent.

Tax reform legislation passed in late 2017 eliminated federal income tax requirement for the BCBSVT legal entity starting with the 2018 tax year. These savings have been fully passed through to customers via a 1.1 percent reduction in premium.

BCBSVT has embarked on numerous efforts to mitigate premium increases. In addition to passing 100 percent of federal income tax savings to consumers, BCBSVT has continued to work closely with its pharmacy benefit manager to improve network pricing and maximize rebates. These pharmacy initiatives have roughly similar impacts totaling a 2.3 percent decrease in premium. Additionally, BCBSVT is working closely with our network providers and OneCare Vermont to maximize our collaborative clinical reach focusing on reducing the overall medical costs. We expect these efforts to exert a downward pressure of just over one percent on medical utilization trend, driving a 0.8 percent rate reduction.

Altogether, BCBSVT rate mitigation is leading to a reduction of rates of 4.2 percent, or a projected \$15.7 million. The average rate increase of 5.3 percent would have been 9.8 percent in the absence of BCBSVT intervention.

BCBSVT started selling plans in the Vermont Individual and Small Group Merged Market in January 2014. In its first four years, higher-than-expected costs have led to a cumulative loss of \$15 million on this line of business. BCBSVT has not included any additional contribution to member reserves to offset this loss. Neither have we requested a higher contribution to member reserves as recoupment for expected 2018 losses stemming from the federal defunding of the Cost Share Reductions program in late 2017.

BCBSVT understands the importance of adequately funding our health care system to keep it strong and accessible. Since the factors driving this rate increase are almost entirely driven by the cost and utilization of health care in Vermont, we believe that there is no way to further reduce these rates without underfunding the health care coverage on which Vermonters rely.

I HEREBY CERTIFY that I have reviewed the applicable filing requirements for this filing, and, to the best of my knowledge, the filing complies with all applicable statutory and regulatory provisions for the State of Vermont.



Ruth Greene
Vice President, Treasurer & CFO



Date

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X	Y	
1	Unified Rate Review v4.3																							
2																								
3	Company Legal Name:	Blue Cross and Blue Shield of V																		State:	VT			
4	HIOS Issuer ID:	13627																		Market:	Combined			
5	Effective Date of Rate Change(s):	1/1/2019																						
6																								
7																								
8	Market Level Calculations (Same for all Plans)																							
9																								
10																								
11	Section I: Experience period data																							
12	Experience Period:	1/1/2017		to	12/31/2017																			
13		<u>Experience Period</u>			<u>Aggregate Amount</u>	<u>PMPM</u>	<u>% of Prem</u>																	
14	Premiums (net of MLR Rebate) in Experience Period:	\$408,055,901			\$497.74	100.00%																		
15	Incurred Claims in Experience Period	\$372,089,227			453.86	91.19%																		
16	Allowed Claims:	\$456,109,835			556.35	111.78%																		
17	Index Rate of Experience Period				\$556.27																			
18	Experience Period Member Months	819,824																						
19																								
20	Section II: Allowed Claims, PMPM basis																							
21		<u>Experience Period</u>			<u>Projection Period:</u> 1/1/2019 to 12/31/2019				Mid-point to Mid-point, Experience to Projection:				24 months											
22		<u>on Actual Experience Allowed</u>				<u>Adj't. from Experience to Annualized Trend</u>				<u>Projections, before credibility Adjustment</u>				<u>Credibility Manual</u>										
23	Benefit Category	Utilization Description	Utilization per 1,000	Average Cost/Service	PMPM	Pop'l risk Morbidity		Other	Cost	Util	Utilization per 1,000	Average Cost/Service	PMPM	Utilization per 1,000	Average Cost/Service	PMPM								
24	Inpatient Hospital	Admits	52.72	\$21,793.61	\$95.74	1.031	1.000	1.027	1.021		56.69	\$22,968.50	\$108.51	0.00	\$0.00	\$0.00								
25	Outpatient Hospital	Services	3,755.32	698.05	218.45	1.031	1.000	1.027	1.021		4,038.45	735.85	247.64	0.00	0.00	0.00								
26	Professional	Visits	9,877.97	149.29	122.89	1.031	0.997	1.027	1.021		10,622.72	156.86	138.85	0.00	0.00	0.00								
27	Other Medical	Visits	1,548.33	171.25	22.10	1.031	1.000	1.027	1.023		1,671.08	180.66	25.16	0.00	0.00	0.00								
28	Capitation	Benefit Period	17,803.04	5.50	8.15	1.031	0.625	1.027	1.021		19,145.30	3.62	5.78	0.00	0.00	0.00								
29	Prescription Drug	Prescriptions	14,578.96	73.28	89.03	1.031	1.147	1.110	1.028		15,880.86	103.60	137.10	0.00	0.00	0.00								
30	Total				\$556.35							\$663.04				\$0.00								
31																								
32	Section III: Projected Experience:	Projected Allowed Claims PMPM (w/applied credibility if applicable)											100.00%		0.00%		After Credibility	Projected Period Totals						
33		Paid to Allowed Average Factor in Projection Period															0.811	\$418,438,956						
34		Projected Incurred Claims, before ACA rein & Risk Adj't, PMPM															\$537.66	\$339,312,807						
35		Projected Risk Adjustments PMPM															13.51	8,526,053						
36		Projected Incurred Claims, before reinsurance recoveries, net of rein prem, PMPM															\$524.15	\$330,786,754						
37		Projected ACA reinsurance recoveries, net of rein prem, PMPM															0.00	0						
38		Projected Incurred Claims															\$524.15	\$330,786,754						
39		Administrative Expense Load													6.93%		40.27	25,413,686						
40		Profit & Risk Load													1.60%		9.30	5,866,072						
41		Taxes & Fees													1.24%		7.23	4,562,986						
42		Single Risk Pool Gross Premium Avg. Rate, PMPM															\$580.94	\$366,629,499						
43		Index Rate for Projection Period															\$662.94							
44		% increase over Experience Period															16.72%							
45		% Increase, annualized:															8.04%							
46		Projected Member Months																631,092						
47																								
48																								
49	Information Not Releasable to the Public Unless Authorized by Law: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.																							
50																								

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

BLUE REWARDS (NON-STANDARD) PLAN DESIGNS

	GOLD	GOLD	SILVER	SILVER	BRONZE	BRONZE	CATASTROPHIC	SILVER REFLECTIVE	SILVER REFLECTIVE
	Blue Rewards	Blue Rewards	Blue Rewards	Blue Rewards	Blue Rewards	Blue Rewards	Blue Rewards	Blue Rewards	Blue Rewards
Deductible/OOP Max	3-6-9	CDHP	3-6-9	CDHP	3-6-9	CDHP	Deductible	3-6-9	CDHP
Medical Ded	\$1,550	\$3,000	\$2,850	\$4,100	\$7,900	\$6,650	\$7,900	\$2,850	\$4,125
Rx Ded	Combined	Combined	Combined	Combined	Combined	Combined	Combined	Combined	Combined
Integrated Ded	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical OOPM	\$5,150	\$3,000	\$7,900	\$4,100	\$7,900	\$6,650	\$7,900	\$7,900	\$4,125
Rx OOPM	\$1,350	\$1,350	\$1,350	\$1,350	Combined	Combined	\$1,350	\$1,350	\$1,350
Integrated OOPM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900
Medical Deductible waived for:	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care	Preventive Care, 3 PCP/MH Office Visits	Preventive Care, 3 PCP/MH Office Visits, Pediatric Dental Class I	Preventive Care
Drug Deductible waived for:	N/A	Wellness Scripts	N/A	Wellness Scripts	N/A	Wellness Scripts	N/A	N/A	Wellness Scripts
Service Category									
Preventive	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PCP Office Visit	3 visits per member combined PCP/MH at no cost share before deductible then \$20 copay	0%	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	0%	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	0%	3 visits per member combined PCP/MH at no cost share before deductible then 0% coinsurance	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	0%
MH/SA Office Visit		0%		0%		0%			0%
Specialist Office Visit	\$30	0%	\$50	0%	\$0	0%	0%	\$50	0%
Urgent Care	\$30	0%	\$50	0%	\$0	0%	0%	\$50	0%
Ambulance	\$30	0%	\$50	0%	\$0	0%	0%	\$55	0%
DME	\$30	0%	\$50	0%	\$0	0%	0%	\$50	0%
ER	\$250	0%	\$450	0%	\$0	0%	0%	\$450	0%
Radiology (MRI, CT, PET)	\$750	0%	\$1,750	0%	\$0	0%	0%	\$1,750	0%
Outpatient	\$750	0%	\$1,750	0%	\$0	0%	0%	\$1,750	0%
Inpatient	\$750	0%	\$1,750	0%	\$0	0%	0%	\$1,750	0%
Rx Generic	\$5	\$5	\$5	\$15	\$0	\$25	0%	\$5	\$15
Rx Preferred Brand	40%	40%	40%	40%	0%	40%	0%	40%	40%
Rx Non-Preferred Brand	60%	60%	60%	60%	0%	60%	0%	60%	60%
Pediatric Vision (Exam and Materials)	\$30	0%	\$50	0%	\$0	0%	0%	\$50	0%
Pediatric Dental Class I	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pediatric Dental Class II	30%	0%	30%	0%	30%	0%	0%	30%	0%
Pediatric Dental Class III	50%	0%	50%	0%	50%	0%	0%	50%	0%

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 2A

MEMBERSHIP BY PLAN AND MARKET

Inforce Membership by Plan	Individual Market	Small Group Market	TOTAL
Blue Rewards Gold	442	742	1,184
Blue Rewards Gold CDHP	1,073	5,833	6,906
Blue Rewards Silver	2,828	598	3,426
Blue Rewards Bronze	171	118	289
Blue Rewards Bronze CDHP	1,105	939	2,044
Standard Platinum	2,776	7,593	10,369
Standard Gold	1,696	4,220	5,916
Standard Silver	8,499	5,007	13,506
Standard Silver CDHP	2,522	2,762	5,284
Standard Bronze	975	1,203	2,178
Standard Bronze CDHP	927	1,197	2,124
Standard Bronze Integrated	83	91	174
Catastrophic	264	0	264
Total	23,361	30,303	53,664

Projected Membership by Plan	Individual Market	Small Group Market	TOTAL
Blue Rewards Gold	422	742	1,164
Blue Rewards Gold CDHP	958	5,541	6,499
Blue Rewards Silver	2,212	0	2,212
Blue Rewards Silver CDHP	684	0	684
Blue Rewards Bronze	228	370	598
Blue Rewards Bronze CDHP	1,047	1,179	2,226
Standard Platinum	2,669	7,593	10,262
Standard Gold	1,616	4,220	5,836
Standard Silver	6,457	0	6,457
Standard Silver CDHP	1,695	0	1,695
Standard Bronze	754	843	1,597
Standard Bronze CDHP	675	837	1,512
Standard Bronze Integrated	154	331	485
Catastrophic	264	0	264
Blue Rewards Silver - Reflective	288	526	814
Blue Rewards Silver CDHP - Reflective	174	1,517	1,691
Standard Silver - Reflective	1,389	4,256	5,645
Standard Silver CDHP - Reflective	602	2,348	2,950
Total	22,288	30,303	52,591

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 2B

ADJUSTMENT FOR IMPACT OF THE HEALTH STATUS OF NEWLY INSURED

Coverage Category in the Experience	Continuing Membership	New Membership	Total Projected Membership	CY 2017 Allowed PMPM
Individual Non-Subsidized - Directly Enrolled with BCBSVT	5,008	381	5,389	\$635.39
Individual Non-Subsidized - Enrolled through VHC	3,342	359	3,701	\$635.19
Individual Subsidized - Enrolled through VHC	13,303	968	14,271	\$616.15
Small Group with 50 or less employees	23,812	1,607	25,419	\$518.04
Small Group with 51-100 employees	4,607	277	4,884	\$555.52
Total	50,072	3,592	53,664	
Weighted Average of Continuing Membership				\$567.11
Weighted Average of Projected Membership				\$567.40
Impact of Newly Insured (Line 1+b3 on Exhibit 5) = $\$567.4 / \567.11				1.0005

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDIAL AND SMALL GROUP RATE FILING

Exhibit 2C

IMPACT OF BENEFIT CHANGES

Metal	Allowed Charge PMPM	PMPM for Claims in Excess of \$500,000	Capped Allowed Charges PMPM	Allowed Charged PMPM with Average PMPM for Claims in Excess of \$500,000
Platinum	\$841.63	\$6.59	\$835.04	\$838.75
Gold	\$593.10	\$4.68	\$588.42	\$592.14
Silver	\$487.91	\$2.90	\$485.01	\$488.73
Bronze	\$350.36	\$0.54	\$349.82	\$353.54
Catastrophic	\$125.77	\$0.00	\$125.77	\$129.49
Total	\$564.06	\$3.72	\$560.35	\$564.06

Metal	Allowed Charges Relativity	Calendar Year 2017 Member Months	March 2018 Membership	2019 Projected Membership
Platinum	1.4870	152,734	10,369	10,262
Gold	1.0498	211,065	14,006	13,499
Silver	0.8664	342,337	22,216	22,148
Bronze	0.6268	110,984	6,809	6,418
Catastrophic	0.2296	2,704	264	264
Total		819,824	53,664	52,591

Weighted Average Allowed Charge Relativity 0.9947 1.0006 1.0021

Benefit Adjustment (1+c1 on Exhibit 5) = 1.0021/0.9947 = **1.0075**

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

IMPACT OF SELECTION

	GOLD		NON-STANDARD PLANS				STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				Weighted Average
	Blue Rewards	Blue Rewards CDHP	Blue Rewards	SILVER SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		Blue Rewards	SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	
Projected Paid Claims																			
Using HHS Induced Utilization Factors																			
Projected FFS Allowed Charges - Without Selection	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	
Benefit Richness Adjustment	1.0127	0.9977	0.9643	0.9626	0.9383	0.9376	1.0925	1.0239	0.9696	0.9754	0.9376	0.9405	0.9442	0.9383	0.9643	0.9622	0.9696	0.9754	
Pricing Actuarial Value	82.23%	79.19%	84.00%	82.74%	66.45%	67.14%	92.81%	84.48%	83.74%	84.24%	67.15%	68.50%	68.84%	66.45%	74.12%	74.00%	74.90%	76.68%	
For Catastrophic Plan only - Impact of the specific eligibility	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.5212	1.0000	1.0000	1.0000	1.0000	
Projected Paid Claims	\$552.38	\$524.06	\$537.33	\$528.31	\$413.62	\$417.61	\$672.61	\$573.80	\$538.62	\$545.09	\$417.62	\$427.35	\$431.14	\$215.56	\$474.12	\$472.33	\$481.75	\$496.15	
Projected Paid Claims																			
Using BCBSVT Actual Utilization Factors																			
Projected FFS Allowed Charges - Without Selection	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	\$663.35	
Benefit Richness Adjustment	1.0475	1.0475	0.8646	0.8646	0.6254	0.6254	1.4838	1.0475	0.8646	0.8646	0.6254	0.6254	0.6254	0.2291	0.8646	0.8646	0.8646	0.8646	
Pricing Actuarial Value	82.21%	79.58%	83.12%	81.37%	65.31%	65.06%	93.58%	84.04%	83.03%	83.16%	65.03%	66.06%	67.25%	65.31%	70.95%	70.07%	72.51%	73.73%	
Projected Paid Claims	\$571.26	\$553.02	\$476.71	\$466.68	\$270.97	\$269.91	\$921.06	\$583.94	\$476.23	\$476.94	\$269.81	\$274.07	\$279.00	\$99.25	\$406.89	\$401.87	\$415.84	\$422.88	
Selection Impact	line 1-c6 on Exhibit 5													line 1-c6 on Exhibit 5				1.0132	

Projected Membership	1,164	6,499	2,212	684	598	2,226	10,262	5,836	6,457	1,695	1,597	1,512	485	264	814	1,691	5,645	2,950	52,591
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BLUE CROSS AND BLUE SHIELD OF VERMONT
 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

EXHIBIT 3A

MEDICAL TREND DEVELOPMENT
 ILLUSTRATION OF CONTRACT NORMALIZATION

Month	Contract Increase	Normalization Factor	Experience Claims	Normalized Claims
Jan-15		1.1249	\$1,000,000	\$1,124,864
Feb-15		1.1249	\$1,000,000	\$1,124,864
Mar-15		1.1249	\$1,000,000	\$1,124,864
Apr-15		1.1249	\$1,000,000	\$1,124,864
May-15		1.1249	\$1,000,000	\$1,124,864
Jun-15		1.1249	\$1,000,000	\$1,124,864
Jul-15		1.1249	\$1,000,000	\$1,124,864
Aug-15		1.1249	\$1,000,000	\$1,124,864
Sep-15		1.1249	\$1,000,000	\$1,124,864
Oct-15	1.0400	1.0816	\$1,000,000	\$1,081,600
Nov-15		1.0816	\$1,000,000	\$1,081,600
Dec-15		1.0816	\$1,000,000	\$1,081,600
Jan-16		1.0816	\$1,000,000	\$1,081,600
Feb-16		1.0816	\$1,000,000	\$1,081,600
Mar-16		1.0816	\$1,000,000	\$1,081,600
Apr-16		1.0816	\$1,000,000	\$1,081,600
May-16		1.0816	\$1,000,000	\$1,081,600
Jun-16		1.0816	\$1,000,000	\$1,081,600
Jul-16		1.0816	\$1,000,000	\$1,081,600
Aug-16		1.0816	\$1,000,000	\$1,081,600
Sep-16		1.0816	\$1,000,000	\$1,081,600
Oct-16	1.0400	1.0400	\$1,000,000	\$1,040,000
Nov-16		1.0400	\$1,000,000	\$1,040,000
Dec-16		1.0400	\$1,000,000	\$1,040,000
Jan-17		1.0400	\$1,000,000	\$1,040,000
Feb-17		1.0400	\$1,000,000	\$1,040,000
Mar-17		1.0400	\$1,000,000	\$1,040,000
Apr-17		1.0400	\$1,000,000	\$1,040,000
May-17		1.0400	\$1,000,000	\$1,040,000
Jun-17		1.0400	\$1,000,000	\$1,040,000
Jul-17		1.0400	\$1,000,000	\$1,040,000
Aug-17		1.0400	\$1,000,000	\$1,040,000
Sep-17		1.0400	\$1,000,000	\$1,040,000
Oct-17	1.0400	1.0000	\$1,000,000	\$1,000,000
Nov-17		1.0000	\$1,000,000	\$1,000,000
Dec-17		1.0000	\$1,000,000	\$1,000,000

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Month	Membership	Original Claims						Adjusted Claims - Normalized for Contract Changes					
		Facility	Professional	Total	Facility PMPM	Professional PMPM	Total PMPM	Facility	Professional	Total	Facility PMPM	Professional PMPM	Total PMPM
Jan-15	68,167	\$19,507,865	\$9,124,108	\$28,631,974	\$286.18	\$133.85	\$420.03	\$21,479,434	\$9,297,413	\$30,776,847	\$315.10	\$136.39	\$451.49
Feb-15	68,581	\$16,870,919	\$8,205,192	\$25,076,111	\$246.00	\$119.64	\$365.64	\$18,642,170	\$8,363,938	\$27,006,108	\$271.83	\$121.96	\$393.78
Mar-15	69,902	\$19,880,944	\$9,657,751	\$29,538,695	\$284.41	\$138.16	\$422.57	\$21,940,741	\$9,853,680	\$31,794,422	\$313.88	\$140.96	\$454.84
Apr-15	70,062	\$19,979,041	\$9,618,612	\$29,597,653	\$285.16	\$137.29	\$422.45	\$22,027,831	\$9,810,486	\$31,838,317	\$314.40	\$140.03	\$454.43
May-15	69,425	\$18,544,439	\$9,165,272	\$27,709,710	\$267.11	\$132.02	\$399.13	\$20,414,023	\$9,331,876	\$29,745,898	\$294.04	\$134.42	\$428.46
Jun-15	69,428	\$20,321,141	\$9,613,214	\$29,934,355	\$292.69	\$138.46	\$431.16	\$22,420,103	\$9,770,063	\$32,190,166	\$322.93	\$140.72	\$463.65
Jul-15	68,915	\$19,967,107	\$9,436,000	\$29,403,107	\$289.74	\$136.92	\$426.66	\$21,904,620	\$9,582,756	\$31,487,376	\$317.85	\$139.05	\$456.90
Aug-15	68,414	\$17,898,355	\$8,498,291	\$26,396,646	\$261.62	\$124.22	\$385.84	\$19,597,840	\$8,630,968	\$28,228,808	\$286.46	\$126.16	\$412.62
Sep-15	68,104	\$20,270,421	\$9,252,567	\$29,522,988	\$297.64	\$135.86	\$433.50	\$22,218,055	\$9,386,288	\$31,604,343	\$326.24	\$137.82	\$464.06
Oct-15	68,048	\$19,765,718	\$9,667,522	\$29,433,239	\$290.47	\$142.07	\$432.54	\$21,512,539	\$9,806,024	\$31,318,562	\$316.14	\$144.10	\$460.24
Nov-15	67,698	\$20,003,871	\$9,163,414	\$29,167,285	\$295.49	\$135.36	\$430.84	\$21,717,685	\$9,287,545	\$31,005,229	\$320.80	\$137.19	\$457.99
Dec-15	67,672	\$20,015,700	\$9,731,576	\$29,747,276	\$295.78	\$143.81	\$439.58	\$21,688,932	\$9,848,649	\$31,537,582	\$320.50	\$145.54	\$466.04
Jan-16	69,453	\$20,163,269	\$9,318,218	\$29,481,487	\$290.32	\$134.17	\$424.48	\$21,309,223	\$9,423,176	\$30,732,399	\$306.82	\$135.68	\$442.49
Feb-16	69,976	\$20,750,743	\$9,275,027	\$30,025,770	\$296.54	\$132.55	\$429.09	\$21,932,043	\$9,310,092	\$31,242,135	\$313.42	\$133.05	\$446.47
Mar-16	70,523	\$22,254,766	\$10,617,738	\$32,872,505	\$315.57	\$150.56	\$466.12	\$23,522,268	\$10,646,763	\$34,169,031	\$333.54	\$150.97	\$484.51
Apr-16	70,450	\$19,521,863	\$9,198,683	\$28,720,546	\$277.10	\$130.57	\$407.67	\$20,623,570	\$9,225,442	\$29,849,011	\$292.74	\$130.95	\$423.69
May-16	70,471	\$19,467,870	\$9,653,820	\$29,121,690	\$276.25	\$136.99	\$413.24	\$20,606,552	\$9,676,609	\$30,283,161	\$292.41	\$137.31	\$429.73
Jun-16	70,607	\$21,489,648	\$10,020,303	\$31,509,951	\$304.36	\$141.92	\$446.27	\$22,728,689	\$10,041,046	\$32,769,735	\$321.90	\$142.21	\$464.11
Jul-16	70,821	\$20,260,650	\$8,960,684	\$29,221,334	\$286.08	\$126.53	\$412.61	\$21,397,627	\$8,962,949	\$30,360,576	\$302.14	\$126.56	\$428.69
Aug-16	70,910	\$21,733,044	\$10,132,253	\$31,865,297	\$306.49	\$142.89	\$449.38	\$22,936,757	\$10,142,776	\$33,079,533	\$323.46	\$143.04	\$466.50
Sep-16	71,037	\$22,156,553	\$10,185,398	\$32,341,951	\$311.90	\$143.38	\$455.28	\$23,376,661	\$10,190,482	\$33,567,143	\$329.08	\$143.45	\$472.53
Oct-16	71,211	\$21,065,430	\$10,307,392	\$31,372,823	\$295.82	\$144.74	\$440.56	\$22,052,826	\$10,315,727	\$32,368,553	\$309.68	\$144.86	\$454.54
Nov-16	71,283	\$22,884,571	\$10,897,037	\$33,781,608	\$321.04	\$152.87	\$473.91	\$23,952,831	\$10,884,023	\$34,836,854	\$336.02	\$152.69	\$488.71
Dec-16	71,339	\$23,652,117	\$10,810,601	\$34,462,717	\$331.55	\$151.54	\$483.08	\$24,750,620	\$10,798,237	\$35,548,857	\$346.94	\$151.37	\$498.31
Jan-17	69,561	\$21,890,208	\$10,399,903	\$32,290,112	\$314.69	\$149.51	\$464.20	\$22,419,428	\$10,568,197	\$32,987,625	\$322.30	\$151.93	\$474.23
Feb-17	69,874	\$20,188,505	\$9,255,300	\$29,443,805	\$288.93	\$132.46	\$421.38	\$20,699,274	\$9,320,473	\$30,019,747	\$296.24	\$133.39	\$429.63
Mar-17	69,644	\$22,169,461	\$10,586,728	\$32,756,189	\$318.33	\$152.01	\$470.34	\$22,722,893	\$10,656,463	\$33,379,355	\$326.27	\$153.01	\$479.29
Apr-17	69,292	\$19,248,376	\$9,234,178	\$28,482,553	\$277.79	\$133.26	\$411.05	\$19,720,513	\$9,291,496	\$29,012,009	\$284.60	\$134.09	\$418.69
May-17	68,904	\$21,958,142	\$10,615,663	\$32,573,804	\$318.68	\$154.06	\$472.74	\$22,482,843	\$10,678,239	\$33,161,082	\$326.29	\$154.97	\$481.26
Jun-17	68,586	\$21,356,230	\$10,006,985	\$31,363,215	\$311.38	\$145.90	\$457.28	\$21,824,825	\$10,061,431	\$31,886,256	\$318.21	\$146.70	\$464.91
Jul-17	68,259	\$20,801,219	\$9,101,126	\$29,902,345	\$304.74	\$133.33	\$438.07	\$21,137,726	\$9,117,993	\$30,255,719	\$309.67	\$133.58	\$443.25
Aug-17	67,932	\$21,168,922	\$9,984,715	\$31,153,636	\$311.62	\$146.98	\$458.60	\$21,526,639	\$9,998,969	\$31,525,608	\$316.89	\$147.19	\$464.08
Sep-17	67,540	\$20,881,218	\$9,514,931	\$30,396,149	\$309.17	\$140.88	\$450.05	\$21,196,010	\$9,525,059	\$30,721,069	\$313.83	\$141.03	\$454.86
Oct-17	67,184	\$23,836,304	\$10,859,211	\$34,695,514	\$354.79	\$161.63	\$516.43	\$23,858,585	\$10,867,257	\$34,725,842	\$355.12	\$161.75	\$516.88
Nov-17	66,853	\$21,893,003	\$10,485,137	\$32,378,140	\$327.48	\$156.84	\$484.32	\$21,903,511	\$10,489,064	\$32,392,575	\$327.64	\$156.90	\$484.53
Dec-17	66,195	\$21,992,911	\$9,678,847	\$31,671,759	\$332.24	\$146.22	\$478.46	\$21,992,911	\$9,678,847	\$31,671,759	\$332.24	\$146.22	\$478.46
CY 2015	824,416	\$233,025,521	\$111,133,519	\$344,159,039	\$282.66	\$134.80	\$417.46	\$255,563,972	\$112,969,686	\$368,533,658	\$309.99	\$137.03	\$447.02
CY 2016	848,081	\$255,400,525	\$119,377,154	\$374,777,679	\$301.15	\$140.76	\$441.91	\$269,189,668	\$119,617,321	\$388,806,989	\$317.41	\$141.04	\$458.46
CY 2017	819,824	\$257,384,498	\$119,722,723	\$377,107,221	\$313.95	\$146.03	\$459.99	\$261,485,158	\$120,253,489	\$381,738,647	\$318.95	\$146.68	\$465.63

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

5.9%
4.1%

2.4% 2.9% 2.6%
0.5% 4.0% 1.6%

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

		Adjustments for Benefits, Aging and Fraud Waste and Abuse Programs										
Month	Membership	Paid to Allowed Ratio	Induced Utilization	Normalized Induced Utilization	Average Age/Gender Factor	Normalized Age/Gender Factor	FWA Factor	Normalized FWA Factor	Total Normalized Factor	Facility PMPM	Professional PMPM	Total PMPM
Jan-15	68,167	82.5%	1.096	1.004	1.245	1.020	1.003	0.997	1.020	\$321.55	\$139.18	\$460.73
Feb-15	68,581	82.5%	1.096	1.004	1.245	1.020	1.003	0.997	1.020	\$277.33	\$124.43	\$401.76
Mar-15	69,902	82.7%	1.097	1.003	1.245	1.020	1.003	0.997	1.019	\$319.99	\$143.71	\$463.71
Apr-15	70,062	82.8%	1.098	1.003	1.247	1.018	1.003	0.997	1.017	\$319.78	\$142.42	\$462.20
May-15	69,425	82.9%	1.099	1.002	1.249	1.016	1.003	0.997	1.014	\$298.15	\$136.29	\$434.44
Jun-15	69,428	83.0%	1.099	1.001	1.251	1.014	1.003	0.997	1.012	\$326.83	\$142.43	\$469.26
Jul-15	68,915	83.2%	1.100	1.000	1.252	1.013	1.003	0.997	1.010	\$321.02	\$140.44	\$461.47
Aug-15	68,414	83.3%	1.101	1.000	1.253	1.013	1.003	0.997	1.009	\$289.13	\$127.33	\$416.47
Sep-15	68,104	83.4%	1.102	0.999	1.256	1.011	1.003	0.997	1.006	\$328.14	\$138.63	\$466.76
Oct-15	68,048	83.4%	1.102	0.999	1.257	1.010	1.003	0.997	1.005	\$317.73	\$144.83	\$462.56
Nov-15	67,698	83.5%	1.102	0.998	1.257	1.009	1.003	0.997	1.004	\$322.13	\$137.76	\$459.88
Dec-15	67,672	83.4%	1.102	0.999	1.259	1.008	1.003	0.997	1.004	\$321.68	\$146.07	\$467.76
Jan-16	69,453	83.2%	1.101	1.000	1.253	1.013	1.001	0.999	1.012	\$310.51	\$137.31	\$447.83
Feb-16	69,976	83.2%	1.100	1.000	1.253	1.013	1.001	0.999	1.012	\$317.33	\$134.71	\$452.04
Mar-16	70,523	83.2%	1.100	1.000	1.252	1.013	1.001	0.999	1.013	\$337.96	\$152.97	\$490.93
Apr-16	70,450	83.1%	1.100	1.001	1.253	1.013	1.001	0.999	1.013	\$296.62	\$132.69	\$429.31
May-16	70,471	83.1%	1.099	1.001	1.254	1.012	1.001	0.999	1.013	\$296.12	\$139.05	\$435.17
Jun-16	70,607	83.0%	1.099	1.001	1.257	1.010	1.001	0.999	1.010	\$325.28	\$143.70	\$468.98
Jul-16	70,821	83.1%	1.099	1.001	1.259	1.008	1.001	0.999	1.009	\$304.73	\$127.64	\$432.38
Aug-16	70,910	83.1%	1.100	1.001	1.259	1.008	1.001	0.999	1.008	\$325.92	\$144.12	\$470.04
Sep-16	71,037	83.2%	1.100	1.000	1.261	1.007	1.001	0.999	1.006	\$331.13	\$144.35	\$475.47
Oct-16	71,211	83.3%	1.101	1.000	1.262	1.006	1.001	0.999	1.005	\$311.22	\$145.58	\$456.80
Nov-16	71,283	83.4%	1.101	0.999	1.262	1.005	1.001	0.999	1.004	\$337.35	\$153.29	\$490.64
Dec-16	71,339	83.5%	1.102	0.998	1.265	1.003	1.001	0.999	1.001	\$347.31	\$151.53	\$498.84
Jan-17	69,561	83.4%	1.101	0.999	1.265	1.004	1.000	1.000	1.003	\$323.16	\$152.33	\$475.49
Feb-17	69,874	83.3%	1.101	0.999	1.264	1.004	1.000	1.000	1.003	\$297.17	\$133.81	\$430.97
Mar-17	69,644	83.3%	1.101	1.000	1.265	1.003	1.000	1.000	1.003	\$327.24	\$153.47	\$480.71
Apr-17	69,292	83.3%	1.101	1.000	1.265	1.003	1.000	1.000	1.003	\$285.43	\$134.48	\$419.91
May-17	68,904	83.3%	1.101	1.000	1.267	1.002	1.000	1.000	1.002	\$326.83	\$155.23	\$482.06
Jun-17	68,586	83.3%	1.101	0.999	1.268	1.001	1.000	1.000	1.001	\$318.42	\$146.79	\$465.21
Jul-17	68,259	83.4%	1.101	0.999	1.267	1.001	1.000	1.000	1.001	\$309.85	\$133.66	\$443.50
Aug-17	67,932	83.3%	1.101	0.999	1.267	1.002	1.000	1.000	1.001	\$317.22	\$147.35	\$464.57
Sep-17	67,540	83.2%	1.100	1.000	1.267	1.002	1.000	1.000	1.002	\$314.35	\$141.26	\$455.61
Oct-17	67,184	83.3%	1.101	1.000	1.268	1.001	1.000	1.000	1.001	\$355.41	\$161.89	\$517.30
Nov-17	66,853	83.2%	1.100	1.000	1.268	1.001	1.000	1.000	1.001	\$327.81	\$156.98	\$484.79
Dec-17	66,195	83.2%	1.100	1.000	1.269	1.000	1.000	1.000	1.000	\$332.24	\$146.22	\$478.46
CY 2015	824,416									\$313.62	\$138.63	\$452.25
CY 2016	848,081									\$320.18	\$142.28	\$462.45
CY 2017	819,824									\$319.44	\$146.91	\$466.35

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

2.1% 2.6% 2.3%
-0.2% 3.3% 0.8%

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Month	Membership	Original Claims - Removing Claimants in Excess of \$250,000						Adjusted Claims - Normalized for Contract Changes - Removing Claimants in Excess of \$250,000					
		Facility	Professional	Total	Facility PMPM	Professional PMPM	Total PMPM	Facility	Professional	Total	Facility PMPM	Professional PMPM	Total PMPM
Jan-15	68,106	\$17,698,025	\$8,850,850	\$26,548,876	\$259.86	\$129.96	\$389.82	\$19,477,622	\$9,013,305	\$28,490,926	\$285.99	\$132.34	\$418.33
Feb-15	68,519	\$15,725,178	\$7,942,183	\$23,667,361	\$229.50	\$115.91	\$345.41	\$17,364,616	\$8,095,334	\$25,459,950	\$253.43	\$118.15	\$371.58
Mar-15	69,837	\$18,088,070	\$9,421,391	\$27,509,460	\$259.00	\$134.91	\$393.91	\$19,949,338	\$9,609,655	\$29,558,993	\$285.66	\$137.60	\$423.26
Apr-15	69,997	\$18,215,844	\$9,313,991	\$27,529,835	\$260.24	\$133.06	\$393.30	\$20,079,513	\$9,498,373	\$29,577,886	\$286.86	\$135.70	\$422.56
May-15	69,359	\$16,652,885	\$8,844,362	\$25,497,247	\$240.10	\$127.52	\$367.61	\$18,320,006	\$9,002,830	\$27,322,836	\$264.13	\$129.80	\$393.93
Jun-15	69,361	\$18,081,448	\$9,330,887	\$27,412,336	\$260.69	\$134.53	\$395.21	\$19,901,398	\$9,485,814	\$29,387,212	\$286.92	\$136.76	\$423.68
Jul-15	68,847	\$17,629,362	\$9,023,425	\$26,652,787	\$256.07	\$131.06	\$387.13	\$19,299,436	\$9,166,524	\$28,465,959	\$280.32	\$133.14	\$413.47
Aug-15	68,348	\$15,806,064	\$8,215,393	\$24,021,457	\$231.26	\$120.20	\$351.46	\$17,297,320	\$8,344,842	\$25,642,162	\$253.08	\$122.09	\$375.17
Sep-15	68,038	\$17,566,093	\$8,942,412	\$26,508,505	\$258.18	\$131.43	\$389.61	\$19,241,445	\$9,072,973	\$28,314,418	\$282.80	\$133.35	\$416.16
Oct-15	67,984	\$17,235,767	\$9,283,298	\$26,519,065	\$253.53	\$136.55	\$390.08	\$18,719,515	\$9,417,693	\$28,137,208	\$275.35	\$138.53	\$413.88
Nov-15	67,637	\$16,761,585	\$8,761,600	\$25,523,185	\$247.82	\$129.54	\$377.36	\$18,210,705	\$8,875,724	\$27,086,428	\$269.24	\$131.23	\$400.47
Dec-15	67,613	\$18,532,775	\$9,525,390	\$28,058,165	\$274.10	\$140.88	\$414.98	\$20,064,448	\$9,638,747	\$29,703,195	\$296.75	\$142.56	\$439.31
Jan-16	69,385	\$18,367,494	\$9,110,997	\$27,478,491	\$264.72	\$131.31	\$396.03	\$19,401,652	\$9,218,361	\$28,620,012	\$279.62	\$132.86	\$412.48
Feb-16	69,908	\$18,630,050	\$9,084,168	\$27,714,218	\$266.49	\$129.94	\$396.44	\$19,678,308	\$9,120,371	\$28,798,679	\$281.49	\$130.46	\$411.95
Mar-16	70,456	\$20,484,953	\$10,417,669	\$30,902,622	\$290.75	\$147.86	\$438.61	\$21,644,930	\$10,447,462	\$32,092,391	\$307.21	\$148.28	\$455.50
Apr-16	70,383	\$17,859,167	\$9,020,893	\$26,880,060	\$253.74	\$128.17	\$381.91	\$18,852,951	\$9,049,908	\$27,902,859	\$267.86	\$128.58	\$396.44
May-16	70,404	\$17,502,081	\$9,407,676	\$26,909,757	\$248.59	\$133.62	\$382.22	\$18,516,931	\$9,432,086	\$27,949,016	\$263.01	\$133.97	\$396.98
Jun-16	70,540	\$19,334,377	\$9,847,573	\$29,181,950	\$274.09	\$139.60	\$413.69	\$20,444,485	\$9,868,779	\$30,313,265	\$289.83	\$139.90	\$429.73
Jul-16	70,755	\$17,912,956	\$8,719,925	\$26,632,881	\$253.17	\$123.24	\$376.41	\$18,920,097	\$8,725,166	\$27,645,262	\$267.40	\$123.32	\$390.72
Aug-16	70,844	\$19,325,713	\$9,854,240	\$29,179,953	\$272.79	\$139.10	\$411.89	\$20,385,560	\$9,864,707	\$30,250,267	\$287.75	\$139.25	\$427.00
Sep-16	70,970	\$18,574,314	\$9,705,686	\$28,280,000	\$261.72	\$136.76	\$398.48	\$19,591,708	\$9,711,199	\$29,302,907	\$276.06	\$136.84	\$412.89
Oct-16	71,146	\$18,732,623	\$9,891,021	\$28,623,644	\$263.30	\$139.02	\$402.32	\$19,605,084	\$9,899,876	\$29,504,961	\$275.56	\$139.15	\$414.71
Nov-16	71,218	\$20,285,987	\$10,345,690	\$30,631,677	\$284.84	\$145.27	\$430.11	\$21,217,532	\$10,336,913	\$31,554,445	\$297.92	\$145.14	\$443.07
Dec-16	71,277	\$20,550,944	\$10,505,891	\$31,056,835	\$288.33	\$147.40	\$435.72	\$21,478,672	\$10,503,422	\$31,982,094	\$301.34	\$147.36	\$448.70
Jan-17	69,490	\$19,909,289	\$10,182,837	\$30,092,125	\$286.51	\$146.54	\$433.04	\$20,406,437	\$10,349,590	\$30,756,028	\$293.66	\$148.94	\$442.60
Feb-17	69,802	\$18,214,979	\$9,055,037	\$27,270,016	\$260.95	\$129.72	\$390.68	\$18,675,546	\$9,117,795	\$27,793,340	\$267.55	\$130.62	\$398.17
Mar-17	69,572	\$20,043,057	\$10,375,251	\$30,418,307	\$288.09	\$149.13	\$437.22	\$20,532,704	\$10,442,767	\$30,975,471	\$295.13	\$150.10	\$445.23
Apr-17	69,220	\$17,265,229	\$9,033,121	\$26,298,349	\$249.43	\$130.50	\$379.92	\$17,683,158	\$9,087,426	\$26,770,584	\$255.46	\$131.28	\$386.75
May-17	68,831	\$19,975,109	\$10,428,381	\$30,403,490	\$290.21	\$151.51	\$441.71	\$20,455,252	\$10,488,296	\$30,943,547	\$297.18	\$152.38	\$449.56
Jun-17	68,513	\$18,809,353	\$9,757,495	\$28,566,848	\$274.54	\$142.42	\$416.96	\$19,226,920	\$9,809,278	\$29,036,198	\$280.63	\$143.17	\$423.81
Jul-17	68,188	\$17,893,311	\$8,812,556	\$26,705,867	\$262.41	\$129.24	\$391.65	\$18,197,448	\$8,828,817	\$27,026,265	\$266.87	\$129.48	\$396.35
Aug-17	67,861	\$19,136,874	\$9,730,292	\$28,867,166	\$282.00	\$143.39	\$425.39	\$19,470,062	\$9,744,143	\$29,214,205	\$286.91	\$143.59	\$430.50
Sep-17	67,472	\$18,100,285	\$9,321,731	\$27,422,017	\$268.26	\$138.16	\$406.42	\$18,397,429	\$9,331,539	\$27,728,968	\$272.67	\$138.30	\$410.97
Oct-17	67,118	\$20,668,777	\$10,609,497	\$31,278,274	\$307.95	\$158.07	\$466.02	\$20,686,286	\$10,617,256	\$31,303,542	\$308.21	\$158.19	\$466.40
Nov-17	66,790	\$19,751,641	\$10,244,038	\$29,995,679	\$295.73	\$153.38	\$449.10	\$19,760,113	\$10,247,878	\$30,007,990	\$295.85	\$153.43	\$449.29
Dec-17	66,135	\$19,893,854	\$9,553,543	\$29,447,398	\$300.81	\$144.46	\$445.26	\$19,893,854	\$9,553,543	\$29,447,398	\$300.81	\$144.46	\$445.26
CY 2015	823,646	\$207,993,097	\$107,455,181	\$315,448,278	\$252.53	\$130.46	\$382.99	\$227,925,361	\$109,221,813	\$337,147,174	\$276.73	\$132.61	\$409.34
CY 2016	847,286	\$227,560,659	\$115,911,429	\$343,472,088	\$268.58	\$136.80	\$405.38	\$239,737,909	\$116,178,248	\$355,916,157	\$282.95	\$137.12	\$420.07
CY 2017	818,992	\$229,661,757	\$117,103,778	\$346,765,535	\$280.42	\$142.99	\$423.41	\$233,385,209	\$117,618,327	\$351,003,537	\$284.97	\$143.61	\$428.58

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

5.8%
4.4%

2.2% 3.4% 2.6%
0.7% 4.7% 2.0%

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

		Adjustments for Benefits, Aging and Fraud Waste and Abuse Programs - Removing Claimants in Excess of \$250,000										
Month	Membership	Paid to Allowed Ratio	Induced Utilization	Normalized Induced Utilization	Average Age/Gender Factor	Normalized Age/Gender Factor	FWA Factor	Normalized FWA Factor	Total Normalized Factor	Facility PMPM	Professional PMPM	Total PMPM
Jan-15	68,106	82.5%	1.096	1.004	1.245	1.020	1.003	0.997	1.020	\$291.84	\$135.05	\$426.89
Feb-15	68,519	82.5%	1.096	1.004	1.245	1.020	1.003	0.997	1.020	\$258.56	\$120.54	\$379.10
Mar-15	69,837	82.7%	1.097	1.003	1.245	1.020	1.003	0.997	1.019	\$291.22	\$140.28	\$431.50
Apr-15	69,997	82.8%	1.098	1.003	1.247	1.018	1.003	0.997	1.017	\$291.76	\$138.02	\$429.78
May-15	69,359	82.9%	1.099	1.002	1.249	1.016	1.003	0.997	1.014	\$267.82	\$131.61	\$399.43
Jun-15	69,361	83.0%	1.099	1.001	1.251	1.014	1.003	0.997	1.012	\$290.40	\$138.41	\$428.81
Jul-15	68,847	83.2%	1.100	1.000	1.252	1.013	1.003	0.997	1.010	\$283.12	\$134.47	\$417.60
Aug-15	68,348	83.3%	1.101	1.000	1.253	1.013	1.003	0.997	1.009	\$255.44	\$123.23	\$378.67
Sep-15	68,038	83.4%	1.102	0.999	1.256	1.011	1.003	0.997	1.006	\$284.45	\$134.13	\$418.58
Oct-15	67,984	83.4%	1.102	0.999	1.257	1.010	1.003	0.997	1.005	\$276.74	\$139.22	\$415.96
Nov-15	67,637	83.5%	1.102	0.998	1.257	1.009	1.003	0.997	1.004	\$270.35	\$131.77	\$402.12
Dec-15	67,613	83.4%	1.102	0.999	1.259	1.008	1.003	0.997	1.004	\$297.85	\$143.08	\$440.93
Jan-16	69,385	83.2%	1.101	1.000	1.253	1.013	1.001	0.999	1.012	\$282.99	\$134.46	\$417.45
Feb-16	69,908	83.2%	1.100	1.000	1.253	1.013	1.001	0.999	1.012	\$285.00	\$132.09	\$417.09
Mar-16	70,456	83.2%	1.100	1.000	1.252	1.013	1.001	0.999	1.013	\$311.28	\$150.25	\$461.53
Apr-16	70,383	83.1%	1.100	1.001	1.253	1.013	1.001	0.999	1.013	\$271.41	\$130.29	\$401.70
May-16	70,404	83.1%	1.099	1.001	1.254	1.012	1.001	0.999	1.013	\$266.34	\$135.67	\$402.01
Jun-16	70,540	83.0%	1.099	1.001	1.257	1.010	1.001	0.999	1.010	\$292.87	\$141.37	\$434.24
Jul-16	70,755	83.1%	1.099	1.001	1.259	1.008	1.001	0.999	1.009	\$269.70	\$124.37	\$394.07
Aug-16	70,844	83.1%	1.100	1.001	1.259	1.008	1.001	0.999	1.008	\$289.94	\$140.30	\$430.24
Sep-16	70,970	83.2%	1.100	1.000	1.261	1.007	1.001	0.999	1.006	\$277.77	\$137.69	\$415.46
Oct-16	71,146	83.3%	1.101	1.000	1.262	1.006	1.001	0.999	1.005	\$276.93	\$139.84	\$416.76
Nov-16	71,218	83.4%	1.101	0.999	1.262	1.005	1.001	0.999	1.004	\$299.10	\$145.72	\$444.82
Dec-16	71,277	83.5%	1.102	0.998	1.265	1.003	1.001	0.999	1.001	\$301.66	\$147.52	\$449.18
Jan-17	69,490	83.4%	1.101	0.999	1.265	1.004	1.000	1.000	1.003	\$294.44	\$149.33	\$443.77
Feb-17	69,802	83.3%	1.101	0.999	1.264	1.004	1.000	1.000	1.003	\$268.39	\$131.03	\$399.42
Mar-17	69,572	83.3%	1.101	1.000	1.265	1.003	1.000	1.000	1.003	\$296.01	\$150.55	\$446.55
Apr-17	69,220	83.3%	1.101	1.000	1.265	1.003	1.000	1.000	1.003	\$256.20	\$131.66	\$387.87
May-17	68,831	83.3%	1.101	1.000	1.267	1.002	1.000	1.000	1.002	\$297.67	\$152.63	\$450.30
Jun-17	68,513	83.3%	1.101	0.999	1.268	1.001	1.000	1.000	1.001	\$280.81	\$143.27	\$424.08
Jul-17	68,188	83.4%	1.101	0.999	1.267	1.001	1.000	1.000	1.001	\$267.02	\$129.55	\$396.57
Aug-17	67,861	83.3%	1.101	0.999	1.267	1.002	1.000	1.000	1.001	\$287.21	\$143.74	\$430.95
Sep-17	67,472	83.2%	1.100	1.000	1.267	1.002	1.000	1.000	1.002	\$273.12	\$138.53	\$411.65
Oct-17	67,118	83.3%	1.101	1.000	1.268	1.001	1.000	1.000	1.001	\$308.46	\$158.32	\$466.78
Nov-17	66,790	83.2%	1.100	1.000	1.268	1.001	1.000	1.000	1.001	\$296.01	\$153.51	\$449.52
Dec-17	66,135	83.2%	1.100	1.000	1.269	1.000	1.000	1.000	1.000	\$300.81	\$144.46	\$445.26
CY 2015	823,646									\$279.99	\$134.16	\$414.15
CY 2016	847,286									\$285.44	\$138.32	\$423.75
CY 2017	818,992									\$285.41	\$143.84	\$429.24

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

1.9% 3.1% 2.3%
0.0% 4.0% 1.3%

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Month	Regression on Adjusted PMPM - 36 Months			Regression on Adjusted PMPM - 24 Months		
	Facility	Professional	Total	Facility	Professional	Total
Jan-15	\$278.40	\$131.25	\$409.62	\$278.86	\$128.94	\$407.68
Feb-15	\$278.68	\$131.66	\$410.33	\$279.13	\$129.43	\$408.46
Mar-15	\$278.93	\$132.03	\$410.96	\$279.37	\$129.88	\$409.16
Apr-15	\$279.22	\$132.45	\$411.66	\$279.64	\$130.38	\$409.94
May-15	\$279.49	\$132.85	\$412.34	\$279.90	\$130.86	\$410.70
Jun-15	\$279.77	\$133.27	\$413.05	\$280.17	\$131.36	\$411.48
Jul-15	\$280.04	\$133.67	\$413.73	\$280.43	\$131.85	\$412.24
Aug-15	\$280.33	\$134.09	\$414.44	\$280.70	\$132.35	\$413.02
Sep-15	\$280.61	\$134.51	\$415.15	\$280.97	\$132.86	\$413.81
Oct-15	\$280.88	\$134.92	\$415.84	\$281.23	\$133.35	\$414.57
Nov-15	\$281.17	\$135.35	\$416.55	\$281.50	\$133.86	\$415.36
Dec-15	\$281.44	\$135.76	\$417.24	\$281.76	\$134.36	\$416.13
Jan-16	\$281.73	\$136.19	\$417.95	\$282.03	\$134.87	\$416.92
Feb-16	\$282.01	\$136.61	\$418.67	\$282.30	\$135.39	\$417.71
Mar-16	\$282.28	\$137.02	\$419.34	\$282.55	\$135.88	\$418.46
Apr-16	\$282.56	\$137.45	\$420.06	\$282.82	\$136.40	\$419.25
May-16	\$282.84	\$137.86	\$420.75	\$283.09	\$136.90	\$420.03
Jun-16	\$283.12	\$138.30	\$421.47	\$283.36	\$137.43	\$420.83
Jul-16	\$283.40	\$138.72	\$422.17	\$283.62	\$137.94	\$421.60
Aug-16	\$283.69	\$139.15	\$422.89	\$283.89	\$138.46	\$422.40
Sep-16	\$283.97	\$139.59	\$423.61	\$284.16	\$138.99	\$423.21
Oct-16	\$284.25	\$140.01	\$424.32	\$284.43	\$139.51	\$423.99
Nov-16	\$284.54	\$140.45	\$425.04	\$284.70	\$140.04	\$424.80
Dec-16	\$284.82	\$140.88	\$425.75	\$284.96	\$140.56	\$425.58
Jan-17	\$285.10	\$141.32	\$426.47	\$285.24	\$141.10	\$426.39
Feb-17	\$285.39	\$141.77	\$427.20	\$285.51	\$141.64	\$427.20
Mar-17	\$285.65	\$142.17	\$427.86	\$285.76	\$142.13	\$427.94
Apr-17	\$285.94	\$142.62	\$428.60	\$286.03	\$142.68	\$428.75
May-17	\$286.22	\$143.05	\$429.31	\$286.30	\$143.21	\$429.54
Jun-17	\$286.51	\$143.50	\$430.04	\$286.57	\$143.75	\$430.36
Jul-17	\$286.79	\$143.94	\$430.75	\$286.84	\$144.29	\$431.15
Aug-17	\$287.08	\$144.39	\$431.49	\$287.11	\$144.84	\$431.97
Sep-17	\$287.37	\$144.84	\$432.23	\$287.39	\$145.40	\$432.80
Oct-17	\$287.65	\$145.28	\$432.94	\$287.66	\$145.93	\$433.59
Nov-17	\$287.94	\$145.74	\$433.68	\$287.93	\$146.49	\$434.42
Dec-17	\$288.22	\$146.18	\$434.40	\$288.20	\$147.04	\$435.22
Annual Trend	1.2%	3.8%	2.0%	1.1%	4.6%	2.3%

	Facility		Professional		Total		Facility		Professional		Total	
1.000	70.929	1.000	1.870	1.000	40.401	1.000	76.114	1.000	0.725	1.000	30.960	
0.000	1.153	0.000	1.231	0.000	1.148	0.000	2.183	0.000	2.414	0.000	2.196	
0.041	0.051	0.265	0.055	0.109	0.051	0.016	0.053	0.178	0.058	0.061	0.053	
1.443	34.000	12.232	34.000	4.177	34.000	0.366	22.000	4.764	22.000	1.425	22.000	

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Utilization Trend Calculation - 24 Month Time Series - Facility														
Month	Membership	Adjusted PMPM	Holt-Winters' Multiplicative		Damped Trend Seasonal Multiplicative		Holt-Winters' Additive		Damped Trend Seasonal Additive		Damped Trend Non-Seasonal		Double Exponential Smoothing	
			Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM
Jan-16	69385	\$282.99	\$282.99		\$282.99		\$282.99		\$282.99		\$282.99		\$282.99	
Feb-16	69908	\$285.00	\$285.00		\$285.00		\$285.00		\$285.00		\$285.00		\$285.00	
Mar-16	70456	\$311.28	\$311.28		\$311.28		\$311.28		\$311.28		\$311.28		\$311.28	
Apr-16	70383	\$271.41	\$271.41		\$271.41		\$271.41		\$271.41		\$271.41		\$271.41	
May-16	70404	\$266.34	\$266.34		\$266.34		\$266.34		\$266.34		\$266.34		\$266.34	
Jun-16	70540	\$292.87	\$292.87		\$292.87		\$292.87		\$292.87		\$292.87		\$292.87	
Jul-16	70755	\$269.70	\$269.70		\$269.70		\$269.70		\$269.70		\$269.70		\$269.70	
Aug-16	70844	\$289.94	\$289.94		\$289.94		\$289.94		\$289.94		\$289.94		\$289.94	
Sep-16	70970	\$277.77	\$277.77		\$277.77		\$277.77		\$277.77		\$277.77		\$277.77	
Oct-16	71146	\$276.93	\$276.93		\$276.93		\$276.93		\$276.93		\$276.93		\$276.93	
Nov-16	71218	\$299.10	\$299.10		\$299.10		\$299.10		\$299.10		\$299.10		\$299.10	
Dec-16	71277	\$301.66	\$301.66	\$285.44	\$301.66	\$285.44	\$301.66	\$285.44	\$301.66	\$285.44	\$301.66	\$285.44	\$301.66	\$285.44
Jan-17	69490	\$294.44	\$294.44	\$286.37	\$294.44	\$286.37	\$294.44	\$286.37	\$294.44	\$286.37	\$294.44	\$286.37	\$294.44	\$286.37
Feb-17	69802	\$268.39	\$268.39	\$285.01	\$268.39	\$285.01	\$268.39	\$285.01	\$268.39	\$285.01	\$268.39	\$285.01	\$268.39	\$285.01
Mar-17	69572	\$296.01	\$296.01	\$283.72	\$296.01	\$283.72	\$296.01	\$283.72	\$296.01	\$283.72	\$296.01	\$283.72	\$296.01	\$283.72
Apr-17	69220	\$256.20	\$256.20	\$282.49	\$256.20	\$282.49	\$256.20	\$282.49	\$256.20	\$282.49	\$256.20	\$282.49	\$256.20	\$282.49
May-17	68831	\$297.67	\$297.67	\$285.08	\$297.67	\$285.08	\$297.67	\$285.08	\$297.67	\$285.08	\$297.67	\$285.08	\$297.67	\$285.08
Jun-17	68513	\$280.81	\$280.81	\$284.08	\$280.81	\$284.08	\$280.81	\$284.08	\$280.81	\$284.08	\$280.81	\$284.08	\$280.81	\$284.08
Jul-17	68188	\$267.02	\$267.02	\$283.91	\$267.02	\$283.91	\$267.02	\$283.91	\$267.02	\$283.91	\$267.02	\$283.91	\$267.02	\$283.91
Aug-17	67861	\$287.21	\$287.21	\$283.66	\$287.21	\$283.66	\$287.21	\$283.66	\$287.21	\$283.66	\$287.21	\$283.66	\$287.21	\$283.66
Sep-17	67472	\$273.12	\$273.12	\$283.31	\$273.12	\$283.31	\$273.12	\$283.31	\$273.12	\$283.31	\$273.12	\$283.31	\$273.12	\$283.31
Oct-17	67118	\$308.46	\$308.46	\$285.90	\$308.46	\$285.90	\$308.46	\$285.90	\$308.46	\$285.90	\$308.46	\$285.90	\$308.46	\$285.90
Nov-17	66790	\$296.01	\$296.01	\$285.58	\$296.01	\$285.58	\$296.01	\$285.58	\$296.01	\$285.58	\$296.01	\$285.58	\$296.01	\$285.58
Dec-17	66135	\$300.81	\$300.81	\$285.41	\$300.81	\$285.41	\$300.81	\$285.41	\$300.81	\$285.41	\$300.81	\$285.41	\$300.81	\$285.41
Jan-18	66135	\$294.42	\$285.37	\$293.29	\$294.42	\$285.37	\$293.29	\$285.37	\$294.42	\$285.37	\$293.29	\$285.37	\$294.42	\$285.37
Feb-18	66135	\$268.42	\$285.45	\$270.06	\$268.42	\$285.45	\$270.06	\$285.45	\$268.42	\$285.45	\$270.06	\$285.45	\$268.42	\$285.45
Mar-18	66135	\$296.05	\$285.40	\$297.56	\$296.05	\$285.40	\$297.56	\$285.40	\$296.05	\$285.40	\$297.56	\$285.40	\$296.05	\$285.40
Apr-18	66135	\$256.26	\$285.52	\$257.76	\$256.26	\$285.52	\$257.76	\$285.52	\$256.26	\$285.52	\$257.76	\$285.52	\$256.26	\$285.52
May-18	66135	\$297.65	\$285.48	\$294.54	\$297.65	\$285.48	\$294.54	\$285.48	\$297.65	\$285.48	\$294.54	\$285.48	\$297.65	\$285.48
Jun-18	66135	\$280.85	\$285.50	\$282.04	\$280.85	\$285.50	\$282.04	\$285.50	\$280.85	\$285.50	\$282.04	\$285.50	\$280.85	\$285.50
Jul-18	66135	\$267.05	\$285.55	\$267.31	\$267.05	\$285.55	\$267.31	\$285.55	\$267.05	\$285.55	\$267.31	\$285.55	\$267.05	\$285.55
Aug-18	66135	\$287.24	\$285.54	\$287.51	\$287.24	\$285.54	\$287.51	\$285.54	\$287.24	\$285.54	\$287.51	\$285.54	\$287.24	\$285.54
Sep-18	66135	\$273.15	\$285.57	\$273.61	\$273.15	\$285.57	\$273.61	\$285.57	\$273.15	\$285.57	\$273.61	\$285.57	\$273.15	\$285.57
Oct-18	66135	\$308.42	\$285.54	\$305.30	\$308.42	\$285.54	\$305.30	\$285.54	\$308.42	\$285.54	\$305.30	\$285.54	\$308.42	\$285.54
Nov-18	66135	\$296.01	\$285.53	\$296.32	\$296.01	\$285.53	\$296.32	\$285.53	\$296.01	\$285.53	\$296.32	\$285.53	\$296.01	\$285.53
Dec-18	66135	\$300.81	\$285.53	\$300.89	\$300.81	\$285.53	\$300.89	\$285.53	\$300.81	\$285.53	\$300.89	\$285.53	\$300.81	\$285.53
Jan-19	66135	\$294.42	\$285.53	\$293.29	\$294.42	\$285.53	\$293.29	\$285.53	\$294.42	\$285.53	\$293.29	\$285.53	\$294.42	\$285.53
Feb-19	66135	\$268.42	\$285.53	\$270.06	\$268.42	\$285.53	\$270.06	\$285.53	\$268.42	\$285.53	\$270.06	\$285.53	\$268.42	\$285.53
Mar-19	66135	\$296.05	\$285.53	\$297.56	\$296.05	\$285.53	\$297.56	\$285.53	\$296.05	\$285.53	\$297.56	\$285.53	\$296.05	\$285.53
Apr-19	66135	\$256.26	\$285.53	\$257.76	\$256.26	\$285.53	\$257.76	\$285.53	\$256.26	\$285.53	\$257.76	\$285.53	\$256.26	\$285.53
May-19	66135	\$297.65	\$285.53	\$294.54	\$297.65	\$285.53	\$294.54	\$285.53	\$297.65	\$285.53	\$294.54	\$285.53	\$297.65	\$285.53
Jun-19	66135	\$280.85	\$285.53	\$282.04	\$280.85	\$285.53	\$282.04	\$285.53	\$280.85	\$285.53	\$282.04	\$285.53	\$280.85	\$285.53
Jul-19	66135	\$267.05	\$285.53	\$267.31	\$267.05	\$285.53	\$267.31	\$285.53	\$267.05	\$285.53	\$267.31	\$285.53	\$267.05	\$285.53
Aug-19	66135	\$287.24	\$285.53	\$287.51	\$287.24	\$285.53	\$287.51	\$285.53	\$287.24	\$285.53	\$287.51	\$285.53	\$287.24	\$285.53
Sep-19	66135	\$273.15	\$285.53	\$273.61	\$273.15	\$285.53	\$273.61	\$285.53	\$273.15	\$285.53	\$273.61	\$285.53	\$273.15	\$285.53
Oct-19	66135	\$308.42	\$285.53	\$305.30	\$308.42	\$285.53	\$305.30	\$285.53	\$308.42	\$285.53	\$305.30	\$285.53	\$308.42	\$285.53
Nov-19	66135	\$296.01	\$285.53	\$296.32	\$296.01	\$285.53	\$296.32	\$285.53	\$296.01	\$285.53	\$296.32	\$285.53	\$296.01	\$285.53
Dec-19	66135	\$300.81	\$285.53	\$300.89	\$300.81	\$285.53	\$300.89	\$285.53	\$300.81	\$285.53	\$300.89	\$285.53	\$300.81	\$285.53
Annual Trend			0.02%		0.02%		0.02%		0.02%		0.49%		0.51%	
RMSE			15.92		15.92		15.92		15.92		14.93		14.93	

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Utilization Trend Calculation - 36 Month Time Series - Professional														
Month	Membership	Adjusted PMPM	Holt-Winters' Multiplicative		Damped Trend Seasonal Multiplicative		Holt-Winters' Additive		Damped Trend Seasonal Additive		Damped Trend Non-Seasonal		Double Exponential Smoothing	
			Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM
Jan-15	68106	\$135.05	\$135.05		\$135.05		\$135.05		\$135.05		\$135.05		\$135.05	
Feb-15	68519	\$120.54	\$120.54		\$120.54		\$120.54		\$120.54		\$120.54		\$120.54	
Mar-15	69837	\$140.28	\$140.28		\$140.28		\$140.28		\$140.28		\$140.28		\$140.28	
Apr-15	69997	\$138.02	\$138.02		\$138.02		\$138.02		\$138.02		\$138.02		\$138.02	
May-15	69359	\$131.61	\$131.61		\$131.61		\$131.61		\$131.61		\$131.61		\$131.61	
Jun-15	69361	\$138.41	\$138.41		\$138.41		\$138.41		\$138.41		\$138.41		\$138.41	
Jul-15	68847	\$134.47	\$134.47		\$134.47		\$134.47		\$134.47		\$134.47		\$134.47	
Aug-15	68348	\$123.23	\$123.23		\$123.23		\$123.23		\$123.23		\$123.23		\$123.23	
Sep-15	68038	\$134.13	\$134.13		\$134.13		\$134.13		\$134.13		\$134.13		\$134.13	
Oct-15	67984	\$139.22	\$139.22		\$139.22		\$139.22		\$139.22		\$139.22		\$139.22	
Nov-15	67637	\$131.77	\$131.77		\$131.77		\$131.77		\$131.77		\$131.77		\$131.77	
Dec-15	67613	\$143.08	\$143.08	\$134.16	\$143.08	\$134.16	\$143.08	\$134.16	\$143.08	\$134.16	\$143.08	\$134.16	\$143.08	\$134.16
Jan-16	69385	\$134.46	\$134.46	\$134.11	\$134.46	\$134.11	\$134.46	\$134.11	\$134.46	\$134.11	\$134.46	\$134.11	\$134.46	\$134.11
Feb-16	69908	\$132.09	\$132.09	\$135.07	\$132.09	\$135.07	\$132.09	\$135.07	\$132.09	\$135.07	\$132.09	\$135.07	\$132.09	\$135.07
Mar-16	70456	\$150.25	\$150.25	\$135.92	\$150.25	\$135.92	\$150.25	\$135.92	\$150.25	\$135.92	\$150.25	\$135.92	\$150.25	\$135.92
Apr-16	70383	\$130.29	\$130.29	\$135.26	\$130.29	\$135.26	\$130.29	\$135.26	\$130.29	\$135.26	\$130.29	\$135.26	\$130.29	\$135.26
May-16	70404	\$135.67	\$135.67	\$135.60	\$135.67	\$135.60	\$135.67	\$135.60	\$135.67	\$135.60	\$135.67	\$135.60	\$135.67	\$135.60
Jun-16	70540	\$141.37	\$141.37	\$135.86	\$141.37	\$135.86	\$141.37	\$135.86	\$141.37	\$135.86	\$141.37	\$135.86	\$141.37	\$135.86
Jul-16	70755	\$124.37	\$124.37	\$135.00	\$124.37	\$135.00	\$124.37	\$135.00	\$124.37	\$135.00	\$124.37	\$135.00	\$124.37	\$135.00
Aug-16	70844	\$140.30	\$140.30	\$136.41	\$140.30	\$136.41	\$140.30	\$136.41	\$140.30	\$136.41	\$140.30	\$136.41	\$140.30	\$136.41
Sep-16	70970	\$137.69	\$137.69	\$136.71	\$137.69	\$136.71	\$137.69	\$136.71	\$137.69	\$136.71	\$137.69	\$136.71	\$137.69	\$136.71
Oct-16	71146	\$139.84	\$139.84	\$136.77	\$139.84	\$136.77	\$139.84	\$136.77	\$139.84	\$136.77	\$139.84	\$136.77	\$139.84	\$136.77
Nov-16	71218	\$145.72	\$145.72	\$137.92	\$145.72	\$137.92	\$145.72	\$137.92	\$145.72	\$137.92	\$145.72	\$137.92	\$145.72	\$137.92
Dec-16	71277	\$147.52	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32
Jan-17	69490	\$149.33	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54
Feb-17	69802	\$131.03	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45
Mar-17	69572	\$150.55	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47
Apr-17	69220	\$131.66	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59
May-17	68831	\$152.63	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98
Jun-17	68513	\$143.27	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14
Jul-17	68188	\$129.55	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61
Aug-17	67861	\$143.74	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89
Sep-17	67472	\$138.53	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98
Oct-17	67118	\$158.32	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48
Nov-17	66790	\$153.51	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10
Dec-17	66135	\$144.46	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84
Jan-18	66135	\$154.91	\$154.91	\$144.27	\$154.91	\$144.27	\$154.91	\$144.27	\$154.91	\$144.27	\$154.91	\$144.27	\$154.91	\$144.27
Feb-18	66135	\$137.71	\$137.71	\$144.87	\$137.71	\$144.87	\$137.71	\$144.87	\$137.71	\$144.87	\$137.71	\$144.87	\$137.71	\$144.87
Mar-18	66135	\$157.77	\$157.77	\$145.44	\$157.77	\$145.44	\$157.77	\$145.44	\$157.77	\$145.44	\$157.77	\$145.44	\$157.77	\$145.44
Apr-18	66135	\$138.15	\$138.15	\$146.02	\$138.15	\$146.02	\$138.15	\$146.02	\$138.15	\$146.02	\$138.15	\$146.02	\$138.15	\$146.02
May-18	66135	\$156.80	\$156.80	\$146.34	\$156.80	\$146.34	\$156.80	\$146.34	\$156.80	\$146.34	\$156.80	\$146.34	\$156.80	\$146.34
Jun-18	66135	\$149.39	\$149.39	\$146.86	\$149.39	\$146.86	\$149.39	\$146.86	\$149.39	\$146.86	\$149.39	\$146.86	\$149.39	\$146.86
Jul-18	66135	\$134.75	\$134.75	\$147.33	\$134.75	\$147.33	\$134.75	\$147.33	\$134.75	\$147.33	\$134.75	\$147.33	\$134.75	\$147.33
Aug-18	66135	\$149.02	\$149.02	\$147.78	\$149.02	\$147.78	\$149.02	\$147.78	\$149.02	\$147.78	\$149.02	\$147.78	\$149.02	\$147.78
Sep-18	66135	\$144.40	\$144.40	\$148.28	\$144.40	\$148.28	\$144.40	\$148.28	\$144.40	\$148.28	\$144.40	\$148.28	\$144.40	\$148.28
Oct-18	66135	\$161.90	\$161.90	\$148.57	\$161.90	\$148.57	\$161.90	\$148.57	\$161.90	\$148.57	\$161.90	\$148.57	\$161.90	\$148.57
Nov-18	66135	\$158.09	\$158.09	\$148.95	\$158.09	\$148.95	\$158.09	\$148.95	\$158.09	\$148.95	\$158.09	\$148.95	\$158.09	\$148.95
Dec-18	66135	\$150.74	\$150.74	\$149.47	\$150.74	\$149.47	\$150.74	\$149.47	\$150.74	\$149.47	\$150.74	\$149.47	\$150.74	\$149.47
Jan-19	66135	\$159.77	\$159.77	\$149.87	\$159.77	\$149.87	\$159.77	\$149.87	\$159.77	\$149.87	\$159.77	\$149.87	\$159.77	\$149.87
Feb-19	66135	\$142.02	\$142.02	\$150.23	\$142.02	\$150.23	\$142.02	\$150.23	\$142.02	\$150.23	\$142.02	\$150.23	\$142.02	\$150.23
Mar-19	66135	\$162.70	\$162.70	\$150.64	\$162.70	\$150.64	\$162.70	\$150.64	\$162.70	\$150.64	\$162.70	\$150.64	\$162.70	\$150.64
Apr-19	66135	\$142.45	\$142.45	\$151.00	\$142.45	\$151.00	\$142.45	\$151.00	\$142.45	\$151.00	\$142.45	\$151.00	\$142.45	\$151.00
May-19	66135	\$161.67	\$161.67	\$151.41	\$161.67	\$151.41	\$161.67	\$151.41	\$161.67	\$151.41	\$161.67	\$151.41	\$161.67	\$151.41
Jun-19	66135	\$154.02	\$154.02	\$151.79	\$154.02	\$151.79	\$154.02	\$151.79	\$154.02	\$151.79	\$154.02	\$151.79	\$154.02	\$151.79
Jul-19	66135	\$138.92	\$138.92	\$152.14	\$138.92	\$152.14	\$138.92	\$152.14	\$138.92	\$152.14	\$138.92	\$152.14	\$138.92	\$152.14
Aug-19	66135	\$153.61	\$153.61	\$152.52	\$153.61	\$152.52	\$153.61	\$152.52	\$153.61	\$152.52	\$153.61	\$152.52	\$153.61	\$152.52
Sep-19	66135	\$148.84	\$148.84	\$152.89	\$148.84	\$152.89	\$148.84	\$152.89	\$148.84	\$152.89	\$148.84	\$152.89	\$148.84	\$152.89
Oct-19	66135	\$166.86	\$166.86	\$153.31	\$166.86	\$153.31	\$166.86	\$153.31	\$166.86	\$153.31	\$166.86	\$153.31	\$166.86	\$153.31
Nov-19	66135	\$162.92	\$162.92	\$153.71	\$162.92	\$153.71	\$162.92	\$153.71	\$162.92	\$153.71	\$162.92	\$153.71	\$162.92	\$153.71
Dec-19	66135	\$155.34	\$155.34	\$154.09	\$155.34	\$154.09	\$155.34	\$154.09	\$155.34	\$154.09	\$155.34	\$154.09	\$155.34	\$154.09
Annual Trend RMSE			3.50%	7.74	2.26%	7.71	3.27%	7.72	2.43%	7.7	4.36%	7.95	6.59%	7.97

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Utilization Trend Calculation - 24 Month Time Series - Professional														
Month	Membership	Adjusted PMPM	Holt-Winters' Multiplicative		Damped Trend Seasonal Multiplicative		Holt-Winters' Additive		Damped Trend Seasonal Additive		Damped Trend Non-Seasonal		Double Exponential Smoothing	
			Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM
Jan-16	69385	\$134.46	\$134.46		\$134.46		\$134.46		\$134.46		\$134.46		\$134.46	
Feb-16	69908	\$132.09	\$132.09		\$132.09		\$132.09		\$132.09		\$132.09		\$132.09	
Mar-16	70456	\$150.25	\$150.25		\$150.25		\$150.25		\$150.25		\$150.25		\$150.25	
Apr-16	70383	\$130.29	\$130.29		\$130.29		\$130.29		\$130.29		\$130.29		\$130.29	
May-16	70404	\$135.67	\$135.67		\$135.67		\$135.67		\$135.67		\$135.67		\$135.67	
Jun-16	70540	\$141.37	\$141.37		\$141.37		\$141.37		\$141.37		\$141.37		\$141.37	
Jul-16	70755	\$124.37	\$124.37		\$124.37		\$124.37		\$124.37		\$124.37		\$124.37	
Aug-16	70844	\$140.30	\$140.30		\$140.30		\$140.30		\$140.30		\$140.30		\$140.30	
Sep-16	70970	\$137.69	\$137.69		\$137.69		\$137.69		\$137.69		\$137.69		\$137.69	
Oct-16	71146	\$139.84	\$139.84		\$139.84		\$139.84		\$139.84		\$139.84		\$139.84	
Nov-16	71218	\$145.72	\$145.72		\$145.72		\$145.72		\$145.72		\$145.72		\$145.72	
Dec-16	71277	\$147.52	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32	\$147.52	\$138.32
Jan-17	69490	\$149.33	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54	\$149.33	\$139.54
Feb-17	69802	\$131.03	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45	\$131.03	\$139.45
Mar-17	69572	\$150.55	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47	\$150.55	\$139.47
Apr-17	69220	\$131.66	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59	\$131.66	\$139.59
May-17	68831	\$152.63	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98	\$152.63	\$140.98
Jun-17	68513	\$143.27	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14	\$143.27	\$141.14
Jul-17	68188	\$129.55	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61	\$129.55	\$141.61
Aug-17	67861	\$143.74	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89	\$143.74	\$141.89
Sep-17	67472	\$138.53	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98	\$138.53	\$141.98
Oct-17	67118	\$158.32	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48	\$158.32	\$143.48
Nov-17	66790	\$153.51	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10	\$153.51	\$144.10
Dec-17	66135	\$144.46	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84	\$144.46	\$143.84
Jan-18	66135		\$145.31	\$143.49	\$151.90	\$144.02	\$155.72	\$144.33	\$142.88	\$143.29	\$148.96	\$143.78	\$149.00	\$143.79
Feb-18	66135		\$140.23	\$144.29	\$137.25	\$144.59	\$148.00	\$145.77	\$139.43	\$144.03	\$149.81	\$145.37	\$149.87	\$145.38
Mar-18	66135		\$160.49	\$145.08	\$157.10	\$145.10	\$140.69	\$144.95	\$157.84	\$144.60	\$150.67	\$145.36	\$150.73	\$145.37
Apr-18	66135		\$139.98	\$145.81	\$136.98	\$145.58	\$159.88	\$147.31	\$138.10	\$145.18	\$151.52	\$147.04	\$151.59	\$147.06
May-18	66135		\$149.42	\$145.53	\$153.62	\$145.64	\$140.86	\$146.33	\$144.76	\$144.50	\$152.37	\$147.00	\$152.45	\$147.03
Jun-18	66135		\$153.10	\$146.35	\$147.88	\$146.03	\$152.02	\$147.06	\$149.36	\$145.01	\$153.23	\$147.83	\$153.31	\$147.87
Jul-18	66135		\$135.89	\$146.91	\$132.30	\$146.30	\$152.96	\$149.04	\$132.67	\$145.31	\$154.08	\$149.91	\$154.18	\$149.95
Aug-18	66135		\$153.36	\$147.72	\$147.13	\$146.59	\$137.51	\$148.54	\$148.52	\$145.71	\$154.93	\$150.86	\$155.04	\$150.91
Sep-18	66135		\$150.56	\$148.73	\$142.38	\$146.92	\$153.26	\$149.78	\$145.77	\$146.32	\$155.77	\$152.31	\$155.90	\$152.37
Oct-18	66135		\$156.95	\$148.61	\$156.93	\$146.79	\$150.22	\$149.09	\$149.30	\$145.56	\$156.62	\$152.16	\$156.76	\$152.23
Nov-18	66135		\$161.78	\$149.29	\$154.63	\$146.88	\$158.79	\$149.53	\$154.36	\$145.62	\$157.47	\$152.49	\$157.62	\$152.58
Dec-18	66135		\$162.19	\$150.77	\$148.47	\$147.21	\$161.32	\$150.94	\$155.36	\$146.53	\$158.32	\$153.65	\$158.49	\$153.75
Jan-19	66135		\$153.57	\$151.46	\$152.92	\$147.30	\$159.83	\$151.28	\$144.25	\$146.64	\$159.16	\$154.50	\$159.35	\$154.61
Feb-19	66135		\$148.16	\$152.12	\$138.05	\$147.37	\$156.20	\$151.96	\$140.66	\$146.75	\$160.01	\$155.35	\$160.21	\$155.47
Mar-19	66135		\$169.52	\$152.87	\$157.89	\$147.43	\$148.90	\$152.65	\$158.94	\$146.84	\$160.85	\$156.19	\$161.07	\$156.33
Apr-19	66135		\$147.82	\$153.53	\$137.57	\$147.48	\$168.08	\$153.33	\$139.08	\$146.92	\$161.69	\$157.04	\$161.94	\$157.19
May-19	66135		\$157.75	\$154.22	\$154.19	\$147.53	\$149.06	\$154.01	\$145.63	\$146.99	\$162.53	\$157.89	\$162.80	\$158.06
Jun-19	66135		\$161.60	\$154.93	\$148.36	\$147.57	\$160.22	\$154.70	\$150.14	\$147.06	\$163.38	\$158.73	\$163.66	\$158.92
Jul-19	66135		\$143.39	\$155.55	\$132.67	\$147.60	\$161.16	\$155.38	\$133.37	\$147.12	\$164.22	\$159.58	\$164.52	\$159.78
Aug-19	66135		\$161.79	\$156.26	\$147.49	\$147.63	\$145.71	\$156.06	\$149.14	\$147.17	\$165.06	\$160.42	\$165.38	\$160.64
Sep-19	66135		\$158.80	\$156.94	\$142.68	\$147.65	\$161.46	\$156.75	\$146.32	\$147.21	\$165.89	\$161.27	\$166.25	\$161.50
Oct-19	66135		\$165.50	\$157.66	\$157.22	\$147.68	\$158.42	\$157.43	\$149.80	\$147.25	\$166.73	\$162.11	\$167.11	\$162.37
Nov-19	66135		\$170.56	\$158.39	\$154.88	\$147.70	\$166.99	\$158.11	\$154.80	\$147.29	\$167.57	\$162.95	\$167.97	\$163.23
Dec-19	66135		\$170.95	\$159.12	\$148.68	\$147.72	\$169.52	\$158.80	\$155.75	\$147.32	\$168.40	\$163.79	\$168.83	\$164.09
Annual Trend			5.18%		1.34%		5.07%		1.21%		6.71%		6.81%	
RMSE			8.05		8		7.99		7.95		8.5		8.5	

MEDICAL TREND DEVELOPMENT
UTILIZATION TREND CALCULATION

Utilization Trend Calculation - 24 Month Time Series - Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Month	Membership	Adjusted PMPM	Holt-Winters' Multiplicative		Damped Trend Seasonal Multiplicative		Holt-Winters' Additive		Damped Trend Seasonal Additive		Damped Trend Non-Seasonal		Double Exponential Smoothing																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
			Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM	Monthly PMPM	Rolling 12 PMPM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
			Jan-16	69385	\$417.45	\$417.45		\$417.45		\$417.45		\$417.45		\$417.45		\$417.45		Feb-16	69908	\$417.09	\$417.09		\$417.09		\$417.09		\$417.09		\$417.09		\$417.09		Mar-16	70456	\$461.53	\$461.53		\$461.53		\$461.53		\$461.53		\$461.53		\$461.53		Apr-16	70383	\$401.70	\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		May-16	70404	\$402.01	\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		Jun-16	70540	\$434.24	\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08	
Feb-16	69908	\$417.09	\$417.09		\$417.09		\$417.09		\$417.09		\$417.09		\$417.09		Mar-16	70456	\$461.53	\$461.53		\$461.53		\$461.53		\$461.53		\$461.53		\$461.53		Apr-16	70383	\$401.70	\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		May-16	70404	\$402.01	\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		Jun-16	70540	\$434.24	\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78															
Mar-16	70456	\$461.53	\$461.53		\$461.53		\$461.53		\$461.53		\$461.53		\$461.53		Apr-16	70383	\$401.70	\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		May-16	70404	\$402.01	\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		Jun-16	70540	\$434.24	\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																														
Apr-16	70383	\$401.70	\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		\$401.70		May-16	70404	\$402.01	\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		Jun-16	70540	\$434.24	\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																													
May-16	70404	\$402.01	\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		\$402.01		Jun-16	70540	\$434.24	\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																												
Jun-16	70540	\$434.24	\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		\$434.24		Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																											
Jul-16	70755	\$394.07	\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		\$394.07		Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																										
Aug-16	70844	\$430.24	\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		\$430.24		Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																									
Sep-16	70970	\$415.46	\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		\$415.46		Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																								
Oct-16	71146	\$416.76	\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		\$416.76		Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																							
Nov-16	71218	\$444.82	\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		\$444.82		Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																						
Dec-16	71277	\$449.18	\$449.18	\$423.75	\$423.75	\$421.62	\$421.62	\$421.44	\$421.44	\$421.42	\$421.42	\$421.42	\$421.42	\$421.42	Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																					
Jan-17	69490	\$443.77	\$443.77	\$425.91	\$425.91	\$422.31	\$422.31	\$421.83	\$421.83	\$421.78	\$421.78	\$421.77	\$421.77	\$421.77	Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																				
Feb-17	69802	\$399.42	\$399.42	\$424.46	\$424.46	\$422.92	\$422.92	\$422.31	\$422.31	\$422.21	\$422.21	\$422.20	\$422.20	\$422.19	Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																			
Mar-17	69572	\$446.55	\$446.55	\$423.19	\$423.19	\$419.73	\$419.73	\$418.84	\$418.84	\$418.66	\$418.66	\$418.63	\$418.63	\$418.63	Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																		
Apr-17	69220	\$387.87	\$387.87	\$422.09	\$422.09	\$421.42	\$421.42	\$420.48	\$420.48	\$420.22	\$420.22	\$420.17	\$420.17	\$420.16	May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																	
May-17	68831	\$450.30	\$450.30	\$426.06	\$426.06	\$423.42	\$423.42	\$422.26	\$422.26	\$421.91	\$421.91	\$421.83	\$421.83	\$421.81	Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																
Jun-17	68513	\$424.08	\$424.08	\$425.22	\$425.22	\$422.66	\$422.66	\$421.29	\$421.29	\$420.82	\$420.82	\$420.71	\$420.71	\$420.68	Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																															
Jul-17	68188	\$396.57	\$396.57	\$425.51	\$425.51	\$425.30	\$425.30	\$423.91	\$423.91	\$423.33	\$423.33	\$423.17	\$423.17	\$423.13	Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																														
Aug-17	67861	\$430.95	\$430.95	\$425.56	\$425.56	\$424.90	\$424.90	\$423.45	\$423.45	\$422.75	\$422.75	\$422.53	\$422.53	\$422.48	Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																													
Sep-17	67472	\$411.65	\$411.65	\$425.29	\$425.29	\$425.74	\$425.74	\$424.32	\$424.32	\$423.50	\$423.50	\$423.21	\$423.21	\$423.14	Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																												
Oct-17	67118	\$466.78	\$466.78	\$429.38	\$429.38	\$426.80	\$426.80	\$425.17	\$425.17	\$424.22	\$424.22	\$423.85	\$423.85	\$423.74	Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																											
Nov-17	66790	\$449.52	\$449.52	\$429.68	\$429.68	\$425.48	\$425.48	\$423.49	\$423.49	\$422.38	\$422.38	\$421.92	\$421.92	\$421.77	Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																										
Dec-17	66135	\$445.26	\$445.26	\$429.24	\$429.24	\$425.93	\$425.93	\$423.85	\$423.85	\$422.58	\$422.58	\$422.01	\$422.01	\$421.82	Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																									
Jan-18	66135	\$447.28	\$447.28	\$429.47	\$429.47	\$427.67	\$427.67	\$446.56	\$446.56	\$424.58	\$424.58	\$433.26	\$433.26	\$433.31	Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																								
Feb-18	66135	\$403.10	\$403.10	\$429.90	\$429.90	\$403.08	\$403.08	\$425.94	\$425.94	\$402.70	\$402.70	\$422.99	\$422.99	\$423.78	Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																							
Mar-18	66135	\$451.35	\$451.35	\$430.22	\$430.22	\$451.32	\$451.32	\$428.25	\$428.25	\$450.40	\$450.40	\$426.72	\$426.72	\$425.59	Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																						
Apr-18	66135	\$392.76	\$392.76	\$430.79	\$430.79	\$392.73	\$392.73	\$425.86	\$425.86	\$392.42	\$392.42	\$424.36	\$424.36	\$423.31	May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																					
May-18	66135	\$456.23	\$456.23	\$431.21	\$431.21	\$456.19	\$456.19	\$428.35	\$428.35	\$455.07	\$455.07	\$426.97	\$426.97	\$426.01	Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																				
Jun-18	66135	\$430.12	\$430.12	\$431.73	\$431.73	\$430.08	\$430.08	\$428.76	\$428.76	\$429.28	\$429.28	\$427.53	\$427.53	\$426.68	Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Jul-18	66135	\$402.57	\$402.57	\$432.32	\$432.32	\$402.52	\$402.52	\$426.86	\$426.86	\$402.11	\$402.11	\$425.62	\$425.62	\$424.88	Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Aug-18	66135	\$437.86	\$437.86	\$432.89	\$432.89	\$437.80	\$437.80	\$427.88	\$427.88	\$436.85	\$436.85	\$426.61	\$426.61	\$425.99	Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Sep-18	66135	\$418.67	\$418.67	\$433.51	\$433.51	\$418.61	\$418.61	\$427.33	\$427.33	\$417.95	\$417.95	\$425.96	\$425.96	\$425.46	Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Oct-18	66135	\$474.62	\$474.62	\$434.12	\$434.12	\$474.54	\$474.54	\$431.09	\$431.09	\$472.99	\$472.99	\$429.81	\$429.81	\$429.43	Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Nov-18	66135	\$457.04	\$457.04	\$434.74	\$434.74	\$456.96	\$456.96	\$433.36	\$433.36	\$455.72	\$455.72	\$432.12	\$432.12	\$431.12	Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Dec-18	66135	\$452.70	\$452.70	\$435.36	\$435.36	\$452.62	\$452.62	\$435.31	\$435.31	\$451.47	\$451.47	\$434.46	\$434.46	\$434.41	Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Jan-19	66135	\$454.73	\$454.73	\$435.98	\$435.98	\$454.62	\$454.62	\$435.92	\$435.92	\$452.76	\$452.76	\$434.98	\$434.98	\$434.92	Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Feb-19	66135	\$409.81	\$409.81	\$436.54	\$436.54	\$409.70	\$409.70	\$436.47	\$436.47	\$408.90	\$408.90	\$435.49	\$435.49	\$435.43	Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Mar-19	66135	\$458.85	\$458.85	\$437.16	\$437.16	\$458.71	\$458.71	\$437.09	\$437.09	\$456.61	\$456.61	\$436.01	\$436.01	\$435.94	Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Apr-19	66135	\$399.28	\$399.28	\$437.71	\$437.71	\$399.15	\$399.15	\$437.63	\$437.63	\$398.62	\$398.62	\$436.53	\$436.53	\$436.45	May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
May-19	66135	\$463.79	\$463.79	\$438.34	\$438.34	\$463.63	\$463.63	\$438.25	\$438.25	\$461.27	\$461.27	\$437.04	\$437.04	\$436.96	Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Jun-19	66135	\$437.24	\$437.24	\$438.93	\$438.93	\$437.08	\$437.08	\$438.83	\$438.83	\$435.48	\$435.48	\$437.56	\$437.56	\$437.47	Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Jul-19	66135	\$409.22	\$409.22	\$439.48	\$439.48	\$409.05	\$409.05	\$439.37	\$439.37	\$408.32	\$408.32	\$438.08	\$438.08	\$437.97	Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Aug-19	66135	\$445.09	\$445.09	\$440.09	\$440.09	\$444.89	\$444.89	\$439.96	\$439.96	\$443.05	\$443.05	\$438.60	\$438.60	\$438.48	Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Sep-19	66135	\$425.57	\$425.57	\$440.66	\$440.66	\$425.37	\$425.37	\$440.53	\$440.53	\$424.15	\$424.15	\$439.11	\$439.11	\$438.98	Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Oct-19	66135	\$482.43	\$482.43	\$441.31	\$441.31	\$482.19	\$482.19	\$441.16	\$441.16	\$479.19	\$479.19	\$439.63	\$439.63	\$439.49	Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Nov-19	66135	\$464.55	\$464.55	\$441.94	\$441.94	\$464.30	\$464.30	\$441.78	\$441.78	\$461.93	\$461.93	\$440.15	\$440.15	\$439.99	Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Dec-19	66135	\$460.14	\$460.14	\$442.56	\$442.56	\$459.87	\$459.87	\$442.38	\$442.38	\$457.67	\$457.67	\$440.66	\$440.66	\$439.99		Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Annual Trend			1.54%		1.91%		1.96%		2.10%		4.15%		4.22%		RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	RMSE			23.06		23.06		23.07		23.08		22.79		22.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

MEDICAL TREND DEVELOPMENT
COST CONTAINMENT STRATEGY

Inpatient Admissions

Goal: Reduce total non-maternity inpatient admissions by	4%	
Experience Period Non-Maternity Inpatient Admissions		
Total Allowed Charges	\$76,784,143	
Total Admissions	2,535	
Average Cost per Admissions	\$30,290	
Claims incurred in the 90 days after discharge when not a readmission		
Type of Claim	Count	Average Cost
Office Visit	9.26	\$134.83
Labs Services	4.30	\$219.00
Brand Drugs Days Supply	100.49	\$9.93
Generic Drug Days Supply	256.84	\$0.74
Savings Calculation		
Total Avoided Admissions	101	
Average Cost	\$30,290	
Total Avoided Inpatient Cost	\$3,059,250	
Inpatient Admissions Replaced by:		
Office Visits	\$126,138	
Labs Services	\$95,191	
Total Medical Replacement Cost	\$221,329	
Net Avoided Medical Cost	\$2,837,921	

Emergency Room Visits

Goal: Replace	5% of Emergency Room visits by Primary Care Provider visits	
Experience Period		
Type of Claim	Count	Average Cost
Emergency Room visit	15,277	\$1,740.69
Primary Care Provider office visit	215,523	\$106.92
Savings Calculation		
Total Avoided ER visits	763.85	
Average Cost	\$1,741	
Total Avoided Emergency Room Cost	\$1,329,629	
Emergency Room Replaced by:		
Primary Care Provider office visit	\$81,667	
Total Medical Replacement Cost	\$81,667	
Net Avoided Medical Cost	\$1,247,962	

Impact of Cost Containment Strategy on Medical Utilization Trend

CY 2017 Total Medical Allowed Charges	\$377,320,017	
Savings from Inpatient Admissions Reduction		-\$2,837,921
Savings from Emergency Room Visits Reduction		-\$1,247,962
Total Savings from Cost Containment Strategy		-\$4,085,883
Selected Medical Utilization Trend	2.00%	
	Allowed Charges	Annual Trend
Projected CY 2018	384,866,418	2.0%
Projected CY 2019 - After Cost Containment	388,477,863	0.9%

PHARMACY TREND DEVELOPMENT
NON-SPECIALTY UTILIZATION TREND CALCULATION

Month	Membership	Monthly Completed Days Supply							Days Supply per Members		
		Generic	New Generics	Brands Going Generic	Brand	Compound	OTC	Vaccines	Total Days Supply	Monthly	Annual
Jan-15	68,167	1,654,861	0	36,648	167,485	836	37,552	782	1,898,164	27.85	
Feb-15	68,581	1,586,914	6,981	35,486	159,026	1,321	34,412	554	1,824,694	26.61	
Mar-15	69,902	1,792,730	22,795	40,217	185,334	1,281	40,650	316	2,083,323	29.80	
Apr-15	70,062	1,682,921	34,094	37,980	179,743	1,405	45,120	174	1,981,437	28.28	
May-15	69,425	1,694,962	51,061	39,623	171,239	1,368	42,505	209	2,000,967	28.82	
Jun-15	69,428	1,702,807	68,194	39,071	177,962	1,946	47,402	317	2,037,699	29.35	
Jul-15	68,915	1,643,988	87,449	38,047	179,492	1,651	44,625	315	1,995,567	28.96	
Aug-15	68,414	1,621,645	118,530	39,433	172,179	1,821	41,325	462	1,995,396	29.17	
Sep-15	68,104	1,588,596	147,004	40,143	175,092	1,740	44,486	1,673	1,998,733	29.35	
Oct-15	68,048	1,608,208	156,681	44,208	195,332	2,012	46,069	4,326	2,056,836	30.23	
Nov-15	67,698	1,567,806	162,412	41,334	178,205	2,224	43,486	2,317	1,997,784	29.51	
Dec-15	67,672	1,723,238	191,119	50,885	214,852	2,236	50,588	1,027	2,233,945	33.01	29.24
Jan-16	69,453	1,531,095	174,879	35,447	159,940	1,979	40,366	870	1,944,576	28.00	29.25
Feb-16	69,976	1,534,271	186,525	36,973	161,013	1,958	42,044	537	1,963,321	28.06	29.37
Mar-16	70,523	1,689,757	206,549	43,457	190,877	2,112	49,749	376	2,182,877	30.95	29.47
Apr-16	70,450	1,538,245	207,723	35,176	164,985	1,801	44,680	340	1,992,950	28.29	29.47
May-16	70,471	1,566,495	251,148	39,066	167,847	2,184	48,121	389	2,075,250	29.45	29.52
Jun-16	70,607	1,565,088	277,970	39,069	166,258	2,271	48,239	473	2,099,368	29.73	29.55
Jul-16	70,821	1,509,913	289,695	35,122	162,240	2,502	47,985	317	2,047,774	28.91	29.55
Aug-16	70,910	1,551,054	338,659	40,391	172,193	1,885	49,316	544	2,154,042	30.38	29.65
Sep-16	71,037	1,477,790	365,912	41,117	174,265	2,282	50,858	1,881	2,114,105	29.76	29.68
Oct-16	71,211	1,500,194	414,278	43,032	170,911	2,561	53,563	3,754	2,188,293	30.73	29.73
Nov-16	71,283	1,449,425	439,415	46,210	171,817	2,043	53,845	2,230	2,164,985	30.37	29.80
Dec-16	71,339	1,529,490	514,437	52,137	194,500	2,446	58,198	1,117	2,352,325	32.97	29.81
Jan-17	69,561	1,375,654	490,598	37,728	150,544	2,148	44,390	1,086	2,102,148	30.22	29.99
Feb-17	69,874	1,260,451	455,336	34,735	143,374	2,151	40,992	593	1,937,632	27.73	29.96
Mar-17	69,644	1,411,998	533,891	40,657	170,723	2,070	48,393	575	2,208,307	31.71	30.02
Apr-17	69,292	1,260,164	514,719	34,075	147,834	1,976	45,320	242	2,004,330	28.93	30.08
May-17	68,904	1,360,661	588,785	38,031	170,888	2,290	56,204	324	2,217,183	32.18	30.30
Jun-17	68,586	1,280,237	574,560	36,247	159,109	2,324	47,185	327	2,099,989	30.62	30.38
Jul-17	68,259	1,238,565	572,758	33,833	156,788	2,335	49,724	170	2,054,173	30.09	30.48
Aug-17	67,932	1,277,993	633,135	34,882	166,452	2,402	52,862	726	2,168,452	31.92	30.60
Sep-17	67,540	1,166,576	585,389	36,226	155,407	2,758	50,613	1,570	1,998,539	29.59	30.59
Oct-17	67,184	1,253,289	651,979	41,754	177,547	2,472	55,668	4,086	2,186,795	32.55	30.74
Nov-17	66,853	1,214,893	642,123	38,161	173,421	2,683	55,739	2,522	2,129,542	31.85	30.86
Dec-17	66,195	1,237,758	645,449	45,048	191,742	2,749	61,813	1,456	2,186,015	33.02	30.85

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

1.9%
3.5%

PHARMACY TREND DEVELOPMENT
NON-SPECIALTY UTILIZATION TREND CALCULATION

Month	Membership	Adjustments for Benefits and Aging						Monthly	Annual
		Paid to Allowed Ratio	Induced Utilization	Normalized Induced Utilization	Average Age/Gender Factor	Normalized Age/Gender Factor	Total Normalized Factor		
Jan-15	68,167	76.4%	1.060	1.024	1.245	1.020	1.044	29.06	
Feb-15	68,581	76.6%	1.061	1.023	1.245	1.020	1.043	27.75	
Mar-15	69,902	76.6%	1.061	1.023	1.245	1.020	1.043	31.07	
Apr-15	70,062	77.0%	1.063	1.021	1.247	1.018	1.039	29.38	
May-15	69,425	77.3%	1.065	1.019	1.249	1.016	1.035	29.83	
Jun-15	69,428	77.6%	1.066	1.017	1.251	1.014	1.032	30.29	
Jul-15	68,915	77.9%	1.068	1.016	1.252	1.013	1.030	29.81	
Aug-15	68,414	78.2%	1.069	1.015	1.253	1.013	1.028	29.98	
Sep-15	68,104	78.3%	1.070	1.014	1.256	1.011	1.025	30.07	
Oct-15	68,048	78.5%	1.071	1.013	1.257	1.010	1.023	30.92	
Nov-15	67,698	78.6%	1.072	1.012	1.257	1.009	1.022	30.15	
Dec-15	67,672	78.8%	1.073	1.011	1.259	1.008	1.020	33.66	30.16
Jan-16	69,453	78.8%	1.073	1.011	1.253	1.013	1.024	28.67	30.13
Feb-16	69,976	78.7%	1.072	1.012	1.253	1.013	1.025	28.75	30.21
Mar-16	70,523	78.6%	1.072	1.012	1.252	1.013	1.026	31.75	30.27
Apr-16	70,450	78.5%	1.071	1.013	1.253	1.013	1.026	29.03	30.24
May-16	70,471	78.4%	1.071	1.013	1.254	1.012	1.025	30.20	30.27
Jun-16	70,607	78.4%	1.071	1.013	1.257	1.010	1.023	30.41	30.28
Jul-16	70,821	78.5%	1.071	1.013	1.259	1.008	1.021	29.53	30.25
Aug-16	70,910	78.5%	1.071	1.013	1.259	1.008	1.020	30.99	30.34
Sep-16	71,037	78.6%	1.072	1.012	1.261	1.007	1.019	30.33	30.36
Oct-16	71,211	78.8%	1.073	1.011	1.262	1.006	1.017	31.26	30.39
Nov-16	71,283	78.9%	1.073	1.011	1.262	1.005	1.016	30.86	30.45
Dec-16	71,339	79.0%	1.074	1.010	1.265	1.003	1.013	33.41	30.44
Jan-17	69,561	78.9%	1.073	1.011	1.265	1.004	1.014	30.66	30.60
Feb-17	69,874	79.0%	1.074	1.010	1.264	1.004	1.014	28.11	30.55
Mar-17	69,644	79.1%	1.075	1.010	1.265	1.003	1.013	32.12	30.58
Apr-17	69,292	79.3%	1.076	1.009	1.265	1.003	1.012	29.27	30.60
May-17	68,904	79.5%	1.077	1.007	1.267	1.002	1.009	32.48	30.79
Jun-17	68,586	79.6%	1.078	1.007	1.268	1.001	1.008	30.86	30.82
Jul-17	68,259	79.9%	1.079	1.005	1.267	1.001	1.007	30.30	30.89
Aug-17	67,932	80.1%	1.080	1.004	1.267	1.002	1.006	32.11	30.98
Sep-17	67,540	80.2%	1.081	1.003	1.267	1.002	1.005	29.73	30.94
Oct-17	67,184	80.4%	1.083	1.002	1.268	1.001	1.003	32.65	31.05
Nov-17	66,853	80.6%	1.084	1.001	1.268	1.001	1.002	31.90	31.13
Dec-17	66,195	80.8%	1.085	1.000	1.269	1.000	1.000	33.02	31.09

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

0.9%
2.1%

Month	Regression on Adjusted PMPM - 36 Months	Regression on Adjusted PMPM - 24 Months
Jan-15	\$29.47	\$28.42
Feb-15	\$29.53	\$28.52
Mar-15	\$29.59	\$28.61
Apr-15	\$29.65	\$28.70
May-15	\$29.71	\$28.80
Jun-15	\$29.77	\$28.89
Jul-15	\$29.83	\$28.99
Aug-15	\$29.89	\$29.09
Sep-15	\$29.95	\$29.19
Oct-15	\$30.01	\$29.28
Nov-15	\$30.07	\$29.38
Dec-15	\$30.13	\$29.48
Jan-16	\$30.20	\$29.58
Feb-16	\$30.26	\$29.68
Mar-16	\$30.32	\$29.77
Apr-16	\$30.38	\$29.88
May-16	\$30.44	\$29.97
Jun-16	\$30.50	\$30.08
Jul-16	\$30.56	\$30.17
Aug-16	\$30.63	\$30.28
Sep-16	\$30.69	\$30.38
Oct-16	\$30.75	\$30.48
Nov-16	\$30.81	\$30.58
Dec-16	\$30.88	\$30.68
Jan-17	\$30.94	\$30.79
Feb-17	\$31.00	\$30.89
Mar-17	\$31.06	\$30.99
Apr-17	\$31.13	\$31.09
May-17	\$31.19	\$31.20
Jun-17	\$31.25	\$31.30
Jul-17	\$31.32	\$31.40
Aug-17	\$31.38	\$31.51
Sep-17	\$31.44	\$31.62
Oct-17	\$31.51	\$31.72
Nov-17	\$31.57	\$31.83
Dec-17	\$31.64	\$31.93

2.5% 4.1%

Regression on Adjusted PMPM - 36 Months		Regression on Adjusted PMPM - 24 Months	
1.000	1.800	1.000	0.287
0.000	0.956	0.000	1.746
0.205	0.043	0.246	0.042
8.763	34.000	7.168	22.000

PHARMACY TREND DEVELOPMENT

GENERIC COST TREND

Month	"Old" Generics			New Generics			All Generics		
	Days Supply	Average Wholesale Price	Cost per Days Supply	Days Supply	Average Wholesale Price	Cost per Days Supply	Days Supply	Average Wholesale Price	Cost per Days Supply
Jan-15	1,654,861	\$5,753,929	\$3.48	0	\$0		1,654,861	\$5,753,929	\$3.48
Feb-15	1,586,914	\$5,524,644	\$3.48	6,981	\$45,298	\$6.49	1,593,895	5,569,942	\$3.49
Mar-15	1,792,730	\$6,345,030	\$3.54	22,795	\$106,616	\$4.68	1,815,525	6,451,646	\$3.55
Apr-15	1,682,921	\$5,991,180	\$3.56	34,094	\$150,409	\$4.41	1,717,015	6,141,588	\$3.58
May-15	1,694,962	\$5,913,153	\$3.49	51,061	\$318,506	\$6.24	1,746,023	6,231,659	\$3.57
Jun-15	1,702,807	\$5,973,742	\$3.51	68,194	\$377,034	\$5.53	1,771,001	6,350,776	\$3.59
Jul-15	1,643,988	\$5,834,358	\$3.55	87,449	\$504,796	\$5.77	1,731,437	6,339,154	\$3.66
Aug-15	1,621,645	\$5,682,329	\$3.50	118,530	\$600,302	\$5.06	1,740,175	6,282,632	\$3.61
Sep-15	1,588,596	\$5,639,125	\$3.55	147,004	\$721,010	\$4.90	1,735,599	6,360,134	\$3.66
Oct-15	1,608,208	\$5,813,057	\$3.61	156,681	\$788,051	\$5.03	1,764,889	6,601,108	\$3.74
Nov-15	1,567,806	\$5,586,944	\$3.56	162,412	\$835,823	\$5.15	1,730,218	6,422,767	\$3.71
Dec-15	1,723,238	\$6,205,203	\$3.60	191,119	\$980,740	\$5.13	1,914,357	7,185,944	\$3.75
Jan-16	1,531,095	\$5,363,575	\$3.50	174,879	\$892,449	\$5.10	1,705,974	6,256,024	\$3.67
Feb-16	1,534,271	\$5,369,205	\$3.50	186,525	\$954,691	\$5.12	1,720,796	6,323,896	\$3.67
Mar-16	1,689,757	\$6,000,835	\$3.55	206,549	\$1,087,595	\$5.27	1,896,306	7,088,429	\$3.74
Apr-16	1,538,245	\$5,407,359	\$3.52	207,723	\$1,069,337	\$5.15	1,745,968	6,476,697	\$3.71
May-16	1,566,495	\$5,521,021	\$3.52	251,148	\$1,319,590	\$5.25	1,817,643	6,840,610	\$3.76
Jun-16	1,565,088	\$5,459,006	\$3.49	277,970	\$1,396,612	\$5.02	1,843,058	6,855,617	\$3.72
Jul-16	1,509,913	\$5,324,100	\$3.53	289,695	\$1,419,869	\$4.90	1,799,608	6,743,969	\$3.75
Aug-16	1,551,054	\$5,507,286	\$3.55	338,659	\$1,644,184	\$4.85	1,889,713	7,151,469	\$3.78
Sep-16	1,477,790	\$5,284,188	\$3.58	365,912	\$1,670,647	\$4.57	1,843,702	6,954,835	\$3.77
Oct-16	1,500,194	\$5,407,080	\$3.60	414,278	\$1,957,758	\$4.73	1,914,472	7,364,838	\$3.85
Nov-16	1,449,425	\$5,197,364	\$3.59	439,415	\$2,015,286	\$4.59	1,888,840	7,212,650	\$3.82
Dec-16	1,529,490	\$5,588,823	\$3.65	514,437	\$2,330,254	\$4.53	2,043,927	7,919,077	\$3.87
Jan-17	1,375,654	\$4,927,764	\$3.58	490,598	\$2,189,180	\$4.46	1,866,252	7,116,945	\$3.81
Feb-17	1,260,451	\$4,545,109	\$3.61	455,336	\$2,092,205	\$4.59	1,715,787	6,637,314	\$3.87
Mar-17	1,411,998	\$5,113,796	\$3.62	533,891	\$2,436,253	\$4.56	1,945,889	7,550,048	\$3.88
Apr-17	1,260,164	\$4,519,029	\$3.59	514,719	\$2,356,842	\$4.58	1,774,883	6,875,871	\$3.87
May-17	1,360,661	\$4,927,674	\$3.62	588,785	\$2,709,583	\$4.60	1,949,446	7,637,257	\$3.92
Jun-17	1,280,237	\$4,662,204	\$3.64	574,560	\$2,593,468	\$4.51	1,854,797	7,255,673	\$3.91
Jul-17	1,238,565	\$4,544,797	\$3.67	572,758	\$2,612,693	\$4.56	1,811,323	7,157,490	\$3.95
Aug-17	1,277,993	\$4,714,142	\$3.69	633,135	\$2,867,764	\$4.53	1,911,128	7,581,906	\$3.97
Sep-17	1,166,576	\$4,371,949	\$3.75	585,389	\$2,661,787	\$4.55	1,751,965	7,033,736	\$4.01
Oct-17	1,253,289	\$4,638,350	\$3.70	651,979	\$3,069,225	\$4.71	1,905,268	7,707,575	\$4.05
Nov-17	1,214,893	\$4,510,661	\$3.71	642,123	\$2,992,007	\$4.66	1,857,016	7,502,668	\$4.04
Dec-17	1,237,758	\$4,659,033	\$3.76	645,449	\$3,091,118	\$4.79	1,883,207	7,750,150	\$4.12

CY2016 / CY 2015 Annual Increase 0.3% 4.0%
CY2017 / CY 2016 Annual Increase 3.2% -5.1% 5.0%

Month	Regression on Cost per Days Supply on "Old" Generics	
	36 Months	24 Months
Jan-15	\$3.48	\$3.37
Feb-15	\$3.48	\$3.38
Mar-15	\$3.49	\$3.39
Apr-15	\$3.50	\$3.40
May-15	\$3.50	\$3.41
Jun-15	\$3.51	\$3.42
Jul-15	\$3.51	\$3.43
Aug-15	\$3.52	\$3.44
Sep-15	\$3.53	\$3.45
Oct-15	\$3.53	\$3.46
Nov-15	\$3.54	\$3.47
Dec-15	\$3.54	\$3.48
Jan-16	\$3.55	\$3.49
Feb-16	\$3.55	\$3.50
Mar-16	\$3.56	\$3.51
Apr-16	\$3.57	\$3.52
May-16	\$3.57	\$3.53
Jun-16	\$3.58	\$3.54
Jul-16	\$3.58	\$3.55
Aug-16	\$3.59	\$3.56
Sep-16	\$3.60	\$3.57
Oct-16	\$3.60	\$3.58
Nov-16	\$3.61	\$3.59
Dec-16	\$3.61	\$3.60
Jan-17	\$3.62	\$3.61
Feb-17	\$3.63	\$3.62
Mar-17	\$3.63	\$3.63
Apr-17	\$3.64	\$3.64
May-17	\$3.64	\$3.65
Jun-17	\$3.65	\$3.66
Jul-17	\$3.66	\$3.67
Aug-17	\$3.66	\$3.68
Sep-17	\$3.67	\$3.69
Oct-17	\$3.67	\$3.71
Nov-17	\$3.68	\$3.72
Dec-17	\$3.69	\$3.73

2.0% 3.5%

Regression on Cost per Days Supply on "Old" Generics-36 Months		Regression on Cost per Days Supply on "Old" Generics-24 Months	
1.000	0.351	1.000	0.061
0.000	0.275	0.000	0.334
0.678	0.012	0.872	0.008
71.662	34.000	149.555	22.000

PHARMACY TREND DEVELOPMENT

BRAND COST TREND

Month	All Other Brands			Brands Going Generic, Vaccines and Compounds			Over the Counter			All Brands			Regression on Cost per Days Supply on All Other Brands Only	
	Days Supply	Average Wholesale Price	Cost per Days Supply	Days Supply	Average Wholesale Price	Cost per Days Supply	Days Supply	Average Wholesale Price	Cost per Days Supply	Days Supply	Average Wholesale Price	Cost per Days Supply	36 Months	24 Months
Jan-15	167,485	\$1,929,293	\$11.52	38,266	\$317,298	\$8.29	37,552	\$90,200	\$2.40	205,751	\$2,246,590	\$10.92	\$11.68	\$11.72
Feb-15	159,026	\$1,892,291	\$11.90	37,361	\$312,563	\$8.37	34,412	\$91,676	\$2.66	196,387	2,204,854	\$11.23	\$11.80	\$11.84
Mar-15	185,334	\$2,233,699	\$12.05	41,814	\$362,524	\$8.67	40,650	\$95,572	\$2.35	227,148	2,596,224	\$11.43	\$11.90	\$11.95
Apr-15	179,743	\$2,207,659	\$12.28	39,559	\$352,076	\$8.90	45,120	\$122,914	\$2.72	219,302	2,559,736	\$11.67	\$12.02	\$12.06
May-15	171,239	\$2,076,272	\$12.12	41,200	\$388,920	\$9.44	42,505	\$100,506	\$2.36	212,439	2,465,192	\$11.60	\$12.14	\$12.18
Jun-15	177,962	\$2,202,376	\$12.38	41,334	\$429,330	\$10.39	47,402	\$115,557	\$2.44	219,296	2,631,705	\$12.00	\$12.26	\$12.30
Jul-15	179,492	\$2,185,100	\$12.17	40,013	\$409,253	\$10.23	44,625	\$117,788	\$2.64	219,505	2,594,354	\$11.82	\$12.38	\$12.42
Aug-15	172,179	\$2,121,989	\$12.32	41,716	\$446,432	\$10.70	41,325	\$107,742	\$2.61	213,895	2,568,422	\$12.01	\$12.51	\$12.54
Sep-15	175,092	\$2,244,803	\$12.82	43,556	\$462,765	\$10.62	44,486	\$112,672	\$2.53	218,648	2,707,568	\$12.38	\$12.63	\$12.66
Oct-15	195,332	\$2,353,102	\$12.05	50,546	\$506,322	\$10.02	46,069	\$110,513	\$2.40	245,878	2,859,424	\$11.63	\$12.75	\$12.79
Nov-15	178,205	\$2,340,288	\$13.13	45,875	\$469,285	\$10.23	43,486	\$108,491	\$2.49	224,080	2,809,573	\$12.54	\$12.88	\$12.91
Dec-15	214,852	\$2,798,743	\$13.03	54,148	\$576,773	\$10.65	50,588	\$135,827	\$2.68	269,000	3,375,516	\$12.55	\$13.01	\$13.04
Jan-16	159,940	\$2,068,992	\$12.94	38,296	\$390,625	\$10.20	40,366	\$92,696	\$2.30	198,236	2,459,617	\$12.41	\$13.14	\$13.17
Feb-16	161,013	\$2,133,114	\$13.25	39,468	\$397,637	\$10.07	42,044	\$101,675	\$2.42	200,481	2,530,751	\$12.62	\$13.27	\$13.30
Mar-16	190,877	\$2,496,776	\$13.08	45,945	\$494,357	\$10.76	49,749	\$113,725	\$2.29	236,822	2,991,133	\$12.63	\$13.39	\$13.42
Apr-16	164,985	\$2,289,808	\$13.88	37,317	\$382,143	\$10.24	44,680	\$103,327	\$2.31	202,302	2,671,951	\$13.21	\$13.53	\$13.55
May-16	167,847	\$2,210,707	\$13.17	41,639	\$501,238	\$12.04	48,121	\$113,589	\$2.36	209,486	2,711,944	\$12.95	\$13.66	\$13.68
Jun-16	166,258	\$2,328,013	\$14.00	41,813	\$636,266	\$15.22	48,239	\$114,784	\$2.38	208,071	2,964,279	\$14.25	\$13.80	\$13.82
Jul-16	162,240	\$2,355,964	\$14.52	37,941	\$526,995	\$13.89	47,985	\$117,916	\$2.46	200,181	2,882,959	\$14.40	\$13.93	\$13.95
Aug-16	172,193	\$2,424,173	\$14.08	42,820	\$542,982	\$12.68	49,316	\$118,169	\$2.40	215,013	2,967,155	\$13.80	\$14.07	\$14.09
Sep-16	174,265	\$2,444,899	\$14.03	45,280	\$563,583	\$12.45	50,858	\$122,437	\$2.41	219,545	3,008,482	\$13.70	\$14.21	\$14.23
Oct-16	170,911	\$2,441,966	\$14.29	49,347	\$606,585	\$12.29	53,563	\$128,031	\$2.39	220,258	3,048,551	\$13.84	\$14.35	\$14.36
Nov-16	171,817	\$2,483,019	\$14.45	50,483	\$595,377	\$11.79	53,845	\$131,481	\$2.44	222,300	3,078,396	\$13.85	\$14.49	\$14.51
Dec-16	194,500	\$2,896,376	\$14.89	55,700	\$709,249	\$12.73	58,198	\$150,159	\$2.58	250,200	3,605,626	\$14.41	\$14.63	\$14.64
Jan-17	150,544	\$2,207,333	\$14.66	40,962	\$1,262,480	\$30.82	44,390	\$100,254	\$2.26	191,506	3,469,814	\$18.12	\$14.78	\$14.79
Feb-17	143,374	\$2,163,681	\$15.09	37,479	\$433,748	\$11.57	40,992	\$101,811	\$2.48	180,853	2,597,429	\$14.36	\$14.93	\$14.94
Mar-17	170,723	\$2,583,056	\$15.13	43,302	\$1,307,028	\$30.18	48,393	\$115,306	\$2.38	214,025	3,890,084	\$18.18	\$15.06	\$15.07
Apr-17	147,834	\$2,317,570	\$15.68	36,293	\$407,547	\$11.23	45,320	\$97,622	\$2.15	184,127	2,725,117	\$14.80	\$15.21	\$15.22
May-17	170,888	\$2,665,277	\$15.60	40,645	\$481,324	\$11.84	56,204	\$135,137	\$2.40	211,533	3,146,601	\$14.88	\$15.36	\$15.36
Jun-17	159,109	\$2,461,048	\$15.47	38,898	\$460,018	\$11.83	47,185	\$113,124	\$2.40	198,007	2,921,066	\$14.75	\$15.52	\$15.52
Jul-17	156,788	\$2,514,343	\$16.04	36,338	\$445,564	\$12.26	49,724	\$119,440	\$2.40	193,126	2,959,907	\$15.33	\$15.67	\$15.67
Aug-17	166,452	\$2,640,216	\$15.86	38,010	\$456,671	\$12.01	52,862	\$128,287	\$2.43	204,462	3,096,887	\$15.15	\$15.82	\$15.82
Sep-17	155,407	\$2,533,851	\$16.30	40,554	\$454,984	\$11.22	50,613	\$132,209	\$2.61	195,961	2,988,835	\$15.25	\$15.98	\$15.98
Oct-17	177,547	\$2,799,552	\$15.77	48,312	\$564,551	\$11.69	55,668	\$144,137	\$2.59	225,859	3,364,103	\$14.89	\$16.14	\$16.13
Nov-17	173,421	\$2,745,580	\$15.83	43,366	\$1,282,783	\$29.58	55,739	\$133,314	\$2.39	216,787	4,028,363	\$18.58	\$16.30	\$16.29
Dec-17	191,742	\$3,066,520	\$15.99	49,253	\$2,151,608	\$43.68	61,813	\$160,234	\$2.59	240,995	5,218,128	\$21.65	\$16.46	\$16.45

CY2016 / CY 2015 Annual Increase 12.7%
 CY2017 / CY 2016 Annual Increase 12.5%

-5.1%
 1.4%

14.2%
 21.6%

12.5% 12.3%

Regression on Cost per Days Supply on All Other Brands Only-36 Months		Regression on Cost per Days Supply on All Other Brands Only-	
1.000	0.000	1.000	0.000
0.000	0.471	0.000	0.869
0.961	0.021	0.917	0.021
845,549	34,000	244,466	22,000

PHARMACY TREND DEVELOPMENT
SPECIALTY TREND CALCULATIONS

Month	Membership	Allowed Charges			Adjustment for Contract	Allowed Charges Adjusted for Contract			PMPM Adjusted for Contract			Rolling 12 PMPM Adjusted for Contract		
		All Other Specialty	New Treatments ¹	Total		All Other Specialty	New Treatments ¹	Total	All Other Specialty	New Treatments ¹	Total	All Other Specialty	New Treatments ¹	Total
Jan-15	68,167	\$2,237,734	\$0	\$2,237,734	0.975	\$2,181,927	\$0	\$2,181,927	\$32.01	\$0.00	\$32.01			
Feb-15	68,581	2,158,385	\$0	\$2,158,385	0.975	\$2,103,758	\$0	\$2,103,758	\$30.68	\$0.00	\$30.68			
Mar-15	69,902	2,372,662	\$0	\$2,372,662	0.975	\$2,312,171	\$0	\$2,312,171	\$33.08	\$0.00	\$33.08			
Apr-15	70,062	2,256,227	\$0	\$2,256,227	0.975	\$2,198,722	\$0	\$2,198,722	\$31.38	\$0.00	\$31.38			
May-15	69,425	2,299,118	\$0	\$2,299,118	0.975	\$2,241,398	\$0	\$2,241,398	\$32.29	\$0.00	\$32.29			
Jun-15	69,428	2,161,320	\$0	\$2,161,320	0.974	\$2,105,018	\$0	\$2,105,018	\$30.32	\$0.00	\$30.32			
Jul-15	68,915	2,128,347	\$20,561	\$2,148,909	1.000	\$2,128,347	\$20,561	\$2,148,909	\$30.88	\$0.30	\$31.18			
Aug-15	68,414	2,097,313	\$82,245	\$2,179,559	1.000	\$2,097,313	\$82,245	\$2,179,559	\$30.66	\$1.20	\$31.86			
Sep-15	68,104	2,128,778	\$83,392	\$2,212,170	1.000	\$2,128,778	\$83,392	\$2,212,170	\$31.26	\$1.22	\$32.48			
Oct-15	68,048	2,162,453	\$103,952	\$2,266,405	1.000	\$2,162,453	\$103,952	\$2,266,405	\$31.78	\$1.53	\$33.31			
Nov-15	67,698	2,133,322	\$65,121	\$2,198,443	1.000	\$2,133,322	\$65,121	\$2,198,443	\$31.51	\$0.96	\$32.47			
Dec-15	67,672	2,200,790	\$62,829	\$2,263,619	1.000	\$2,200,790	\$62,829	\$2,263,619	\$32.52	\$0.93	\$33.45	\$31.53	\$0.51	\$32.04
Jan-16	69,453	1,673,521	\$83,391	\$1,756,911	1.000	\$1,673,521	\$83,391	\$1,756,911	\$24.10	\$1.20	\$25.30	\$30.87	\$0.61	\$31.47
Feb-16	69,976	2,102,406	\$155,355	\$2,257,761	1.000	\$2,102,406	\$155,355	\$2,257,761	\$30.04	\$2.22	\$32.26	\$30.81	\$0.79	\$31.61
Mar-16	70,523	2,282,977	\$105,098	\$2,388,075	1.000	\$2,282,977	\$105,098	\$2,388,075	\$32.37	\$1.49	\$33.86	\$30.75	\$0.92	\$31.67
Apr-16	70,450	2,172,123	\$86,828	\$2,258,951	1.000	\$2,172,123	\$86,828	\$2,258,951	\$30.83	\$1.23	\$32.06	\$30.71	\$1.02	\$31.73
May-16	70,471	2,408,177	\$66,267	\$2,474,444	1.000	\$2,408,177	\$66,267	\$2,474,444	\$34.17	\$0.94	\$35.11	\$30.87	\$1.10	\$31.97
Jun-16	70,607	2,357,786	\$106,244	\$2,464,030	1.000	\$2,357,786	\$106,244	\$2,464,030	\$33.39	\$1.50	\$34.90	\$31.13	\$1.23	\$32.36
Jul-16	70,821	2,275,781	\$85,682	\$2,361,464	1.000	\$2,275,781	\$85,682	\$2,361,464	\$32.13	\$1.21	\$33.34	\$31.24	\$1.31	\$32.54
Aug-16	70,910	2,731,297	\$90,256	\$2,821,554	1.000	\$2,731,297	\$90,256	\$2,821,554	\$38.52	\$1.27	\$39.79	\$31.90	\$1.31	\$33.21
Sep-16	71,037	2,494,908	\$66,332	\$2,561,240	1.000	\$2,494,908	\$66,332	\$2,561,240	\$35.12	\$0.93	\$36.06	\$32.23	\$1.29	\$33.51
Oct-16	71,211	2,370,765	\$109,736	\$2,480,502	1.000	\$2,370,765	\$109,736	\$2,480,502	\$33.29	\$1.54	\$34.83	\$32.35	\$1.29	\$33.64
Nov-16	71,283	2,747,838	\$110,882	\$2,858,720	1.000	\$2,747,838	\$110,882	\$2,858,720	\$38.55	\$1.56	\$40.10	\$32.94	\$1.34	\$34.28
Dec-16	71,339	2,883,444	\$92,682	\$2,976,126	1.000	\$2,883,444	\$92,682	\$2,976,126	\$40.42	\$1.30	\$41.72	\$33.61	\$1.37	\$34.97
Jan-17	69,561	2,429,636	\$110,575	\$2,540,211	1.000	\$2,429,636	\$110,575	\$2,540,211	\$34.93	\$1.59	\$36.52	\$34.49	\$1.40	\$35.89
Feb-17	69,874	2,629,988	\$27,626	\$2,657,614	1.000	\$2,629,988	\$27,626	\$2,657,614	\$37.64	\$0.40	\$38.03	\$35.12	\$1.25	\$36.37
Mar-17	69,644	3,061,839	\$71,105	\$3,132,944	1.000	\$3,061,839	\$71,105	\$3,132,944	\$43.96	\$1.02	\$44.99	\$36.08	\$1.21	\$37.28
Apr-17	69,292	2,369,272	\$104,635	\$2,473,906	1.000	\$2,369,272	\$104,635	\$2,473,906	\$34.19	\$1.51	\$35.70	\$36.36	\$1.23	\$37.59
May-17	68,904	2,981,750	\$72,869	\$3,054,619	1.000	\$2,981,750	\$72,869	\$3,054,619	\$43.27	\$1.06	\$44.33	\$37.10	\$1.24	\$38.35
Jun-17	68,586	3,015,033	\$51,127	\$3,066,160	1.000	\$3,015,033	\$51,127	\$3,066,160	\$43.96	\$0.75	\$44.71	\$37.97	\$1.18	\$39.15
Jul-17	68,259	2,875,928	\$80,405	\$2,956,333	1.000	\$2,875,928	\$80,405	\$2,956,333	\$42.13	\$1.18	\$43.31	\$38.80	\$1.18	\$39.98
Aug-17	67,932	3,197,054	\$121,817	\$3,318,871	1.000	\$3,197,054	\$121,817	\$3,318,871	\$47.06	\$1.79	\$48.86	\$39.50	\$1.22	\$40.72
Sep-17	67,540	3,068,907	\$115,580	\$3,184,487	1.000	\$3,068,907	\$115,580	\$3,184,487	\$45.44	\$1.71	\$47.15	\$40.35	\$1.28	\$41.64
Oct-17	67,184	3,220,023	\$77,717	\$3,297,740	1.000	\$3,220,023	\$77,717	\$3,297,740	\$47.93	\$1.16	\$49.09	\$41.57	\$1.25	\$42.82
Nov-17	66,853	3,300,824	\$105,229	\$3,406,054	1.000	\$3,300,824	\$105,229	\$3,406,054	\$49.37	\$1.57	\$50.95	\$42.47	\$1.25	\$43.72
Dec-17	66,195	2,969,837	\$117,167	\$3,087,005	1.000	\$2,969,837	\$117,167	\$3,087,005	\$44.86	\$1.77	\$46.64	\$42.84	\$1.29	\$44.13

CY2016 / CY 2015 Annual Increase
CY2017 / CY 2016 Annual Increase

6.6% 169.4% 9.2%
27.5% -5.7% 26.2%

PHARMACY TREND DEVELOPMENT
SPECIALTY TREND CALCULATIONS

Month	Adjustment for Aging on All Onther Specialty PMPM				Month	Regression on All Other Specialty PMPM Adjusted for Contract	
	Average Age/Gender Factor	Normalized Age/Gender Factor	Monthly	Rolling 12		24 Months on Monthly	24 Months on Rolling 12
Jan-15	1.245	1.020	\$32.63		Jan-15	\$22.58	\$24.56
Feb-15	1.245	1.020	\$31.28		Feb-15	\$23.09	\$24.94
Mar-15	1.245	1.020	\$33.72		Mar-15	\$23.57	\$25.30
Apr-15	1.247	1.018	\$31.95		Apr-15	\$24.10	\$25.69
May-15	1.249	1.016	\$32.79		May-15	\$24.63	\$26.08
Jun-15	1.251	1.014	\$30.76		Jun-15	\$25.19	\$26.49
Jul-15	1.252	1.013	\$31.30		Jul-15	\$25.74	\$26.89
Aug-15	1.253	1.013	\$31.06		Aug-15	\$26.33	\$27.31
Sep-15	1.256	1.011	\$31.59		Sep-15	\$26.92	\$27.74
Oct-15	1.257	1.010	\$32.09		Oct-15	\$27.51	\$28.16
Nov-15	1.257	1.009	\$31.81		Nov-15	\$28.14	\$28.60
Dec-15	1.259	1.008	\$32.79	31.98	Dec-15	\$28.76	\$29.03
Jan-16	1.253	1.013	\$24.40	31.29	Jan-16	\$29.41	\$29.49
Feb-16	1.253	1.013	\$30.43	31.22	Feb-16	\$30.08	\$29.95
Mar-16	1.252	1.013	\$32.81	31.14	Mar-16	\$30.71	\$30.39
Apr-16	1.253	1.013	\$31.24	31.08	Apr-16	\$31.41	\$30.86
May-16	1.254	1.012	\$34.59	31.24	May-16	\$32.10	\$31.33
Jun-16	1.257	1.010	\$33.72	31.49	Jun-16	\$32.83	\$31.82
Jul-16	1.259	1.008	\$32.40	31.58	Jul-16	\$33.55	\$32.30
Aug-16	1.259	1.008	\$38.81	32.24	Aug-16	\$34.31	\$32.81
Sep-16	1.261	1.007	\$35.36	32.56	Sep-16	\$35.09	\$33.32
Oct-16	1.262	1.006	\$33.49	32.67	Oct-16	\$35.86	\$33.83
Nov-16	1.262	1.005	\$38.75	33.25	Nov-16	\$36.67	\$34.36
Dec-16	1.265	1.003	\$40.55	33.91	Dec-16	\$37.48	\$34.88
Jan-17	1.265	1.004	\$35.05	34.78	Jan-17	\$38.33	\$35.42
Feb-17	1.264	1.004	\$37.78	35.38	Feb-17	\$39.20	\$35.98
Mar-17	1.265	1.003	\$44.11	36.32	Mar-17	\$40.00	\$36.49
Apr-17	1.265	1.003	\$34.30	36.57	Apr-17	\$40.91	\$37.06
May-17	1.267	1.002	\$43.36	37.29	May-17	\$41.81	\$37.62
Jun-17	1.268	1.001	\$44.01	38.14	Jun-17	\$42.75	\$38.21
Jul-17	1.267	1.001	\$42.19	38.95	Jul-17	\$43.69	\$38.79
Aug-17	1.267	1.002	\$47.14	39.63	Aug-17	\$44.68	\$39.39
Sep-17	1.267	1.002	\$45.51	40.47	Sep-17	\$45.70	\$40.01
Oct-17	1.268	1.001	\$47.98	41.68	Oct-17	\$46.70	\$40.62
Nov-17	1.268	1.001	\$49.40	42.56	Nov-17	\$47.76	\$41.25
Dec-17	1.269	1.000	\$44.86	42.92	Dec-17	\$48.81	\$41.88

CY2016 / CY 2015 Annual Increase 6.0%
CY2017 / CY 2016 Annual Increase 26.6%

30.2% 20.1%

Regression on All Other Specialty		Regression on All	
1.001	0.000	1.001	0.000
0.000	3.316	0.000	1.035
0.798	0.080	0.951	0.025
86.961	22.000	427.348	22.000

PHARMACY TREND DEVELOPMENT
 SPECIALTY TREND CALCULATIONS

Restated Specialty Drug Trend

Pharmacy Specialty Claims in the Experience	A	\$36,175,943
Claims Removed from the Experience (CY 2016)		
PCSK9 Inhibitors	B1	\$152,520
Orkambi	B2	\$801,930
Multiple Sclerosis	B3	\$889,515
Total	B = B1+B2+B3	\$1,843,965
Pharmacy Specialty Claims without Excluded Drug:	C = A - B	\$34,331,978
Projected Specialty Claims using a 20.1% trend for D = C x (1.201)^(24/12)		\$49,491,694
Adding Incremental Cost of Excluded Treatments for the Projection Period		
PCSK9 Inhibitors	E1	\$265,455
Orkambi	E2	\$1,519,447
Ocreavus	E3	\$1,092,000
Total	E = E1+E2+E3	\$2,876,902
Restated Projected Specialty Claims	G = D + E	\$52,368,596
Restated Specialty Trend	H = (G/A)^(12/24) - 1	20.3%

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

EXHIBIT 3H

TREND DEVELOPMENT
PROJECTION FACTOR FOR INDEX RATE CALCULATION

TREND FACTORS - FROM 2017 to 2018			
Claim Type	Cost	Utilization	Total
Medical	2.6%	2.0%	4.6%
Pharmacy	11.0%	2.1%	13.3%
Dental	3.5%	3.5%	7.2%
Vision	0.0%	0.0%	0.0%

TREND FACTORS - FROM 2018 to 2019			
Claim Type	Cost	Utilization	Total
Medical	2.7%	0.9%	3.6%
Pharmacy	11.0%	2.1%	13.3%
Dental	3.5%	3.5%	7.2%
Vision	0.0%	0.0%	0.0%

Claim Type	CY 2017 Allowed PMPM	Cost Trend	Adding Cost Trend	Utilization Trend	CY 2018 Allowed PMPM
Medical Claims	\$460.25	1.0258	\$472.13	1.0200	\$481.58
Pharmacy Claims	\$101.78	1.1100	\$112.98	1.0210	\$115.35
Dental Claims	\$1.94	1.0355	\$2.01	1.0355	\$2.08
Vision claims	\$0.10	1.0000	\$0.10	1.0000	\$0.10
Total	\$564.06	1.0410	\$587.22	1.0202	\$599.10

Claim Type	CY 2018 Allowed PMPM	Cost Trend	Adding Cost Trend	Utilization Trend	CY 2019 Allowed PMPM	Impact of Pharmacy Contract	CY 2019 Allowed PMPM - After Pharmacy Contract Change
Medical Claims	\$481.58	1.0273	\$494.71	1.0090	\$499.14	1.0000	\$499.14
Pharmacy Claims	\$115.35	1.1100	\$128.04	1.0210	\$130.73	0.9396	\$122.84
Dental Claims	\$2.08	1.0355	\$2.15	1.0355	\$2.23	1.0000	\$2.23
Vision claims	\$0.10	1.0000	\$0.10	1.0000	\$0.10	1.0000	\$0.10
Total	\$599.10	1.0432	\$625.00	1.0115	\$632.20		\$624.31

Cost Trend Factor	1+d ₁	1.0860
Utilization Trend Factor	1+d ₂	1.0320
Impact of Pharmacy Contract Changes factor	1+c ₅	0.9875

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING**

Exhibit 4

EXPECTED RISK ADJUSTMENT TRANSFERS

Issuer Average Plan Liability Risk Score	BCBSVT	MVP
Interim 2017	1.400	1.139
<i>Impact of Projected Member Movement</i>	1.016	1.064
<i>Supplemental Diagnoses</i>	1.005	1.000
<i>Impact of Claims Runout</i>	1.024	1.061
Adjusted 2018	1.463	1.286
<i>Impact of Projected Member Movement</i>	1.000	1.000
<i>Supplemental Diagnoses</i>	1.000	1.000
Projected Final Report 2019	1.463	1.286

Transfer Amounts	Combined Market	Catastrophic Market
Estimated 2017 - Final	-\$5,913,785	\$14,287
Adjusted 2018	-\$8,263,363	\$90,615
Estimated 2019	-\$8,709,752	\$91,159

* receivable are expressed as negative numbers

Projected Risk Adjustment Transfer	-\$8,618,593
Projected Risk Adjustment Fee (\$1.80 per enrollee per year)	\$94,664
Net Projected Risk Adjustment	-\$8,523,929
Member Months	631,092
Net Projected Risk Adjustment PMPM	-\$13.51
Paid to Allowed Ratio (from Exh 6C)	81.14%
Market Wide Adjustment for the Risk Adjustment Program	-\$16.65

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 5

INDEX RATE CALCULATION

<u>Index Rate : Experience Period Allowed Claims for EHB</u>	A	\$564.06
 <u>Adjustments from Experience Period to Projection Period</u>		
<u>Population Risk Morbidity</u>		
Impact of the Change in Small Group definition	1+b ₁	1.0000
Impact of the take-up rate of the Uninsured	1+b ₂	1.0000
Impact of the Health Status of the newly insured	1+b ₃	1.0005
Impact of insured formerly on Employer coverage	1+b ₄	1.0000
Impact of new enrollment from prior high risk pool	1+b ₅	1.0000
Impact of mandated coverage on morbidity	1+b ₆	1.0000
Impact of the removal of the penalty for the individual mandate	1+b ₇	1.0200
Impact of VHC Adjustments	1+b ₈	1.0000
Changes in pool morbidity	1+b ₉	1.0231
 <u>Other</u>		
Impact of different benefit plans (in experience vs projection)	1+c ₁	1.0075
Changes in provider networks	1+c ₂	1.0000
Changes in demographics (age, gender, region, etc.)	1+c ₃	1.0101
Changes in pharmacy rebates	1+c ₄	1.0000
Changes in pharmacy contract	1+c ₅	0.9875
Impact of Selection	1+c ₆	1.0132
		\$599.70
<u>Adjusted Experience Period Allowed Claims for EHB</u>	C	\$599.70
 <u>Trend Factors</u>		
Cost Trend	1+d ₁	1.0860
Utilization Trend	1+d ₂	1.0320
		\$672.14
<u>Projected Period Allowed Claims for Experience EHB</u>	D	\$672.14
 <u>Additional Adjustments for Non System Claims</u>		
Projected Pharmacy Rebates	e ₁	-\$18.53
Projected Blue Print Payments	e ₂	\$3.76
Projected ITS Fees	e ₃	\$2.05
Projected Vaccine Payments	e ₄	\$0.99
Projected Net cost of Reinsurance	e ₅	\$1.36
OneCare Care Coordination Fee	e ₆	\$0.61
ESI Additional Fees	e ₇	\$0.56
		\$662.94
<u>Projected Index Rate</u>	F = D + e ₁ + e ₂ + e ₃ + e ₄ + e ₅	\$662.94
 <u>Market Wide Adjustments</u>		
Risk Adjustment Payments and Fees	g ₁	-\$16.65
Transitional Reinsurance Payments and Recoveries	g ₂	\$0.00
Vermont Exchange Fees	g ₃	\$0.00
		\$646.29
<u>Market Adjusted Index Rate</u>	H = E + g ₁ + g ₂ + g ₃	\$646.29

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 6A

PLAN LEVEL ADJUSTMENT SUMMARY

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				Weighted Average
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP	
Market Adjusted Index Rate	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29
Benefit Richness Adjustment	1.0132	0.9976	0.9628	0.9610	0.9350	0.9343	1.0959	1.0249	0.9684	0.9744	0.9343	0.9374	0.9413	0.9350	0.9626	0.9604	0.9682	0.9743	
Paid to Allowed Ratio	82.00%	78.84%	83.85%	82.53%	65.59%	66.31%	93.01%	84.35%	83.57%	84.10%	66.32%	67.72%	68.08%	65.59%	73.57%	73.44%	74.38%	76.24%	
Plan Benefits in addition to EHB	1.0002	1.0002	1.0002	1.0002	1.0002	1.0002	1.0001	1.0001	1.0002	1.0002	1.0002	1.0002	1.0002	1.0002	1.0002	1.0002	1.0002	1.0002	
For Catastrophic Only - Impact of Eligibility	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4938	1.0000	1.0000	1.0000	1.0000	
Expected Claims Cost	\$537.08	\$508.37	\$521.82	\$512.68	\$396.45	\$400.50	\$658.90	\$558.78	\$523.13	\$529.68	\$400.51	\$410.37	\$414.22	\$195.77	\$457.77	\$455.96	\$465.50	\$480.10	\$524.07
Administrative Charges Plan Level Adjustment	1.0839	1.0891	1.0860	1.0878	1.1132	1.1124	1.0579	1.0682	1.0728	1.0721	1.0952	1.0929	1.0919	1.2291	1.0980	1.0988	1.0818	1.0793	
Taxes and Fees Plan Level Adjustment	1.0126	1.0128	1.0127	1.0128	1.0135	1.0135	1.0123	1.0127	1.0129	1.0128	1.0137	1.0136	1.0136	1.0164	1.0131	1.0131	1.0132	1.0131	
Contribution to Reserve Plan Level Adjustment	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	1.0163	
Plan Level Adjusted Index Rate	\$599.08	\$569.88	\$583.24	\$574.01	\$454.57	\$458.86	\$717.12	\$614.29	\$577.67	\$584.52	\$451.86	\$461.98	\$465.87	\$248.56	\$517.50	\$515.79	\$518.52	\$533.50	\$580.86
Projected Membership	1,164	6,499	2,212	684	598	2,226	10,262	5,836	6,457	1,695	1,597	1,512	485	264	814	1,691	5,645	2,950	52,591

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

PLAN LEVEL ADJUSTMENT
BENEFIT RICHNESS ADJUSTMENT FACTOR

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				TOTAL
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP	
Projected Membership	1,164	6,499	2,212	684	598	2,226	10,262	5,836	6,457	1,695	1,597	1,512	485	264	814	1,691	5,645	2,950	52,591
Base Paid to Allowed Ratio before Silver Load	82.21%	79.58%	72.69%	72.28%	65.31%	65.06%	93.58%	84.04%	73.93%	75.20%	65.03%	66.06%	67.25%	65.31%	72.69%	72.19%	73.93%	75.19%	
Benefit Richness Adjustment for EHB	1.0937	1.0775	1.0415	1.0396	1.0134	1.0127	1.1799	1.1058	1.0473	1.0535	1.0126	1.0158	1.0197	1.0134	1.0415	1.0393	1.0473	1.0535	1.0800
Normalized Benefit Richness Adjustment for EHB	1.0127	0.9977	0.9643	0.9626	0.9383	0.9376	1.0925	1.0239	0.9696	0.9754	0.9376	0.9405	0.9442	0.9383	0.9643	0.9622	0.9696	0.9754	
Projected Period Paid Claims for Experience EHB	\$552.69	\$532.24	\$564.61	\$556.12	\$446.64	\$451.29	\$623.84	\$567.84	\$562.84	\$566.22	\$451.33	\$460.40	\$462.68	\$446.64	\$498.19	\$497.37	\$503.41	\$515.41	
Benefit Richness Adjustment for EHB	1.0127	0.9977	0.9643	0.9626	0.9383	0.9376	1.0925	1.0239	0.9696	0.9754	0.9376	0.9405	0.9442	0.9383	0.9643	0.9622	0.9696	0.9754	1.0000
Non-System Claims	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	
Market Wide Adjustments (Paid)	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	
Total Paid Claims with Benefit Richness Adjustment	\$536.99	\$508.29	\$521.74	\$512.60	\$396.39	\$400.43	\$658.81	\$558.69	\$523.04	\$529.60	\$400.44	\$410.30	\$414.14	\$396.39	\$457.69	\$455.88	\$465.42	\$480.02	
Overall Benefit Richness Adjustment	1.0132	0.9976	0.9628	0.9610	0.9350	0.9343	1.0959	1.0249	0.9684	0.9744	0.9343	0.9374	0.9413	0.9350	0.9626	0.9604	0.9682	0.9743	

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 6C

PLAN LEVEL ADJUSTMENT
PAID TO ALLOWED RATIOS

	NON-STANDARD PLANS						STANDARD PLANS						Catastrophic Blue Rewards	REFLECTIVE PLANS				Total		
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP		BRONZE Integrated	SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible		SILVER CDHP	
Projected Membership	1,164	6,499	2,212	684	598	2,226	10,262	5,836	6,457	1,695	1,597	1,512	485	264	814	1,691	5,645	2,950	52,591	
Projected Period Allowed Claims for Experience EHB	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14	\$672.14
Paid to Allowed Ratio for EHB Portion	82.23%	79.19%	84.00%	82.74%	66.45%	67.14%	92.81%	84.48%	83.74%	84.24%	67.15%	68.50%	68.84%	66.45%	74.12%	74.00%	74.90%	76.68%	81.14%	
Projected Period Paid Claims for Experience EHB	\$552.69	\$532.24	\$564.61	\$556.12	\$446.64	\$451.29	\$623.84	\$567.84	\$562.84	\$566.22	\$451.33	\$460.40	\$462.68	\$446.64	\$498.19	\$497.37	\$503.41	\$515.41	\$545.36	
Non-System Claims	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	-\$9.20	
Market Wide Adjustments (Paid)	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	-\$13.51	
Market Wide Adjustments (Allowed)	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	-\$16.65	
Market Adjusted Index Rate	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	
Total Paid Claims	\$529.98	\$509.53	\$541.89	\$533.41	\$423.92	\$428.58	\$601.13	\$545.13	\$540.13	\$543.51	\$428.62	\$437.69	\$439.97	\$423.92	\$475.48	\$474.66	\$480.70	\$492.70	\$522.65	
Paid to Allowed Ratio	82.00%	78.84%	83.85%	82.53%	65.59%	66.31%	93.01%	84.35%	83.57%	84.10%	66.32%	67.72%	68.08%	65.59%	73.57%	73.44%	74.38%	76.24%	80.87%	

For Section 3 of worksheet 1 of the URRT	
Expected Claims Cost (from Exhibit 6A)	\$524.07
Non-EHB benefit claims cost	\$0.08
Market-wide adjustment	\$13.51
Projected Incurred Claims, before market-wide adjustments	\$537.66
Projected Index Rate	\$662.94
Projected Non-EHB Allowed Claims	\$0.10
Projected Allowed Experience Claims	\$663.04
Paid to Allowed Ratio = \$537.66/\$663.04	81.1%

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 6D

PLAN LEVEL ADJUSTMENTS
IMPACT OF SPECIFIC ELIGIBILITY CATEGORIES FOR THE CATASTROPHIC PLAN

	Percent of Eligible Population	Projected Allowed Charges for Experience EHB	Paid to Allowed Ratio for EHB Claims	Projected Paid Claims for EHB Claims
Average Population	100.0%	\$624.31	69.3%	\$432.55
Individual Ages 30 or Less	98.6%	\$347.54	63.7%	\$221.24
Individual Ages over 30	1.4%	\$739.09	69.7%	\$514.89
Weighted Average		\$353.14	63.8%	\$225.43
<i>Allowed Charges Adjustment</i>		<i>0.5656</i>		
<i>Paid to Allowed Ratio Adjustment</i>			<i>0.9214</i>	
<u>Plan Level Adjustment Calculation</u>				
Projected Period Allowed Claims for Experience EHB		\$672.14		
Paid to Allowed Ratio for EHB Portion		66.4%		
Benefit Richness Adjustment for EHB		0.9383		
<i>Adjustment for Allowed Charges and Paid to Allowed Ratio</i>		<i>0.5212</i>		
Projected Period Paid Claims for Experience EHB		\$218.42		
Non-System Claims		-\$9.20		
Market Wide Adjustments		-\$13.51		
Non-EHB Benefits		\$0.07		
Expected Claims Cost		\$195.77		
Market Adjusted Index Rate		\$646.29		
Paid to Allowed Ratio		65.6%		
Benefit Richness Adjustment		0.9350		
Plan Benefits in addition to EHB		1.0002		
For Catastrophic Only - Impact of Eligibility		0.4938		
Expected Claims Cost		\$195.77		
Total Adjustment for Catastrophic Plan			0.4938	

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 7A

DETAILS OF ADMINISTRATIVE CHARGES

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				TOTAL	
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP		
BCBSVT Base Administrative Charges	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72	\$37.72
Administrative Charges for Outside Vendors	\$0.54	\$0.79	\$0.35	\$0.50	\$0.36	\$0.50	\$0.45	\$0.39	\$0.36	\$0.48	\$0.41	\$0.41	\$0.36	\$0.34	\$0.35	\$0.50	\$0.36	\$0.36	\$0.36	\$0.46
Blue Rewards Program	\$6.81	\$6.81	\$6.81	\$6.81	\$6.81	\$6.81	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6.81	\$6.81	\$6.81	\$0.00	\$0.00	\$0.00	\$2.09
Total Administrative Charges PMPM	\$45.06	\$45.32	\$44.88	\$45.03	\$44.89	\$45.03	\$38.16	\$38.11	\$38.07	\$38.20	\$38.13	\$38.12	\$38.07	\$44.86	\$44.88	\$45.03	\$38.07	\$38.07	\$38.07	\$40.26
Administrative Charges Plan Level Adjustment	1.0839	1.0891	1.0860	1.0878	1.1132	1.1124	1.0579	1.0682	1.0728	1.0721	1.0952	1.0929	1.0919	1.2291	1.0980	1.0988	1.0818	1.0793	1.0768	1.0768
Administrative Charges as a percent of Premium	7.52%	7.95%	7.69%	7.84%	9.87%	9.81%	5.32%	6.20%	6.59%	6.53%	8.44%	8.25%	8.17%	18.05%	8.67%	8.73%	7.34%	7.14%	7.14%	6.93%

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING**

DETAILS OF TAXES AND FEES

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				Total
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP	
State Assessment - HCCA	\$4.35	\$4.12	\$4.23	\$4.16	\$3.23	\$3.26	\$5.33	\$4.53	\$4.24	\$4.29	\$3.26	\$3.34	\$3.37	\$1.62	\$3.72	\$3.70	\$3.78	\$3.90	\$4.25
State Tax - VITL	\$1.08	\$1.03	\$1.05	\$1.03	\$0.80	\$0.81	\$1.33	\$1.13	\$1.06	\$1.07	\$0.81	\$0.83	\$0.84	\$0.40	\$0.93	\$0.92	\$0.94	\$0.97	\$1.06
Federal Assessment - PCORI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Federal Insurer Fee	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GMCB Billbacks	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92	\$1.92
Total Taxes and Fees PMPM	\$7.36	\$7.07	\$7.21	\$7.12	\$5.95	\$5.99	\$8.58	\$7.58	\$7.22	\$7.29	\$5.99	\$6.09	\$6.13	\$3.95	\$6.57	\$6.55	\$6.64	\$6.79	\$7.23
Taxes and Fees Plan Level Adjustment	1.0126	1.0128	1.0127	1.0128	1.0135	1.0135	1.0123	1.0127	1.0129	1.0128	1.0137	1.0136	1.0136	1.0164	1.0131	1.0131	1.0132	1.0131	1.0128
Taxes and Fees as a percent of Premium	1.23%	1.24%	1.24%	1.24%	1.31%	1.31%	1.20%	1.23%	1.25%	1.25%	1.33%	1.32%	1.32%	1.59%	1.27%	1.27%	1.28%	1.27%	1.24%

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 7D

AV PRICING VALUE

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS			
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP
Market Wide Adjusted Index Rate	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29
Plan Level Adjusted Index Rate	\$599.08	\$569.88	\$583.24	\$574.01	\$454.57	\$458.86	\$717.12	\$614.29	\$577.67	\$584.52	\$451.86	\$461.98	\$465.87	\$248.56	\$517.50	\$515.79	\$518.52	\$533.50
AV Pricing Value	92.70%	88.18%	90.24%	88.82%	70.33%	71.00%	110.96%	95.05%	89.38%	90.44%	69.92%	71.48%	72.08%	38.46%	80.07%	79.81%	80.23%	82.55%

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING**

Exhibit 8

**FEDERAL MINIMUM LOSS RATIO for COMBINED MARKET
(PROJECTION)**

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				TOTAL
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP	
Expected Direct Claims PMPM	\$551.53	\$522.60	\$536.16	\$526.95	\$409.79	\$413.87	\$674.34	\$573.41	\$537.48	\$544.08	\$413.87	\$423.82	\$427.69	\$207.50	\$471.59	\$469.76	\$479.38	\$494.10	\$538.42
Risk Adjustment Transfer Payments PMPM	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66	-\$13.66
Adjustments for Health Care Quality PMPM*	\$10.18	\$10.20	\$10.16	\$10.17	\$10.16	\$10.17	\$3.36	\$3.35	\$3.35	\$3.36	\$3.36	\$3.35	\$3.35	\$10.16	\$10.16	\$10.17	\$3.35	\$3.35	\$5.45
MLR Claims	\$548.05	\$519.14	\$532.66	\$523.46	\$406.29	\$410.38	\$664.04	\$563.11	\$527.17	\$533.79	\$403.57	\$413.52	\$417.38	\$204.00	\$468.10	\$466.28	\$469.08	\$483.79	\$530.22
Premium PMPM	\$599.08	\$569.88	\$583.24	\$574.01	\$454.57	\$458.86	\$717.12	\$614.29	\$577.67	\$584.52	\$451.86	\$461.98	\$465.87	\$248.56	\$517.50	\$515.79	\$518.52	\$533.50	\$580.86
Licensing and regulatory fees	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15
Taxes & Fees PMPM	-\$3.01	-\$2.95	-\$2.98	-\$2.96	-\$2.73	-\$2.73	-\$3.25	-\$3.05	-\$2.98	-\$2.99	-\$2.73	-\$2.75	-\$2.76	-\$2.33	-\$2.85	-\$2.84	-\$2.86	-\$2.89	-\$2.98
MLR Premium	\$595.93	\$566.78	\$580.12	\$570.90	\$451.69	\$455.98	\$713.72	\$611.09	\$574.54	\$581.38	\$448.97	\$459.08	\$462.96	\$246.09	\$514.50	\$512.79	\$515.50	\$530.46	\$577.73
Expected Loss Ratio	92.0%	91.6%	91.8%	91.7%	89.9%	90.0%	93.0%	92.1%	91.8%	91.8%	89.9%	90.1%	90.2%	82.9%	91.0%	90.9%	91.0%	91.2%	91.8%
Projected Membership	1,164	6,499	2,212	684	598	2,226	10,262	5,836	6,457	1,695	1,597	1,512	485	264	814	1,691	5,645	2,950	52,591

*Approximately 8.8% of current BCBSVT Administrative Charges are for health care quality plus the Blue Rewards PMPM

BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

Exhibit 9A

CONTRACT CONVERSION FACTOR

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				Total
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP	
Inforce Membership	1,184	6,906	2,456	0	289	2,044	10,369	5,916	6,798	1,784	2,178	2,124	174	264	970	0	6,708	3,500	\$3,664
Plan Level Adjusted Index Rate	\$599.08	\$569.88	\$583.24	\$574.01	\$454.57	\$458.86	\$717.12	\$614.29	\$577.67	\$584.52	\$451.86	\$461.98	\$465.87	\$248.56	\$517.50	\$515.79	\$518.52	\$533.50	\$580.39
Average Members per Subscribers	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.6526	1.0233	1.6526	1.6526	1.6526	1.6526	
Average Tier Factor	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.4774	1.0220	1.4774	1.4774	1.4774	1.4774	
Ratio of Members per Subscribers to Tier Factor	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.1186	1.0013	1.1186	1.1186	1.1186	1.1186	
Preliminary 2018 Rates																			
Single Rate	\$670.13	\$637.47	\$652.41	\$642.09	\$508.48	\$513.28	\$802.17	\$687.14	\$646.18	\$653.84	\$505.45	\$516.77	\$521.12	\$248.88	\$578.88	\$576.96	\$580.02	\$596.77	
Couple Rate	\$1,340.26	\$1,274.94	\$1,304.82	\$1,284.18	\$1,016.96	\$1,026.56	\$1,604.34	\$1,374.28	\$1,292.36	\$1,307.68	\$1,010.90	\$1,033.54	\$1,042.24	\$497.76	\$1,157.76	\$1,153.92	\$1,160.04	\$1,193.54	
Adult and Child(ren) Rate	\$1,293.35	\$1,230.32	\$1,259.15	\$1,239.23	\$981.37	\$990.63	\$1,548.19	\$1,326.18	\$1,247.13	\$1,261.91	\$975.52	\$997.37	\$1,005.76	\$480.34	\$1,117.24	\$1,113.53	\$1,119.44	\$1,151.77	
Family Rate	\$1,883.07	\$1,791.29	\$1,833.27	\$1,804.27	\$1,428.83	\$1,442.32	\$2,254.10	\$1,930.86	\$1,815.77	\$1,837.29	\$1,420.31	\$1,452.12	\$1,464.35	\$699.35	\$1,626.65	\$1,621.26	\$1,629.86	\$1,676.92	\$579.62
Inforce Contracts																			
Single Rate	451	1,816	1,282	0	131	872	3,233	2,157	3,369	784	986	832	67	253	488	0	2,788	1,195	Additional Factor for Contract Conversion Factor 100.1%
Couple Rate	100	676	416	0	21	190	1,214	579	1,115	298	229	187	13	2	68	0	636	321	
Adult and Child(ren) Rate	33	184	48	0	6	41	317	142	144	34	44	37	3	2	19	0	154	79	
Family Rate	117	831	68	0	26	180	972	557	249	90	168	210	18	1	74	0	578	375	

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING**

Exhibit 9B

CONSUMER ADJUSTED PREMIUM RATES

	NON-STANDARD PLANS						STANDARD PLANS							Catastrophic Blue Rewards	REFLECTIVE PLANS				Total Annual Premium for Inforce Contracts
	GOLD Blue Rewards	GOLD Blue Rewards CDHP	SILVER Blue Rewards	SILVER Blue Rewards CDHP	BRONZE Blue Rewards	BRONZE Blue Rewards CDHP	PLATINUM Deductible	GOLD Deductible	SILVER Deductible	SILVER CDHP	BRONZE Deductible	BRONZE CDHP	BRONZE Integrated		SILVER Blue Rewards	SILVER Blue Rewards CDHP	SILVER Deductible	SILVER CDHP	
Plan Level Adjusted Index Rate	\$599.08	\$569.88	\$583.24	\$574.01	\$454.57	\$458.86	\$717.12	\$614.29	\$577.67	\$584.52	\$451.86	\$461.98	\$465.87	\$248.56	\$517.50	\$515.79	\$518.52	\$533.50	
PHPM to Single Contract Conversion Factor	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.1201	1.0026	1.1201	1.1201	1.1201	1.1201	
2019 Proposed Rates																			
Single Rate	\$671.02	\$638.31	\$653.27	\$642.94	\$509.15	\$513.96	\$803.23	\$688.05	\$647.04	\$654.71	\$506.12	\$517.45	\$521.81	\$249.21	\$579.64	\$577.72	\$580.78	\$597.56	
Couple Rate	\$1,342.04	\$1,276.62	\$1,306.54	\$1,285.88	\$1,018.30	\$1,027.92	\$1,606.46	\$1,376.10	\$1,294.08	\$1,309.42	\$1,012.24	\$1,034.90	\$1,043.62	\$498.42	\$1,159.28	\$1,155.44	\$1,161.56	\$1,195.12	
Adult and Child(ren) Rate	\$1,295.07	\$1,231.94	\$1,260.81	\$1,240.87	\$982.66	\$991.94	\$1,550.23	\$1,327.94	\$1,248.79	\$1,263.59	\$976.81	\$998.68	\$1,007.09	\$480.98	\$1,118.71	\$1,115.00	\$1,120.91	\$1,153.29	
Family Rate	\$1,885.57	\$1,793.65	\$1,835.69	\$1,806.66	\$1,430.71	\$1,444.23	\$2,257.08	\$1,933.42	\$1,818.18	\$1,839.74	\$1,422.20	\$1,454.03	\$1,466.29	\$700.28	\$1,628.79	\$1,623.39	\$1,631.99	\$1,679.14	\$373,751,090
2018 Approved Rates																			
Single Rate	\$633.99	\$607.36	\$549.55	\$532.86	\$484.78	\$484.56	\$751.92	\$657.15	\$561.02	\$571.48	\$488.26	\$492.22	\$499.22	\$246.14	\$549.55	\$532.86	\$561.02	\$571.48	
Couple Rate	\$1,267.18	\$1,214.72	\$1,099.10	\$1,065.72	\$969.56	\$969.12	\$1,503.84	\$1,314.30	\$1,122.04	\$1,142.96	\$976.52	\$984.44	\$998.44	\$492.28	\$1,099.10	\$1,065.72	\$1,122.04	\$1,142.96	
Adult and Child(ren) Rate	\$1,222.83	\$1,172.20	\$1,060.63	\$1,028.42	\$935.63	\$935.20	\$1,451.21	\$1,268.30	\$1,082.77	\$1,102.96	\$942.34	\$949.98	\$963.49	\$475.05	\$1,060.63	\$1,028.42	\$1,082.77	\$1,102.96	
Family Rate	\$1,780.39	\$1,706.68	\$1,544.24	\$1,497.34	\$1,362.23	\$1,361.61	\$2,112.90	\$1,846.59	\$1,576.47	\$1,605.86	\$1,372.01	\$1,383.14	\$1,402.81	\$691.65	\$1,544.24	\$1,497.34	\$1,576.47	\$1,605.86	\$347,729,947
2019 Proposed Rate Increases																			
Single Rate	5.9%	5.1%	18.9%		5.0%	6.1%	6.8%	4.7%	15.3%	14.6%	3.7%	5.1%	4.5%	1.2%	5.5%	8.4%	3.5%	4.6%	
Couple Rate	5.9%	5.1%	18.9%		5.0%	6.1%	6.8%	4.7%	15.3%	14.6%	3.7%	5.1%	4.5%	1.2%	5.5%	8.4%	3.5%	4.6%	
Adult and Child(ren) Rate	5.9%	5.1%	18.9%		5.0%	6.1%	6.8%	4.7%	15.3%	14.6%	3.7%	5.1%	4.5%	1.2%	5.5%	8.4%	3.5%	4.6%	
Family Rate	5.9%	5.1%	18.9%		5.0%	6.1%	6.8%	4.7%	15.3%	14.6%	3.7%	5.1%	4.5%	1.2%	5.5%	8.4%	3.5%	4.6%	7.5%
Inforce Contracts																			
Single Rate	451	1,816	1,282	0	131	872	3,233	2,157	3,369	784	986	832	67	253	488	0	2,788	1,195	
Couple Rate	100	676	416	0	21	190	1,214	579	1,115	298	229	187	13	2	68	0	636	321	
Adult and Child(ren) Rate	33	184	48	0	6	41	317	142	144	34	44	37	3	2	19	0	154	79	
Family Rate	117	831	68	0	26	180	972	557	249	90	168	210	18	1	74	0	578	375	
Projected Contracts																			
Single Rate	443	1,703	1,144	311	273	924	3,195	2,127	3,032	688	725	594	161	253	345	694	2,390	1,220	
Couple Rate	99	639	347	102	43	206	1,203	571	964	249	170	134	27	2	92	166	612	311	
Adult and Child(ren) Rate	32	173	43	15	13	45	314	140	138	38	32	26	8	2	18	38	125	65	
Family Rate	116	784	76	32	55	202	965	550	318	110	122	149	63	1	63	145	449	245	



February 7, 2018

Mr. Dana Houlihan
Director, Plan Management & Enrollment Policy
VT Health Connect
Department of Vermont Health Access
Via Email Only

RE: STATE OF VERMONT ACTUARIAL VALUE CERTIFICATION FOR 2019 STANDARD PLAN DESIGNS

Dear Dana:

The Affordable Care Act (ACA) requires that health care coverage provided by issuers to non-grandfathered individual and small groups must cover all Essential Health Benefits (EHBs) and have plan designs that have Actuarial Values (AVs) that fall under the Platinum (90% AV), Gold (80% AV), Silver (70% AV), or Bronze (60% AV) tiers.

The State of Vermont (State) is standardizing several plan designs that all issuers offering plans in the Exchange, Vermont Health Connect, must offer. Issuers must offer the standard plan designs in the individual and small group merged market. In 2018, one Platinum, one Gold, two Silver, and three Bronze standard plan designs were developed for Vermont Health Connect. There is a traditional deductible plan at each of the four metal levels and a HDHP at each of the Silver and Bronze levels. In 2018, the State also added a second traditional deductible Bronze plan. Due to regulatory constraints and additional pressure on meeting the Bronze tier target AV, the new Bronze plan is not subject to the statute (H.559 Sec. 32. 8 V.S.A. § 4089) for prescription drug deductibles and Maximum Out of Pockets (MOOPs) as described below. The new plan provides coverage for office visits and generic drugs prior to the deductible and qualifies for the expanded Bronze AV range described above. The 2018 standard plan designs are all continuing in 2019.

For each of the Silver standard plan designs, the cost sharing reduction plan designs are also standard. Cost sharing reduction (CSR) plan designs were developed at each of the 73% (federal), 77% (Vermont specific), 87% (federal), and 94% (federal) AV levels.

The State contracted with Wakely Consulting Group, LLC (Wakely) to assist in the development of the 2019 standard plan designs and to provide an actuarial certification of the actuarial values of the state's standard plan designs that do not fit within the parameters of the Federal calculator and require adjustment. This memo documents the approved 2019 standard plan designs as well as the process for developing the corresponding actuarial values. The actuarial certification is provided in Appendix A.

A list of the changes from the 2018 standard plan designs is in Appendix B. At a high level the changes for each base standard plan are:

1. Platinum – the medical deductible, medical MOOP, and pharmacy MOOP were increased
2. Gold – the medical MOOP, pharmacy MOOP, and generic pharmacy copay were increased
3. Silver Deductible – the medical deductible, combined medical/pharmacy MOOP, pharmacy only MOOP, and primary care and mental health/substance abuse office visit copays were all increased
4. Bronze Deductible with Pharmacy Limit – the medical deductible, combined medical/pharmacy MOOP, and pharmacy only MOOP were all increased
5. Bronze Deductible without Pharmacy Limit – the combined medical/pharmacy deductible and combined medical/pharmacy MOOP were increased
6. Silver HDHP – the combined medical/pharmacy MOOP and the embedded individual combined medical/pharmacy MOOP were increased
7. Bronze HDHP – the combined medical/pharmacy MOOP and the embedded individual combined medical/pharmacy MOOP were increased

In addition to the standard plans, starting in 2016 the State of Vermont is requesting that issuers offer a Gold plan where the deductible and MOOP are set at the same amount. This means that once the deductible is met, the plan pays 100% of all services. Unlike the standard plans, it is not required that issuers offer this plan, but it is highly recommended. The issuer may determine the amount at which to set the deductible and MOOP, as long as they are equal and the resulting plan falls in the Gold tier. Since the amounts are to be determined by the issuers, these plans are not included within this memo.

Regulatory Background

The ACA allows for a -4% to +2% de minimis range around the target AVs for each metal level. For example, any plan design that has an AV from 66% to 72% is considered a Silver plan. Bronze plan designs meeting certain criteria are eligible for an expanded range of +5% on the higher end, allowing an AV up to 65% compared to a high end at 62%. Applicable plans include High Deductible Health Plans (HDHPs), or plans that cover at least one major service, other than preventive, prior to the deductible. Of the Vermont standard plan designs, two of the three Bronze plans qualify for the expanded range.

The Center for Consumer Information and Insurance Oversight (CCIIO) has released the final 2019 Actuarial Value Calculator (AVC)¹ that issuers must use to determine the AV of a plan. While CCIIO anticipates that most plans will be able to use the AVC without modification, some plan designs have features which are not supported by the AVC. In these instances, an actuary can either modify the inputs to most closely represent the plan design or an actuary can modify the results of the AVC to account for the features not supported by the AVC. An actuarial certification documenting the development of the AV for these designs is required.

The federal HDHP minimum deductible and MOOP limits are not yet released for 2019. The 2018 minimum deductible and MOOP are \$1,350 and \$6,650, respectively. Historically, the deductible has increased \$50 every two to three years and the MOOP increases around \$100 a year on average, though neither changed from 2016 to 2017. Additionally, the 2019 Notice of Benefits and Payment Parameters (NBPP)² are still in draft form. Based on the draft regulations, the single annual limit is expected to be \$7,900, up from \$7,350 in 2018.

The plan designs presented are compliant with the 2018 HDHP limits and the 2019 draft NBPP. Should the plan designs need to change once the 2019 HDHP limits are released (typically in early April) or if there are changes from the draft to the final 2019 NBPP, the Department of Vermont Health Access (DVHA) will present the updated designs to Green Mountain Care Board (GMCB) for their information and approval, if needed.

Bill S.19 proposes that starting in 2019, the premiums of the Silver on-Exchange plans will reflect the cost of funding for CSR subsidies, following the announcement that federal funding would cease. This will result in a “CSR load” to these plans such that the Silver premiums may increase substantially. For individuals who are not eligible for premium subsidies (and are therefore not protected from the CSR load), carriers will be able to offer “reflective” off-Exchange Silver plans whose premiums have not been increased for the CSR load and have only a minor difference in plan design compared to their on-Exchange counterparts. As of the date of this report, this bill has passed both the house and senate, but has not yet been signed into law by the governor.

The off-Exchange “reflective” plans will have a \$5 copay or 5% coinsurance increase on ambulance services compared to the on-Exchange plans. These differentials apply to both standard and non-standard Silver plans. A comparison of the standard Silver on and off-Exchange plan designs are shown in Appendix C. As ambulance services are not explicitly included in the AVC and the differences in cost sharing are minimal, there is no difference in the calculation of

¹ <http://www.cms.gov/CCIIO/Resources/Regulations-and-guidance/index.html>

² <https://www.gpo.gov/fdsys/pkg/FR-2017-11-02/pdf/2017-23599.pdf>

the federal calculation of the AV for these plans. Unless otherwise noted, in the Appendices the cost sharing for ambulance services represents the on-Exchange plan design.

In the event there is a Silver plan approved with 100% coinsurance, the off-Exchange “reflective” plan will have a \$25 deductible and MOOP increase compared to the on-Exchange plan. Unlike the ambulance cost sharing above, this difference will impact the AV. The carrier submitting such a plan will need to ensure that both the on and off-Exchange plan designs fit within the AV requirements. Since this is for non-standard plans only, these plans are not included within this memo.

Four of the standard plan designs (and the cost sharing reduction plan designs) have features not supported by the AVC and thus an actuarial certification is required. The remaining standard plan designs have features that may warrant an AV adjustment but no explicit adjustment or actuarial certification has been done for these plans. In developing these standard plan designs and the resulting actuarial certification, Wakely also followed applicable Actuarial Standards of Practice (ASOP) as detailed in Appendix D and including:

1. ASOP No. 23 Data Quality;
2. ASOP No. 25 Credibility Procedures;
3. ASOP No. 41 Actuarial Communications; and
4. ASOP No. 50 Determining Minimum Value and Actuarial Value under the Affordable Care Act.

Actuarial Value Considerations

A summary of Vermont’s standard plan designs is in Appendix E. Both Silver plans and two of the three Bronze plans have design features that are both significant and not supported by the AVC. The Silver cost sharing reduction plan designs have similar features. The issuers that opt to offer pediatric dental would also have design features that could be significant and not supported by the AVC. While most plans have some subtleties in their design that are not supported by the AVC, CCIIO has stated and regulations dictate that modifications should be made only for substantial differences. The four potential substantial differences that Wakely considered include:

1. Family deductible and MOOPs. There are two common types of applications for deductibles and MOOPs, commonly referred to in Vermont as stacked and aggregate³.

³ Stacked deductibles and MOOPs are typical in traditional deductible plans where the individual deductible and MOOP apply to each member of a contract and the family deductible and MOOP is used as a protection for contracts where multiple members have claims. For example, if the family MOOP is two times the

The data supporting the AVC is only at the member level, and thus most closely resembles the stacked application of deductibles and MOOPs although the family stacked AV will be higher in most instances. Most HDHP plans use the aggregate application of deductible and MOOPs which can significantly lower the AV since a family of two would need to accumulate to a deductible that is twice that of a single contract. Note that due to the new regulation in 2016, if the family MOOP is more than the single limit of \$7,900 (proposed for 2019), the MOOP must either be stacked or there must be an embedded individual MOOP of \$7,900. Wakely had previously developed a model to account for aggregate family deductibles and has modified this model to account for stacked and embedded MOOPs for HDHPs. Thus, a specific adjustment has been made to the appropriate AVs for HDHPs.

2. Vermont implemented a statute (H.559 Sec. 32. 8 V.S.A. § 4089) for prescription drug deductibles and MOOPs. The requirement mandates, in part, that the MOOP for prescription drug costs in any plan design shall not exceed the minimum deductible amount for HDHPs per Section 223(c)(2)(A)(i) of the Internal Revenue Code of 1986 (\$1,350 and \$2,700 for individual and family coverage in 2018, 2019 amounts are not yet known). The requirement also states that for HDHPs the cost sharing benefit for prescription drugs must start after the minimum deductible amount for HDHPs (same \$1,350 and \$2,700 for individual and family coverage in 2018) is met, but the amount may be met with either medical or prescription drug claims. This means that for all HDHPs, for purposes of prescription drug coverage, the deductible is considered met when accumulated medical and drug claims reach \$1,350 for individual or \$2,700 for family, regardless of what the medical deductible amount is. Similarly, the MOOP for only drug claims (including amounts used to accumulate to the deductible) is \$1,350 or \$2,700, regardless of the amount of the overall MOOP which will include both drug and medical claims.

Since for an integrated deductible and MOOP, only one amount is able to be input in the AVC, the value of the lower drug deductible and MOOP cannot be modeled in the AVC. This statute has a significant impact on AV, particularly at the lower AV tiers where the difference between the medical and prescription drug deductible and MOOP is greater.

individual MOOP but three members of a contract all would have reached their individual MOOP, it limits the family's liability to two times the individual MOOP.

Aggregate deductible and MOOPs are typical in HDHPs where all claims for all members of a non-single contract accumulate to the family deductible and MOOP. For two person or family contracts where only one member has significant claims, the member still must reach the higher deductible and MOOP amounts which makes the average member liability higher under an aggregate deductible.

Wakely has developed a model to account for Vermont's prescription drug regulation and thus, where appropriate, a specific adjustment has been made to the AVs using this model.

3. In the current market, most Vermont HDHPs waive the deductible for preventive prescription drugs. This is another plan feature not currently supported by the AVC. Wakely has not analyzed the exact portion of drugs this represents and this may vary by issuer. The impact to AV would only apply to drug costs that would normally be incurred prior to the member reaching the deductible. Any costs after the deductible is met and after the MOOP is met would be similar to the AVC. It is possible that this design feature could have a significant impact on the AV. However, the impact of this benefit is likely not enough to warrant an additional analysis. Based on some high level estimates, Wakely believes the maximum impact to AV for this design feature is approximately 0.5% with the likely expected impact to be half of that. Since Wakely did not quantify the exact adjustment of the preventive drug difference for HDHPs, Wakely did not make a specific adjustment but did make sure that any AVs developed for HDHPs were at least 0.5% below the high end of the de minimis range in order to account for this increased benefit. It is expected that the impact for these drugs would be highest for the Bronze plan where the deductible is highest and the impact would decrease as deductibles decrease (and AVs increase).

4. If a plan covers pediatric dental, starting in 2015 there can be no cost sharing for Class I (basic) pediatric oral health essential health benefits. Appendix F contains a list of the dental procedure codes that are classified as Class I and have no cost sharing. Pediatric dental is not explicitly reflected in the federal AVC. It is included as part of the "other" benefits which are assumed to have average cost sharing for the plan. The reduction in cost sharing for the Class I benefits will result in a higher AV than what is modeled in the AVC, particularly for the higher deductible plans. It is possible that this design feature could have a significant impact on the AV. Based on some high level estimates, Wakely believes the maximum impact to AV for this design feature is approximately 0.5%. Since this adjustment may apply to some issuers and not to others, Wakely did not make a specific adjustment but did make sure that any AVs developed were at least 0.5% below the high end of the de minimis range in order to account for this benefit. It is expected that the impact for these dental services would be highest for the Bronze plan where the deductible is highest and the impact would decrease as deductibles decrease (and AVs increase).

There are other potential design features for which adjustments could be made. However, given the expectation that adjustments be made for only the most substantive deviations, Wakely does not believe additional adjustments are warranted. It is also important to note that the bucketing of claims and the methodology used to calculate the AVC are not always clearly defined. Thus, at times it is difficult to ascertain whether an adjustment is warranted and how that adjustment would be estimated.

As stated, Wakely made explicit adjustments to account for the stacked and aggregate family deductible/MOOP and Vermont’s prescription drug regulation. These adjustments are described in detail in the Methodology section. For the preventive prescription drug and pediatric dental benefits, Wakely did not make an explicit adjustment but did allow cushion in the AV such that an increase of up to 0.5% would not result in the AV falling outside of the required range. The table below shows the acceptable range for each standard plan design after accounting for this cushion where an explicit adjustment was not made.

	Plan	Adjusted Acceptable Range
Deductible Plans	Platinum	86.0%-92.0%
	Gold	76.0%-82.0%
	Silver	66.0%-72.0%
	Bronze (with drug limit)	56.0%-61.5%
	Bronze (without drug limit)	56.0%-65.0%
HDHPs	Silver - Embedded MOOP	66.0%-71.0%
	Bronze - Embedded MOOP	56.0%-64.0%
Cost Sharing Reduction Plan Designs - Deductible Plans	250-300% FPL (73% AV)	72.0%-74.0%
	200-250% FPL (77% AV)	76.0%-78.0%
	150-200% FPL (87% AV)	86.0%-88.0%
	133-150% FPL (94% AV)	93.0%-95.0%
Cost Sharing Reduction Plan Designs - HDHPs	250-300% FPL (73% AV)	72.0%-73.0%
	200-250% FPL (77% AV)	76.0%-77.0%
	150-200% FPL (87% AV)	86.0%-87.0%
	133-150% FPL (94% AV)	93.0%-94.0%

The table in Appendix G shows all plan designs for which adjustments were made, the adjustments considered, the original AV from the AVC, and the final adjusted AV. The pediatric dental consideration may also apply to the Platinum, Gold and Silver Deductible and CSR plans when issuers include the benefit but no explicit adjustment was made since coverage of the pediatric dental benefit is optional and the impact to higher AV plans is less significant.

Methodology

Since several of the standard plan designs have features not supported by the AVC, Wakely developed an HDHP model to capture the impact of these features on the AV. It was anticipated that the AVC would not accommodate all of the Vermont plan design features and this model was developed several months prior to the draft 2014 AVC being released. While there are similarities in the data used (for example, both models include all members regardless of duration), there are

also differences (for example, only group data is included in the HDHP model, while the AVC includes both small group and individual experience).

If a plan does have substantive differences from what the AVC allows, there are two allowed approaches defined in the federal regulations. The first allows the actuary to adjust the inputs of the plan design to “fit” it into the AVC. The second allows the actuary to put in as many of the design features as possible into the AVC and then adjust the resulting AV to account for the unique design features. Wakely determined the second approach was most appropriate for the Vermont plan design differences. Thus for the plan designs where adjustments were made, Wakely first input as much of the plan design as possible into the AVC and then modified the resulting AV to account for the unique features.

The following discusses the HDHP model that Wakely developed and the process used to adjust the actuarial values from the AVC.

HDHP Model

Anticipating the need to quantify some of Vermont’s unique plan design features, in mid-2012 Wakely developed an HDHP model that would account for both aggregate deductibles and MOOPs as well as quantify the impact of Vermont’s prescription drug regulation. For the 2016 AV adjustments, this model was updated with more recent data and an option was added to account for embedded/stacked MOOPs.

In developing the model Wakely was provided with membership and medical and pharmacy claims data extracts from the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES). Filters were then applied to the data to target a specific population for the model and reduce the amount of records to work with. The data used included:

- Allowed commercial medical and prescription drug data that was incurred in 2012 (updated data was not provided in time to incorporate in this analysis)
- Products types HMO (non-Medicare risk), PPO, POS and EPO
- Used claims with a Useflag='0'
- All market categories except individual
- Limited to members in select payer ids

After all filters were applied, the remaining data included allowed claims and membership for approximately 2.3 million member months.

The methodology developed for the HDHP model does not use the traditional approach of continuance tables. When determining the paid claims and resulting actuarial value of the plan designs where the prescription drug regulation is a factor, the order in which the claims occur is important. Continuance tables fail to recognize the impact of the order of the claims on actuarial values. Thus, the HDHP model re-prices the claims based on the inputs provided in the model rather than rely on continuance tables.

The HDHP model allows a user to enter the following:

- Medical and Prescription drug deductible amounts for both individual and family contracts. These amounts can differ but the model assumes the amounts are always integrated, or that both medical and drug claims will accumulate to both deductibles, even if different amounts.
- Medical and prescription drug maximum out of pocket amounts for both individual and family contracts. These amounts can differ and the model allows for different treatment of the MOOPs as noted below.
- Medical and prescription drug coinsurance amounts. If the plan design includes copays, an effective coinsurance needs to be input.
- The structure of the deductibles and MOOPs. As can be seen in the table below, the model can distinguish between aggregate and stacked deductibles and MOOPs. It also allows for different accumulations of claims to the medical and prescription drug MOOPs. There are six structural selections available in the model, described in the table below. Option 5 is most closely aligned to the federal AVC. Option 6 represents the design of the Vermont HDHPs.

Options	Costs that Accumulate			Deductible / MOOP Type
	Deductible	Maximum Out-of-Pocket (MOOP)		
		Medical	Rx	
1	Medical & Rx	Medical & Rx	Rx Only	Aggregate
2	Medical & Rx	Medical & Rx	Rx Only	Stacked
3	Medical & Rx	Medical Only	Rx Only	Aggregate
4	Medical & Rx	Medical Only	Rx Only	Stacked
5	Medical & Rx	Medical & Rx	Medical & Rx	Stacked
6	Medical & Rx	Medical & Rx	Rx Only	Aggregate Deductible /Aggregate MOOP with Embedded Ind MOOP (can also be used for Stacked MOOP)

Adjusted AV Calculations

Using the federal AV calculator and the HDHP model as outlined above, the following methodology was used to develop the adjusted AV calculations for the HDHPs:

1. The plan designs were entered into the AVC ignoring the separate prescription drug deductible and MOOP thresholds. The resulting AV is the unadjusted value, which does not account for the prescription drug regulations or the aggregate family deductible and MOOP levels.
2. The HDHP model was used to determine the revised AV.
 - a. The same plan design input into the AVC was input into the HDHP model. The HDHP model only allows for coinsurance. Since the HDHP designs include copays, an effective coinsurance was developed for each plan design. The effective coinsurance amounts were developed separately for medical and prescription drug services using the allowed weights and average cost per service from the federal AVC continuance tables for the relevant metal tier.
 - b. The HDHP model was normalized to the AVC for each plan design. This means the same plan design, ignoring the prescription drug thresholds and assuming a stacked family deductible and MOOP, was input into the HDHP model and the underlying data was adjusted to arrive at the same AV as the AVC. This was done to ensure the same starting AV in both models and to try to mirror the induced utilization in the AVC. The normalization factors were reviewed for reasonability and deemed reasonable given they are accounting for trend, regional differences in cost and utilization and induced utilization.

- c. The plan design in the HDHP model was adjusted to lower the prescription drug deductible and MOOP inputs (if applicable) to the appropriate plan design amounts and also to adjust the prescription drug MOOP to only consider prescription drug claims (the medical MOOP amount continues to use both medical and prescription drug claims). The application of deductible and MOOP was also changed to use an aggregate family deductible and family MOOP with an embedded individual MOOP equal to \$7,900.
3. The resulting AV from the HDHP model is used as the final AV for tier placement.

The HDHP model was intended only for HDHPs where medical and drug claims both accumulate to the deductible. The Bronze plan with the pharmacy limit⁴ and Silver deductible plans (and associated CSR plans) need to be adjusted to account for the lower prescription drug MOOP, but the deductible plan has separate medical and drug deductibles. Thus, the HDHP model was used but with a slight variation in methodology. The following highlight the differences in methodology used only for the Bronze and Silver Deductible plans.

1. Same as for HDHPs, as much of the plan design as possible was entered into the AVC. This is the unadjusted AV. The Bronze and Silver Deductible plans then need to be adjusted for the lower and separate prescription drug MOOP.
2. The HDHP model was used to develop the AV adjustments in a slightly different process than for the HDHPs.
 - a. Instead of normalizing the HDHP model to the AVC, the normalization factor for the Bronze or Silver HDHP was used.
 - b. The HDHP model cannot accommodate plan designs where both medical and drug claims do not accumulate to the deductible. Thus, the same plan design was entered into the HDHP model as in the AVC but the model selection indicated that both medical and drug claims accumulated to the deductible amounts.
 - c. The HDHP model was then re-run with the lower drug MOOP and to adjust the prescription drug MOOP to only consider prescription drug claims (the medical MOOP amount continues to use both medical and prescription drug claims). The model continued to use a stacked application for deductible and MOOP since it is a traditional deductible plan.

⁴ Only the Bronze plan with the pharmacy limit needs to be adjusted. The Bronze plan without the pharmacy limit is not subject to the lower prescription drug MOOP and as such does not require an explicit adjustment to the AVC results.

3. The final AV is the ratio of the AV from 2c and 2b applied to the AV from the AVC in 1.

Appendix H includes screen shots from the AVC and the HDHP model for each plan design with an adjusted actuarial value. Also included is a summary of the AVs and in the instance of the Bronze and Silver Deductible plans, a calculation of the adjustment.

Disclosures and Limitations

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

Intended Users. This information has been prepared for the sole use of the State of Vermont and issuers within that state that will be submitting standard plan designs. Distribution to such parties should be made in its entirety. This report cannot be distributed to or relied on by any third party without the prior written permission of Wakely.

Risks and Uncertainties. The assumptions and resulting estimates included in this report and produced by the model 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 actual experience will tie to the AV estimated for the placement of plan designs into tiers. The developed actuarial values are for the purposes of classifying plan designs of similar value and do not represent the expected actuarial value of a plan. Actual AVs will vary based on a plan's specific population, utilization, unit cost, and other variables.

Conflict of Interest. The responsible actuary is financially independent and free from conflict concerning all matters related to performing the actuarial services underlying this analysis. In addition, Wakely is organizationally and financially independent to the State of Vermont and any issuer in the state.

Data and Reliance. We have relied on others for data and information used in the actuarial value adjustments. 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. Below is a list of data and assumptions provided by others and assumptions required by law.

- Final 2019 Federal AVC Model was relied on for the original AV. While reasonability tests have shown there are some assumptions and methodologies that are not consistent with expectations, the AVC was developed for plan classification and not pricing. Thus, the

model is being used as such and we make no warranties for the accuracy of the AVs that result from the AVC.

- VHCURES data supplied by the state was used in the development of the HDHP model.

Subsequent Events. Subsequent events to the date of this report that could impact the plan designs presented include, but are not limited to:

1. The federal HDHP minimum deductible and Maximum Out of Pocket (MOOP) limits are not yet released for 2019. The 2018 minimum deductible and MOOP are \$1,350 and \$6,650, respectively. Historically, the deductible has increased \$50 every two to three years and the MOOP increases around \$100 a year on average, though neither changed from 2016 to 2017. The plan designs presented are compliant with the 2018 HDHP limits and may need to change once the 2019 HDHP limits are released, primarily if the minimum deductible is increased.
2. The 2019 Notice of Benefits and Payment Parameters (NBPP) are still in draft form. Based on the draft regulations, the single annual limit is expected to be \$7,900, up from \$7,350 in 2018. The plan designs presented are compliant with the 2019 draft NBPP and may need to change if the final NBPP lowers the annual limit from the draft notice.
3. Other changes to regulations passed subsequent to this report.

Contents of Actuarial Report. This document and the supporting exhibits/files constitute the entirety of actuarial report and supersede any previous communications on the project.

Deviations from ASOPS. Wakely completed the analysis using sound actuarial practice. To the best of my knowledge, the report and methods used in the analysis are in compliance with the appropriate Actuarial Standards of Practice (ASOP) with no known deviations. A summary of ASOP compliance is listed in Exhibit D.

Exhibit A contains the formal actuarial certification. If you have any questions regarding this letter or the certification, please contact me.

Sincerely,



Julie A. Peper, FSA, MAAA
Principal and Senior Consulting Actuary



Brittney Phillips, ASA, MAAA
Consulting Actuary

Appendix A

Actuarial Certification State of Vermont Actuarial Value of Standard Plan Designs Effective January 1, 2019

I, Julie A. Peper, am associated with the firm of Wakely Consulting Group, LLC (Wakely), am a Fellow of the Society of Actuaries and a member of the American Academy of Actuaries, and meet its Qualification Standards for Statements of Actuarial Opinion. Wakely was retained by the State of Vermont to provide a certification of the actuarial value of the state's standard plan designs that are effective January 1, 2019 on Vermont Health Connect. This certification may not be appropriate for other purposes.

To the best of my information, knowledge and belief, the actuarial values provided with this certification are considered actuarially sound for purposes of § 156.135(b), according to the following criteria:

1. The final 2019 federal Actuarial Value Calculator was used to determine the AV for the plan provisions that fit within the calculator parameters;
2. Appropriate adjustments were calculated, to the AV identified by the calculator, for plan design features that deviate substantially from the parameters of the AV calculator;
3. The actuarial values have been developed in accordance with generally accepted actuarial principles and practices; and
4. The actuarial values meet the requirements of § 156.135(b).

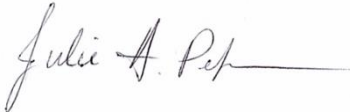
The assumptions and methodology used to develop the actuarial values have been documented in my correspondence with the State of Vermont. The actuarial values associated with this certification are for standard plan designs (Silver HDHP, Bronze HDHP, one Bronze Deductible, Silver Deductible, Silver HDHP CSR 73%, Silver HDHP CSR 77%, Silver HDHP CSR 87%, Silver HDHP CSR 94%, Silver Deductible CSR 73%, Silver Deductible CSR 77%, Silver Deductible CSR 87%, and Silver Deductible CSR 94%) that will be effective as of January 1, 2019 for individual and group coverage sold on Vermont Health Connect.

The developed actuarial values are for the purposes of classifying plan designs of similar value and do not represent the expected actuarial value of a plan. Actual AVs will vary based on a plan's specific population, utilization, unit cost and other variables.

In developing the actuarial values, I have relied upon the federal Actuarial Value calculator and data from the Vermont Healthcare Claims Uniform Reporting and Evaluation System

(VHCURES). I did not audit the data provided; however, I did review the data for reasonableness and consistency.

Actuarial methods, considerations, and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated from time-to-time by the Actuarial Standards Board, whose standards form the basis of this Statement of Opinion.

A handwritten signature in cursive script that reads "Julie A. Peper" followed by a horizontal line extending to the right.

Julie A. Peper, FSA, MAAA
February 7, 2018

Appendix B – Summary of Plan Design Changes from 2018 Designs

Deductible Plans		
Plan	Platinum	Gold
Changes	Increase medical deductible from \$300 to \$350	Increase medical MOOP from \$4,500 to \$4,700
	Increase medical MOOP from \$1,300 to \$1,350	Increase Rx MOOP from \$1,300 to \$1,350
	Increase Rx MOOP from \$1,300 to \$1,350	Increase generic Rx copay from \$5 to \$10

Deductible Plans		
Plan	Silver	Bronze w/ Rx Limit
Changes	Increase medical deductible from \$2,600 to \$2,800	Increase medical deductible from \$5,000 to \$5,500
	Increase combined medical/Rx MOOP from \$6,800 to \$7,500	Increase combined medical/Rx MOOP from \$7,350 to \$7,900
	Increase Rx MOOP from \$1,300 to \$1,350	Increase Rx MOOP from \$1,300 to \$1,350
	Increase PCP and MH/SA office visit copays from \$25 to \$30	

Deductible Plans	
Plan	Bronze w/o Rx Limit
Changes	Increase combined medical/Rx deductible from \$7,350 to \$7,600
	Increase combined medical/Rx MOOP from \$7,350 to \$7,600

HDHPs		
Plan	Silver - Embedded MOOP	Bronze - Embedded MOOP
Changes	Increase combined medical/Rx MOOP from \$6,400 to \$6,650	Increase combined medical/Rx MOOP from \$6,550 to \$6,650
	Increase embedded single combined medical/Rx MOOP from \$7,350 to \$7,900	Increase embedded single combined medical/Rx MOOP from \$7,350 to \$7,900



Appendix C – On and Off-Exchange Reflective Silver Standard Plan Designs

Deductible/OOP Max	2019 Plan Designs - Silver Deductible Plans	
	On-Exchange	Off-Exchange
Type of Plan	Deductible	Deductible
Medical Ded	\$2,800	\$2,800
Rx Ded	\$300	\$300
Integrated Ded	No	No
Medical MOOP	\$7,500	\$7,500
Rx MOOP	\$1,350	\$1,350
Integrated MOOP	Rx -No, Medical - Yes	Rx -No, Medical - Yes
Family Deductible / OOP	Stacked, 2x Individual	Stacked, 2x Individual
Medical Deductible waived for:	Prev, OV, UC, Amb	Prev, OV, UC, Amb
Drug Deductible waived for:	Generic scripts	Generic scripts
Service Category	Copay / Coinsurance	Copay / Coinsurance
Inpatient	40%	40%
Outpatient	40%	40%
ER	\$250	\$250
Radiology (MRI, CT, PET)	40%	40%
Preventive	\$0	\$0
PCP Office Visit	\$30	\$30
MH/SA Office Visit	\$30	\$30
Specialist Office Visit	\$75	\$75
Urgent Care	\$85	\$85
Ambulance	\$100	\$105
Rx Generic	\$15	\$15
Rx Preferred Brand	\$60	\$60
Rx Non-Preferred Brand	50%	50%
Rx Specialty	50%	50%
Actuarial Value		
2019 Federal AVC, Adjusted if Necessary	71.9%	71.9%

2019 Plan Designs - Silver HDHP Plans	
On-Exchange	Off-Exchange
HSA Q/HDHP	HSA Q/HDHP
\$1,550	\$1,550
\$1,350	\$1,350
Yes	Yes
\$6,650	\$6,650
\$1,350	\$1,350
Rx -No, Medical - Yes	Rx -No, Medical - Yes
Aggregate with Combined Medical/Rx embedded \$7,900 Single MOOP; 2x Individual Preventive Wellness scripts	Aggregate with Combined Medical/Rx embedded \$7,900 Single MOOP; 2x Individual Preventive Wellness scripts
Copay / Coinsurance	Copay / Coinsurance
30%	30%
30%	30%
30%	30%
30%	30%
0%	0%
10%	10%
10%	10%
30%	30%
30%	30%
30%	35%
\$10	\$10
\$40	\$40
50%	50%
50%	50%
70.3%	70.3%

Appendix D – Comments Relative to Applicable ASOPs

This appendix includes comments relative to the following applicable Actuarial Standards of Practice (ASOP).

1. ASOP No. 23, Data Quality;
2. ASOP No. 25, Credibility Procedures;
3. ASOP No. 41, Actuarial Communications; and
4. ASOP No. 50 Determining Minimum Value and Actuarial Value under the Affordable Care Act.

ASOP 23: Data Quality

3.1 Overview – VHCURES data was used as the basis for the HDHP model and this data source was deemed reasonable for the analysis discussed in the management report.

3.2 Selection of Data - The data was considered reasonable for our analysis subject to the following considerations -

- a. The data sources contained all material data elements.
- b. The following considerations were reviewed as part of our analysis:
 1. Data was appropriate and sufficiently current. Wakely requested to update the data in the model but the data was not provided in time to do so. The data used is reasonable for its use since it is primarily used to understand relativities.
 2. Data was reasonable and comprehensive of the necessary data elements.
 3. There were no known, material limitations of the data.
 4. No alternative data sets were reasonably available. The reliability of the data underlying our analysis did not require support from alternative data sets.
 5. Alternative data sets were not deemed necessary to complete the analysis.
 6. Sampling methods were not required.

3.3 Reliance on Data Supplied by Others - Reliance is discussed in the management report to which this appendix is attached.

3.4 Reliance on Other Information Relevant to the Use of Data - We relied on information contained in the report. We did not detect any material errors in the data provided and relied upon the data as part of our analysis.

3.5 Review of Data - We reviewed the data. Data definitions were included as part of the VHCURES data. Ultimately the data was reasonable with the adjustments discussed in our management report.

3.6 Limitation of the Actuary's Responsibility - We did not audit the data.

3.7 Use of Data– Use and adjustments to the data are discussed in this management report. In addition:

- a. We deem that the data are of sufficient quality to perform the analysis;
- b. The data did not require enhancement before the analysis could be performed
- c. The data was reasonable for the analysis and did not require adjustment beyond that discussed in the management report;
- d. We did not detect any material defects in any data source;
- e. The data were adequate to perform our analysis.

ASOP 25: Credibility Procedures

The HDHP model uses data as its starting point. The experience used is fully credible and therefore no credibility blending or adjustments were necessary.

ASOP 41: Actuarial Communications

This report and the actuarial memorandum submitted are consistent with the guidance in ASOP 41.

3.1 General Requirements for Actuarial Communications

3.1.1 Principal and Scope of Engagement – These results were developed to comply with § 156.135(b) and should not be used for any other purpose. The distribution of this report to other users is limited to the State of Vermont.

3.1.2 Form and Content – The State of Vermont was the principal for this engagement and the scope of the engagement included developing and certifying the actuarial values for the standard plan designs as discussed in the management report.

3.1.3 Timing of Communication – This report is provided in conjunction with the actuarial certification of the submitted actuarial values.

3.1.4 Identification of Responsible Actuary – The responsible actuary is identified in the attestation and this management report.

3.2 Actuarial Report – This management report is an Actuarial Report as defined in this ASOP. Correspondence between Wakely and the State of Vermont as part of this engagement should also be considered part of the Actuarial Report.

3.3 Specific Circumstances – No constraints apply beyond any discussed in the attachment management report.

3.4 Disclosures Within an Actuarial Report - all relevant disclosures have been made in the management report. Consistent with this ASOP, we make specific mention to the following items here:

3.4.1 Uncertainty or Risk – Uncertainty is discussed in the management report.

3.4.2 Conflict of Interest – Wakely is financially, organizationally, and otherwise independent from the State of Vermont and any reliant parties.

3.4.3 Reliance on Other Sources for Data and Other Information - Reliance regarding data and assumptions are discussed in this management report.

3.4.4 Responsibility for Assumptions and Methods - Assumptions and methods are discussed in the management report and the parties associated with the assumptions and methods have been delineated. Therefore, pursuant to this ASOP, no additional disclosure is necessary.

3.4.5 Information Date of Report -The management report list the applicable dates for the analysis and correspondence.

3.4.6 Subsequent Events - Subsequent events are listed in the Limitations and Disclosures section.

3.5 Explanation of Material Differences - Wakely has issued no other report regarding the development of these actuarial values. No comparison to prior results is necessary.

3.6 Oral Communications - No oral communication is considered part of this actuarial report. Any material assumptions or methods discussed in oral communications have been documented in written form as well.

3.7 Responsibility to Other Users - Intended users of this report have been specifically noted in the document.

ASOP 50: Determining Minimum Value and Actuarial Value under the Affordable Care Act

3.1 Use of AVC or MVC – The federal AVC was used.

3.2 Exceptions to the AVC – The federal AV was determined by making adjustments to the results of the federal AVC based on provisions that could not be appropriately modeled in the AVC.

3.3 Exceptions to the MVC – Not applicable.

3.4 Evaluating Non-Standard Plan Designs – The HDHP model was normalized to the federal AVC.

3.5 Reasonableness of Assumptions for Non-Standard Plan Designs – The assumptions used to modify the federal AVs were reviewed for reasonability.

3.6 Unreasonable Results – Not applicable.

3.7 Documentation – See ASOP 41 documentation above.



Appendix E – Standard Plan Designs

Deductible Plan Designs

2019 Plan Designs - Deductible Plans					
Deductible/OOP Max	Platinum	Gold	Silver	Bronze w/ Rx Limit	Bronze w/o Rx Limit
Type of Plan	Deductible	Deductible	Deductible	Deductible	Deductible
Medical Ded	\$350	\$850	\$2,800	\$5,500	\$7,600
Rx Ded	\$0	\$100	\$300	\$900	N/A
Integrated Ded	No	No	No	No	Yes
Medical MOOP	\$1,350	\$4,700	\$7,500	\$7,900	\$7,600
Rx MOOP	\$1,350	\$1,350	\$1,350	\$1,350	N/A
Integrated MOOP	No	No	Rx -No, Medical - Yes	Rx -No, Medical - Yes	Yes
Family Deductible / OOP	Stacked, 2x Individual	Stacked, 2x Individual	Stacked, 2x Individual	Stacked, 2x Individual	Stacked, 2x Individual
Medical Deductible waived for:	Prev, OV, UC, Amb	Prev, OV, UC, Amb	Prev, OV, UC, Amb	Preventive	Preventive, OV
Drug Deductible waived for:	N/A	Generic scripts	Generic scripts	Applies to all scripts	Generic Scripts
Service Category	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance
Inpatient	10%	30%	40%	50%	0%
Outpatient	10%	30%	40%	50%	0%
ER	\$100	\$150	\$250	50%	0%
Radiology (MRI, CT, PET)	10%	30%	40%	50%	0%
Preventive	\$0	\$0	\$0	\$0	\$0
PCP Office Visit	\$10	\$15	\$30	\$35	\$40
MH/SA Office Visit	\$10	\$15	\$30	\$35	\$40
Specialist Office Visit	\$30	\$30	\$75	\$90	\$100
Urgent Care	\$40	\$40	\$85	\$100	\$0
Ambulance	\$50	\$50	\$100	\$100	\$0
Rx Generic	\$5	\$10	\$15	\$20	\$25
Rx Preferred Brand	\$50	\$50	\$60	\$85	\$0
Rx Non-Preferred Brand	50%	50%	50%	60%	0%
Rx Specialty	50%	50%	50%	60%	0%
Actuarial Value					
2019 Federal AVC, Adjusted if Necessary	90.1%	82.0%	71.9%	61.3%	63.0%



Deductible Plan Designs – Cost Sharing Reduction Plans

2019 Plan Designs - Deductible Plans					
Deductible/OOP Max	70% AV Silver	250-300% FPL (73% AV)	200-250% FPL (77% AV)	150-200% FPL (87% AV)	133-150% FPL (94% AV)
Type of Plan	Deductible	Deductible	Deductible	Deductible	Deductible
Medical Ded	\$2,800	\$2,700	\$2,200	\$800	\$150
Rx Ded	\$300	\$300	\$200	\$150	\$0
Integrated Ded	No	No	No	No	No
Medical MOOP	\$7,500	\$6,300	\$4,900	\$1,800	\$900
Rx MOOP	\$1,350	\$1,200	\$1,000	\$400	\$200
Integrated MOOP	Rx -No, Medical - Yes	Rx -No, Medical - Yes	Rx -No, Medical - Yes	Rx -No, Medical - Yes	Rx -No, Medical - Yes
Family Deductible / OOP	Stacked, 2x Individual	Stacked, 2x Individual	Stacked, 2x Individual	Stacked, 2x Individual	Stacked, 2x Individual
Medical Deductible waived for:	Prev, OV, UC, Amb	Prev, OV, UC, Amb	Prev, OV, UC, Amb	Prev, OV, UC, Amb	Prev, OV, UC, Amb
Drug Deductible waived for:	Generic scripts	Generic scripts	Generic scripts	Generic scripts	N/A
Service Category	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance
Inpatient	40%	40%	40%	40%	10%
Outpatient	40%	40%	40%	40%	10%
ER	\$250	\$250	\$250	\$250	\$75
Radiology (MRI, CT, PET)	40%	40%	40%	40%	10%
Preventive	\$0	\$0	\$0	\$0	\$0
PCP Office Visit	\$30	\$30	\$20	\$10	\$5
MH/SA Office Visit	\$30	\$30	\$20	\$10	\$5
Specialist Office Visit	\$75	\$65	\$40	\$30	\$15
Urgent Care	\$85	\$75	\$50	\$40	\$25
Ambulance	\$100	\$100	\$100	\$100	\$50
Rx Generic	\$15	\$12	\$12	\$10	\$5
Rx Preferred Brand	\$60	\$60	\$60	\$50	\$20
Rx Non-Preferred Brand	50%	50%	50%	50%	30%
Rx Specialty	50%	50%	50%	50%	30%
Actuarial Value					
2019 Federal AVC, Adjusted if Necessary	71.9%	74.0%	77.8%	87.6%	94.9%

HDHP Plan Designs

2019 Plan Designs - HDHP Plans		
Deductible/OOP Max	Silver	Bronze
Type of Plan	HSA Q/HDHP	HSA Q/HDHP
Medical Ded	\$1,550	\$5,250
Rx Ded	\$1,350	\$1,350
Integrated Ded	Yes	Yes
Medical MOOP	\$6,650	\$6,650
Rx MOOP	\$1,350	\$1,350
Integrated MOOP	Rx -No, Medical - Yes	Rx -No, Medical - Yes
Family Deductible / OOP	Aggregate with Combined Medical/Rx embedded \$7,900 Single MOOP; 2x Individual	Aggregate with Combined Medical/Rx embedded \$7,900 Single MOOP; 2x Individual
Medical Deductible waived for:	Preventive	Preventive
Drug Deductible waived for:	Wellness scripts	Wellness scripts
Service Category	Copay / Coinsurance	Copay / Coinsurance
Inpatient	30%	50%
Outpatient	30%	50%
ER	30%	50%
Radiology (MRI, CT, PET)	30%	50%
Preventive	0%	0%
PCP Office Visit	10%	50%
MH/SA Office Visit	10%	50%
Specialist Office Visit	30%	50%
Urgent Care	30%	50%
Ambulance	30%	50%
Rx Generic	\$10	\$12
Rx Preferred Brand	\$40	40%
Rx Non-Preferred Brand	50%	60%
Rx Specialty	50%	60%
Actuarial Value		
2019 Federal AVC, Adjusted if Necessary	70.3%	60.7%

HDHP Plan Designs – Cost Sharing Reduction Plans

2019 Plan Designs - HDHP Plan CSR Variations					
Deductible/OOP Max	70% AV Silver	250-300% FPL (73% AV)	200-250% FPL (77% AV)	150-200% FPL (87% AV)	133-150% FPL (94% AV)
Type of Plan	HSA Q/HDHP	HSA Q/HDHP	HSA Q/HDHP	Deductible (NOT HSAQ)	Deductible (NOT HSAQ)
Medical Ded	\$1,550	\$1,550	\$1,350	\$1,200	\$550
Rx Ded	\$1,350	\$1,350	N/A	N/A	N/A
Integrated Ded	Yes	Yes	Yes	Yes	Yes
Medical MOOP	\$6,650	\$4,800	\$3,300	\$1,200	\$550
Rx MOOP	\$1,350	\$1,350	\$1,350	N/A	N/A
Integrated MOOP	Rx -No, Medical - Yes	Rx -No, Medical - Yes	Rx -No, Medical - Yes	Yes	Yes
Family Deductible / OOP	Aggregate with Combined Medical/Rx embedded \$7,900 Single MOOP; 2x Individual	Aggregate with Combined Medical/Rx embedded \$7,900 Single MOOP; 2x Individual	Aggregate, 2x Individual	Aggregate, 2x Individual	Aggregate, 2x Individual
Medical Deductible waived for:	Preventive	Preventive	Preventive	Preventive	Preventive
Drug Deductible waived for:	Wellness scripts	Wellness scripts	Wellness scripts	Wellness scripts	Wellness scripts
Service Category	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance	Copay / Coinsurance
Inpatient	30%	25%	25%	0%	0%
Outpatient	30%	25%	25%	0%	0%
ER	30%	25%	25%	0%	0%
Radiology (MRI, CT, PET)	30%	25%	25%	0%	0%
Preventive	0%	0%	0%	0%	0%
PCP Office Visit	10%	10%	10%	0%	0%
MH/SA Office Visit	10%	10%	10%	0%	0%
Specialist Office Visit	30%	25%	25%	0%	0%
Urgent Care	30%	25%	25%	0%	0%
Ambulance	30%	25%	25%	0%	0%
Rx Generic	\$10	\$10	\$10	\$0	\$0
Rx Preferred Brand	\$40	\$40	\$40	\$0	\$0
Rx Non-Preferred Brand	50%	50%	50%	0%	0%
Rx Specialty	50%	50%	50%	0%	0%
Actuarial Value					
2019 Federal AVC, Adjusted if Necessary	70.3%	73.0%	76.8%	86.9%	93.7%

Appendix F – Class I Pediatric Dental Codes

These procedures are diagnostic and preventive in nature. Under the definition of what is essential they may have limits. The services and limits are described in the Department of Vermont Health Access, Dental Procedure/Fee Schedule (Effective for services provided on or after 11/01/2013)

- D0120 Periodic Oral Evaluation
- D0140 Limited Oral Evaluation – Problem Focused
- D0145 Oral Evaluation for a patient under three years of age and counseling with primary caregiver
- D0150 Comprehensive Oral Evaluation
- D0170 Re-evaluation – Limited, Problem Focused
- D0210 Intraoral Radiographs– Complete Series (including bitewings)
- D0220 Intraoral Radiographs – Periapical – First Film
- D0230 Intraoral Radiographs– Periapical – Each Additional Film
- D0240 Intraoral – Occlusal Film
- D0250 Extraoral – First Film
- D0260 Extraoral – Each Additional Film
- D0270 Bitewing – Single Film
- D0272 Bitewings – 2 Films
- D0273 Bitewings – 3 Films
- D0274 Bitewings – 4 Films
- D0330 Panoramic Film
- D0340 Cephalometric Film
- D0350 Oral/Facial Photographic Images
- D0364 Cone Beam CT Capture and Interpretation with Limited Field of View - Less Than One Whole Jaw
- D0365 Cone Beam CT Capture and Interpretation with Limited Field of View of One Full Dental Arch - Mandible
- D0366 Cone Beam CT Capture and Interpretation with Limited Field of View of One Full Dental Arch - Maxilla, with or without Cranium
- D0367 Cone Beam CT Capture and Interpretation with Limited Field of View of Both Jaws, With or Without Cranium
- D0368 Cone Beam CT Capture and Interpretation for TMJ Series Including Two or More Exposures
- D0391 Interpretation of Diagnostic Image by a Practitioner Not Associated with Capture of the Image, Including the Report
- D0470 Diagnostic Models
- D1120 Prophylaxis – Child
- D1208 Topical Application of Fluoride
- D1330 Oral Hygiene Instructions
- D1351 Sealant – Per Tooth
- D1351 U9 Sealant – Per Tooth-Deciduous second molars and bicuspid*
- D1352 Preventive resin restoration in a moderate to high caries risk patient -permanent tooth
- D1510 Space Maintainer - Fixed – Unilateral
- D1515 Space Maintainer – Fixed – Bilateral
- D1525 Space Maintainer – Removable – Bilateral
- D1550 Recementation of Space Maintainer

Appendix G – Summary of Adjustments Considered and Final Adjusted AVs

Adjustments Considered	Aggregate Ded	Aggregate MOOP, Embedded \$7,900	Stacked MOOP	Drug Regulation	Preventive Drugs	Pediatric Dental	AV from AVC	Final Adjusted AV
Silver HDHP – Embedded \$7,900 Individual MOOP	Yes	Yes	No	Yes	Yes	Yes	72.8%	70.3%
Bronze HDHP– Embedded \$7,900 Individual MOOP	Yes	Yes	No	Yes	Yes	Yes	62.0%	60.7%
Silver Deductible	No	No	No	Yes	No	Yes	71.3%	71.9%
Bronze Deductible (with pharmacy limit)	No	No	Yes	Yes	No	Yes	60.5%	61.3%
Silver HDHP - Embedded \$7,900 Individual MOOP CSR 73%	Yes	Yes	No	Yes	Yes	Yes	75.5%	73.0%
Silver HDHP - Embedded \$7,900 Individual MOOP CSR 77%	Yes	Yes	No	Yes	Yes	Yes	79.1%	76.8%
Silver HDHP - Embedded \$7,900 Individual MOOP CSR 87%	Yes	Yes	No	No	Yes	Yes	87.4%	86.9%
Silver HDHP - Embedded \$7,900 Individual MOOP CSR 94%	Yes	Yes	No	No	Yes	Yes	93.7%	93.7%
Silver Deductible CSR – 73%	No	No	Yes	Yes	No	Yes	73.4%	74.0%
Silver Deductible CSR – 77%	No	No	Yes	Yes	No	Yes	77.3%	77.8%
Silver Deductible CSR – 87%	No	No	Yes	Yes	No	Yes	87.4%	87.6%
Silver Deductible CSR – 94%	No	No	Yes	Yes	No	Yes	94.7%	94.9%

Appendix H – Screen Shots and AV Development

1. Silver HDHP – Embedded MOOP
2. Bronze HDHP – Embedded MOOP
3. Silver Deductible Plan
4. Bronze Deductible Plan (with pharmacy limit)
5. Silver HDHP – Embedded MOOP CSR – 73%
6. Silver HDHP – Embedded MOOP CSR – 77%
7. Silver HDHP – Embedded MOOP CSR – 87%
8. Silver HDHP – Embedded MOOP CSR – 94%
9. Silver Deductible CSR – 73%
10. Silver Deductible CSR – 77%
11. Silver Deductible CSR – 87%
12. Silver Deductible CSR – 94%

1. Silver HDHP – Embedded MOOP

AV from AVC = 72.8%

Adjusted AV = 70.3%

AVC Screen Shot:

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

Desired Metal Tier: Silver

Tier 1 Plan Benefit Design		
Medical	Drug	Combined
Deductible (\$)		\$1,550.00
Coinsurance (% Insurer's Cost Share)		70.00%
MOOP (\$)		\$6,650.00
MOOP if Separate (\$)		

Tier 2 Plan Benefit Design		
Medical	Drug	Combined
Deductible (\$)		
Coinsurance (% Insurer's Cost Share)		
MOOP (\$)		
MOOP if Separate (\$)		

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	90%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	90%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$10.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$40.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input type="checkbox"/>
# Visits (1-10):	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: 2019 Silver HDHP Plan
 Plan HIOS ID:
 Issuer HIOS ID:

Output

Calculate

Status/Error Messages:

Error: Result is outside of [-4, +2] percent de minimis variation.

Actuarial Value:

72.81%

Metal Tier:

NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Additional Notes:

Calculation Time:

0.0391 seconds

Final 2019 AV Calculator

1. Silver HDHP – Embedded MOOP, Continued

HDHP Model – Normalization:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		1,550	1,550		
Family Deductible		3,100	3,100		
Individual Out-of-Pocket		6,650	6,650		
Family Out-of-Pocket		13,300	13,300		
Coinsurance (50% or Less)		27%	29%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$289.21	\$45.07	\$334.29	
Plan PMPM		\$215.74	\$27.64	\$243.38	
Actuarial Value		74.6%	61.3%	72.8%	

1. Silver HDHP – Embedded MOOP, Continued

HDHP Model – Adjusted Actuarial Value:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		1,550	1,350		
Family Deductible		3,100	2,700		
Individual Out-of-Pocket		6,650	1,350		
Family Out-of-Pocket		13,300	2,700		
Coinsurance (50% or Less)		27%	29%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Rx Only	Aggregate Plus	6
<div style="border: 1px solid black; border-radius: 10px; width: 150px; height: 30px; background-color: #4a86e8; color: white; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> Calculate </div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$289.21	\$45.07	\$334.29	
Plan PMPM		\$205.39	\$29.50	\$234.89	
Actuarial Value		71.0%	65.5%	70.3%	

2. Bronze HDHP – Embedded MOOP

AV from AVC = 62.0%

Adjusted AV = 60.7%

AVC Screen Shot:

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
 - Apply Inpatient Copay per Day?
 - Apply Skilled Nursing Facility Copay per Day?
 - Use Separate MOOP for Medical and Drug Spending?
 - Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
- Desired Metal Tier: Bronze

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$5,250.00			
Coinsurance (%; Insurer's Cost Share)			50.00%			
MOOP (\$)			\$6,650.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$12.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	60%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	40%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	40%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input type="checkbox"/>
# Visits (1-10):	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: 2019 Bronze HDHP Plan
 Plan HIOS ID:
 Issuer HIOS ID:

Output

Calculate

Status/Error Messages: Calculation Successful.
 Actuarial Value: 61.97%
 Metal Tier: Bronze

Additional Notes:

Calculation Time: 0.0391 seconds
 Final 2019 AV Calculator

2. Bronze HDHP – Embedded MOOP, Continued

HDHP Model – Normalization:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		5,250	5,250		
Family Deductible		10,500	10,500		
Individual Out-of-Pocket		6,650	6,650		
Family Out-of-Pocket		13,300	13,300		
Coinsurance (50% or Less)		48%	47%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
	Settings	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
					5
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block;">Calculate</div>			
Results					
		Medical	Rx	Total	
	Allowed PMPM	\$322.69	\$50.29	\$372.98	
	Plan PMPM	\$207.42	\$23.87	\$231.29	
	Actuarial Value	64.3%	47.5%	62.0%	

2. **Bronze HDHP – Embedded MOOP, Continued**

HDHP Model – Adjusted Actuarial Value:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		5,250	1,350		
Family Deductible		10,500	2,700		
Individual Out-of-Pocket		6,650	1,350		
Family Out-of-Pocket		13,300	2,700		
Coinsurance (50% or Less)		48%	47%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings		Medical & Rx	Medical & Rx	Rx Only	OOP Type
					Aggregate Plus
					6
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$322.69	\$50.29	\$372.98	
Plan PMPM		\$196.71	\$29.78	\$226.49	
Actuarial Value		61.0%	59.2%	60.7%	

3. Silver Deductible

AV from AVC = 71.25%

Adjustments

- HDHP Model with drug adjustments / HDHP Model without drug adjustments = $66.65\%/66.04\% = 1.009 \times .7125 = 71.9\%$

Adjusted AV = 71.9%

AVC Screen Shot:

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?

Apply Inpatient Copay per Day?

Apply Skilled Nursing Facility Copay per Day?

Use Separate MOOP for Medical and Drug Spending?

Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Silver

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)	\$2,800.00	\$300.00				
Coinsurance (% Insurer's Cost Share)	60.00%	50.00%				
MOOP (\$)	\$7,500.00					
MOOP if Separate (\$)						

Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?		Copay applies only after deductible?	
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input type="checkbox"/>	<input type="checkbox"/>		\$75.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$75.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$75.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input type="checkbox"/>	<input type="checkbox"/>		\$15.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$60.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?

Specialty Rx Coinsurance Maximum: _____

Set a Maximum Number of Days for Charging an IP Copay?

Days (1-10): _____

Begin Primary Care Cost-Sharing After a Set Number of Visits?

Visits (1-10): _____

Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?

Copays (1-10): _____

Plan Description:
 Name: 2019 Silver Deductible Plan
 Plan HIOS ID:
 Issuer HIOS ID:

Output

Calculate

Status/Error Messages: Calculation Successful.

Actuarial Value: 71.25%

Metal Tier: Silver

NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Additional Notes:

Calculation Time: 0.043 seconds

Final 2019 AV Calculator

3. Silver Deductible, Continued

HDHP Model – Without Prescription Drug Adjustments:

Inputs					
<p><i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i></p> <p><i>Press 'Calculate' anytime an input or dropdown selection is changed.</i></p> <p><i>Note that the model run-time will vary based on the computers processing speed.</i></p> <p><i>A message box will appear to indicate that the calculations are done.</i></p>					
		Medical	Rx		
Individual Deductible		2,800	300		
Family Deductible		5,600	600		
Individual Out-of-Pocket		7,500	7,500		
Family Out-of-Pocket		15,000	15,000		
Coinsurance (50% or Less)		36%	34%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$289.21	\$45.07	\$334.29	
Plan PMPM		\$190.05	\$30.71	\$220.76	
Actuarial Value		65.7%	68.1%	66.04%	

3. Silver Deductible, Continued

HDHP Model – With Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		2,800	300		
Family Deductible		5,600	600		
Individual Out-of-Pocket		7,500	1,350		
Family Out-of-Pocket		15,000	2,700		
Coinsurance (50% or Less)		36%	34%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Rx Only	OOP Type
					Stacked
					2
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px auto;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$289.21	\$45.07	\$334.29	
Plan PMPM		\$189.18	\$33.63	\$222.80	
Actuarial Value		65.4%	74.6%	66.65%	

4. Bronze Deductible (with drug limit)

AV from AVC = 60.5%

Adjustments

- HDHP Model with drug adjustments / HDHP Model without drug adjustments = $61.5\%/60.7\% = 1.013 \times .605 = 61.3\%$

Adjusted AV = 61.3%

AVC Screen Shot:

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?

Apply Inpatient Copay per Day?

Apply Skilled Nursing Facility Copay per Day?

Use Separate MOOP for Medical and Drug Spending?

Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Bronze

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)	\$5,500.00	\$900.00				
Coinsurance (% Insurer's Cost Share)	50.00%	40.00%				
MOOP (\$)		\$7,900.00				
MOOP if Separate (\$)						

Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$90.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$90.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$90.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$20.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$85.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:	Plan Description:
Set a Maximum on Specialty Rx Coinsurance Payments? <input type="checkbox"/>	Name: 2019 Bronze Deductible Plan - with Rx Limit
Specialty Rx Coinsurance Maximum: <input type="checkbox"/>	
Set a Maximum Number of Days for Charging an IP Copay? <input type="checkbox"/>	Plan HIOS ID: <input type="checkbox"/>
# Days (1-10): <input type="checkbox"/>	Issuer HIOS ID: <input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? <input type="checkbox"/>	
# Visits (1-10): <input type="checkbox"/>	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? <input type="checkbox"/>	
# Copays (1-10): <input type="checkbox"/>	

Output

Status/Error Messages: Calculation Successful.

Actuarial Value: 60.47%

Metal Tier: Bronze

Additional Notes: NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Calculation Time: 0.0352 seconds

Final 2019 AV Calculator

4. Bronze Deductible (Continuing, with drug limit), Continued

HDHP Model – Without Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		5,500	900		
Family Deductible		11,000	1,800		
Individual Out-of-Pocket		7,900	7,900		
Family Out-of-Pocket		15,800	15,800		
Coinsurance (50% or Less)		47%	45%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
					5
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$322.69	\$50.29	\$372.98	
Plan PMPM		\$196.59	\$29.72	\$226.31	
Actuarial Value		60.9%	59.1%	60.7%	

4. **Bronze Deductible (Continuing, with drug limit), Continued**

HDHP Model – With Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		5,500	900		
Family Deductible		11,000	1,800		
Individual Out-of-Pocket		7,900	1,350		
Family Out-of-Pocket		15,800	2,700		
Coinsurance (50% or Less)		47%	45%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Rx Only	Stacked	2
<div style="border: 1px solid black; border-radius: 15px; background-color: #4a86e8; color: white; padding: 10px 40px; display: inline-block; margin: 10px 0;">Calculate</div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$322.69	\$50.29	\$372.98	
Plan PMPM		\$194.83	\$34.64	\$229.47	
Actuarial Value		60.4%	68.9%	61.5%	

5. Silver HDHP – Embedded MOOP CSR – 73%

AV from AVC = 75.5%

Adjusted AV = 73.0%

AVC Screen Shot:

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
- Desired Metal Tier: Silver

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$1,550.00			
Coinsurance (% , Insurer's Cost Share)			75.00%			
MOOP (\$)			\$4,800.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	90%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	90%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$10.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$40.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? Specialty Rx Coinsurance Maximum:	<input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay? # Days (1-10):	<input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? # Visits (1-10):	<input type="checkbox"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? # Copays (1-10):	<input type="checkbox"/>

Plan Description:

2019 HDHP
Plan CSR
Variations - 250-
300% FPL
(73% AV)

Name:
Plan HIOS ID:
Issuer HIOS ID:

Output

Calculate

Status/Error Messages:

Error: Result is outside of +/- 1 percent de minimis variation for CSRs.

Actuarial Value:

75.50%

Metal Tier:

NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Additional Notes:

Calculation Time:

0.0391 seconds

Final 2019 AV Calculator

5. Silver HDHP – Embedded MOOP CSR – 73%, Continued

HDHP Model – Normalization:

Inputs				
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>				
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>				
<i>Note that the model run-time will vary based on the computers processing speed.</i>				
<i>A message box will appear to indicate that the calculations are done.</i>				
		Medical	Rx	
Individual Deductible		1,550	1,550	
Family Deductible		3,100	3,100	
Individual Out-of-Pocket		4,800	4,800	
Family Out-of-Pocket		9,600	9,600	
Coinsurance (50% or Less)		23%	29%	
Individual Embedded Moop:		7,900		
		Costs that Accumulate		
			OOP	
		Deductible	Medical	Rx
	Settings	Medical & Rx	Medical & Rx	Medical & Rx
				Deductible / OOP Type
				Stacked
				5
		<div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; display: inline-block; border-radius: 10px;">Calculate</div>		
Results				
		Medical	Rx	Total
	Allowed PMPM	\$301.26	\$46.95	\$348.21
	Plan PMPM	\$233.39	\$29.55	\$262.94
	Actuarial Value	77.5%	62.9%	75.5%

5. Silver HDHP – Embedded MOOP CSR – 73%, Continued

HDHP Model – Adjusted Actuarial Value:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		1,550	1,350		
Family Deductible		3,100	2,700		
Individual Out-of-Pocket		4,800	1,350		
Family Out-of-Pocket		9,600	2,700		
Coinsurance (50% or Less)		23%	29%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Rx Only	Aggregate Plus	6
	<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block;">Calculate</div>				
Results					
		Medical	Rx	Total	
Allowed PMPM		\$301.26	\$46.95	\$348.21	
Plan PMPM		\$223.28	\$31.06	\$254.34	
Actuarial Value		74.1%	66.2%	73.0%	

6. Silver HDHP – Embedded MOOP CSR – 77%

AV from AVC = 79.1%

Adjusted AV = 76.8%

AVC Screen Shot:

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Gold

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design		
	Medical	Drug	Combined
Deductible (\$)			\$1,350.00
Coinsurance (% Insurer's Cost Share)			75.00%
MOOP (\$)			\$3,300.00
MOOP if Separate (\$)			

	Tier 2 Plan Benefit Design		
	Medical	Drug	Combined
Deductible (\$)			
Coinsurance (% Insurer's Cost Share)			
MOOP (\$)			
MOOP if Separate (\$)			

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	90%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	90%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$10.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$40.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50%		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? Specialty Rx Coinsurance Maximum:	<input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay? # Days (1-10):	<input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? # Visits (1-10):	<input type="checkbox"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? # Copays (1-10):	<input type="checkbox"/>

Plan Description:

2019 HDHP
Plan CSR
Variations - 200-
250% FPL
(77% AV)

Name:
Plan HIOS ID:
Issuer HIOS ID:

Output

Calculate

Status/Error Messages:

Actuarial Value:

Metal Tier:

Additional Notes:

Calculation Time:

Final 2019 AV Calculator

Error: Result is outside of +/- 1 percent de minimis variation for CSRs.

79.10%

NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

0.043 seconds

6. Silver HDHP – Embedded MOOP CSR – 77%, Continued

HDHP Model – Normalization:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		1,350	1,350		
Family Deductible		2,700	2,700		
Individual Out-of-Pocket		3,300	3,300		
Family Out-of-Pocket		6,600	6,600		
Coinsurance (50% or Less)		23%	27%		
Individual Embedded Moop:		7,900			
Costs that Accumulate					
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	Stacked
<div style="border: 1px solid black; border-radius: 15px; background-color: #4a7ebb; color: white; padding: 10px 30px; display: inline-block; margin: 10px 0;">Calculate</div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$315.99	\$49.25	\$365.24	
Plan PMPM		\$255.70	\$33.30	\$289.00	
Actuarial Value		80.9%	67.6%	79.1%	

6. Silver HDHP – Embedded MOOP CSR – 77%, Continued

HDHP Model – Adjusted Actuarial Value:

Inputs						
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>						
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>						
<i>Note that the model run-time will vary based on the computers processing speed.</i>						
<i>A message box will appear to indicate that the calculations are done.</i>						
		Medical	Rx			
Individual Deductible		1,350	1,350			
Family Deductible		2,700	2,700			
Individual Out-of-Pocket		3,300	1,350			
Family Out-of-Pocket		6,600	2,700			
Coinsurance (50% or Less)		23%	27%			
Individual Embedded Moop:		7,900				
		Costs that Accumulate				
			OOP		Deductible /	
		Deductible	Medical	Rx	OOP Type	
Settings	Medical & Rx	Medical & Rx	Rx Only	Aggregate Plus	6	
<div style="border: 1px solid black; border-radius: 15px; padding: 10px 40px; display: inline-block; background-color: #4a86e8; color: white; margin: 10px 0;">Calculate</div>						
Results						
		Medical	Rx	Total		
Allowed PMPM		\$315.99	\$49.25	\$365.24		
Plan PMPM		\$247.19	\$33.48	\$280.68		
Actuarial Value		78.2%	68.0%	76.8%		

7. Silver HDHP – Embedded MOOP CSR – 87%

AV from AVC = 87.4%

Adjusted AV = 86.9%

AVC Screen Shot:

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Gold

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design		
	Medical	Drug	Combined
Deductible (\$)			\$1,200.00
Coinsurance (% Insurer's Cost Share)			100.00%
MOOP (\$)			\$1,200.00
MOOP if Separate (\$)			

Tier 2 Plan Benefit Design		
Medical	Drug	Combined

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? Specialty Rx Coinsurance Maximum:	<input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay? # Days (1-10):	<input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? # Visits (1-10):	<input type="checkbox"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? # Copays (1-10):	<input type="checkbox"/>

Plan Description:

2019 HDHP
Plan CSR
Variations - 150-
200% FPL
(87% AV)

Name:
Plan HIOS ID:
Issuer HIOS ID:

Output

Calculate

Status/Error Messages: CSR Level of 87% (150-200% FPL), Calculation Successful.
Actuarial Value: 87.40%
Metal Tier: Gold

Additional Notes:

Calculation Time: 0.0312 seconds
Final 2019 AV Calculator

7. Silver HDHP – Embedded MOOP CSR – 87%, Continued

HDHP Model – Normalization:

Inputs				
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>				
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>				
<i>Note that the model run-time will vary based on the computers processing speed.</i>				
<i>A message box will appear to indicate that the calculations are done.</i>				
		Medical	Rx	
Individual Deductible		1,200	1,200	
Family Deductible		2,400	2,400	
Individual Out-of-Pocket		1,200	1,200	
Family Out-of-Pocket		2,400	2,400	
Coinsurance (50% or Less)		0%	0%	
Individual Embedded Moop:		7,350		
		Costs that Accumulate		
			OOP	
		Deductible	Medical	Rx
	Settings	Medical & Rx	Medical & Rx	Medical & Rx
				Deductible / OOP Type
				Stacked
				5
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>		
Results				
		Medical	Rx	Total
	Allowed PMPM	\$321.35	\$50.08	\$371.43
	Plan PMPM	\$284.67	\$39.96	\$324.63
	Actuarial Value	88.6%	79.8%	87.4%

7. Silver HDHP – Embedded MOOP CSR – 87%, Continued

HDHP Model – Adjusted Actuarial Value:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		1,200	1,200		
Family Deductible		2,400	2,400		
Individual Out-of-Pocket		1,200	1,200		
Family Out-of-Pocket		2,400	2,400		
Coinsurance (50% or Less)		0%	0%		
Individual Embedded Moop:		7,350			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Rx Only	Aggregate Plus	6
<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$321.35	\$50.08	\$371.43	
Plan PMPM		\$283.05	\$39.73	\$322.79	
Actuarial Value		88.1%	79.3%	86.9%	

8. Silver HDHP – Embedded MOOP CSR – 94%

AV from AVC = 93.7%

Adjusted AV = 93.7%

AVC Screen Shot:

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

Desired Metal Tier: Platinum

Deductible (\$) _____

Coinsurance (% , Insurer's Cost Share) _____

MOOP (\$) _____

MOOP if Separate (\$) _____

Tier 1 Plan Benefit Design		
Medical	Drug	Combined
		\$550.00
		100.00%
		\$550.00

Tier 2 Plan Benefit Design		
Medical	Drug	Combined

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? Specialty Rx Coinsurance Maximum:	<input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay? # Days (1-10):	<input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? # Visits (1-10):	<input type="checkbox"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? # Copays (1-10):	<input type="checkbox"/>

Plan Description:

2019 HDHP
Plan CSR
Variations - 133-
150% FPL
Name: (94% AV)
Plan HIOS ID:
Issuer HIOS ID:

Output

Calculate

Status/Error Messages: CSR Level of 94% (100-150% FPL), Calculation Successful.
Actuarial Value: 93.66%
Metal Tier: Platinum

Additional Notes:

Calculation Time: 0.0352 seconds
Final 2019 AV Calculator

8. Silver HDHP – Embedded MOOP CSR – 94%, Continued

HDHP Model – Normalization:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		550	550		
Family Deductible		1,100	1,100		
Individual Out-of-Pocket		550	550		
Family Out-of-Pocket		1,100	1,100		
Coinsurance (50% or Less)		0%	0%		
Individual Embedded Moop:		7,350			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
					5
<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$337.42	\$52.59	\$390.00	
Plan PMPM		\$318.45	\$46.86	\$365.31	
Actuarial Value		94.4%	89.1%	93.7%	

8. Silver HDHP – Embedded MOOP CSR – 94%, Continued

HDHP Model – Adjusted Actuarial Value:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		550	550		
Family Deductible		1,100	1,100		
Individual Out-of-Pocket		550	550		
Family Out-of-Pocket		1,100	1,100		
Coinsurance (50% or Less)		0%	0%		
Individual Embedded Moop:		7,350			
Costs that Accumulate					
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Rx Only	Aggregate Plus	6
<div style="border: 1px solid black; border-radius: 15px; padding: 10px 40px; display: inline-block; background-color: #4a86e8; color: white; margin: 10px 0;">Calculate</div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$337.42	\$52.59	\$390.00	
Plan PMPM		\$318.44	\$46.81	\$365.24	
Actuarial Value		94.4%	89.0%	93.7%	

9. Silver Deductible CSR – 73%

AV from AVC = 73.37%

Adjustments

- HDHP Model with drug adjustments / HDHP Model without drug adjustments = $68.86\%/68.30\% = 1.008 \times 73.37\% = 74.0\%$

Adjusted AV = 74.0%

AVC Screen Shot:

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?
 Apply Inpatient Copay per Day?
 Apply Skilled Nursing Facility Copay per Day?
 Use Separate MOOP for Medical and Drug Spending?
 Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
 Desired Metal Tier: Silver

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)	\$2,700.00	\$300.00			
Coinsurance (% Insurer's Cost Share)	60.00%	50.00%			
MOOP (\$)	\$6,300.00				
MOOP if Separate (\$)					

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Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?		Copay applies only after deductible?	
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input type="checkbox"/>	<input type="checkbox"/>		\$65.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		\$65.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$65.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$65.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input type="checkbox"/>	<input type="checkbox"/>		\$12.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$60.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?
 Specialty Rx Coinsurance Maximum: _____
 Set a Maximum Number of Days for Charging an IP Copay?
 # Days (1-10): _____
 Begin Primary Care Cost-Sharing After a Set Number of Visits?
 # Visits (1-10): _____
 Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?
 # Copays (1-10): _____

Plan Description:

2019
 Deductible
 Plan CSR
 Variations - 250-
 300% FPL
 (73% AV)
Name: _____
Plan HIOS ID: _____
Issuer HIOS ID: _____

Output

Status/Error Messages: CSR Level of 73% (200-250% FPL), Calculation Successful.
 Actuarial Value: 73.37%
 Metal Tier: Silver
 Additional Notes: NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Calculation Time: 0.0391 seconds
Final 2019 AV Calculator

9. Silver Deductible CSR – 73%, Continued

HDHP Model – Without Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		2,700	300		
Family Deductible		5,400	600		
Individual Out-of-Pocket		6,300	6,300		
Family Out-of-Pocket		12,600	12,600		
Coinsurance (50% or Less)		36%	33%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
	Settings	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
					5
		<div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; display: inline-block; border-radius: 10px;">Calculate</div>			
Results					
		Medical	Rx	Total	
	Allowed PMPM	\$301.26	\$46.95	\$348.21	
	Plan PMPM	\$204.97	\$32.87	\$237.84	
	Actuarial Value	68.0%	70.0%	68.30%	

9. Silver Deductible CSR – 73%, Continued

HDHP Model – With Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		2,700	300		
Family Deductible		5,400	600		
Individual Out-of-Pocket		6,300	1,200		
Family Out-of-Pocket		12,600	2,400		
Coinsurance (50% or Less)		36%	33%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Rx Only	Stacked	2
<div style="border: 1px solid black; border-radius: 10px; width: 150px; height: 30px; background-color: #4a86e8; color: white; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> Calculate </div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$301.26	\$46.95	\$348.21	
Plan PMPM		\$203.97	\$35.81	\$239.79	
Actuarial Value		67.7%	76.3%	68.86%	

10. Silver Deductible CSR – 77%

AV from AVC = 77.3%

Adjustments

- HDHP Model with drug adjustments / HDHP Model without drug adjustments = $73.3\%/72.8\% = 1.007 \times .773 = 77.8\%$

Adjusted AV = 77.8%

AVC Screen Shot:

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?
 Apply Inpatient Copay per Day?
 Apply Skilled Nursing Facility Copay per Day?
 Use Separate MOOP for Medical and Drug Spending?
 Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
 Desired Metal Tier: Gold

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)	\$2,200.00	\$200.00			
Coinsurance (% Insurer's Cost Share)	60.00%	50.00%			
MOOP (\$)	\$4,900.00				
MOOP if Separate (\$)					

Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input type="checkbox"/>	<input type="checkbox"/>		\$20.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input type="checkbox"/>	<input type="checkbox"/>		\$40.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input type="checkbox"/>	<input type="checkbox"/>		\$20.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$40.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$40.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input type="checkbox"/>	<input type="checkbox"/>		\$12.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$60.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?
 Specialty Rx Coinsurance Maximum: _____
 Set a Maximum Number of Days for Charging an IP Copay?
 # Days (1-10): _____
 Begin Primary Care Cost-Sharing After a Set Number of Visits?
 # Visits (1-10): _____
 Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?
 # Copays (1-10): _____

Plan Description:
 2019 Deductible Plan CSR Variations - 200-250% FPL (77% AV)
Name: _____
Plan HIOS ID: _____
Issuer HIOS ID: _____

Output

Status/Error Messages: Error: Result is outside of +/- 1 percent de minimis variation for CSRs.
 Actuarial Value: 77.26%
 Metal Tier: _____
 Additional Notes: NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.
 Calculation Time: 0.043 seconds
 Final 2019 AV Calculator

10. Silver Deductible CSR – 77%, Continued

HDHP Model – Without Prescription Drug Adjustments:

Inputs						
<p><i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i></p> <p><i>Press 'Calculate' anytime an input or dropdown selection is changed.</i></p> <p><i>Note that the model run-time will vary based on the computers processing speed.</i></p> <p><i>A message box will appear to indicate that the calculations are done.</i></p>						
		Medical	Rx			
Individual Deductible		2,200	200			
Family Deductible		4,400	400			
Individual Out-of-Pocket		4,900	4,900			
Family Out-of-Pocket		9,800	9,800			
Coinsurance (50% or Less)		34%	33%			
Individual Embedded Moop:		7,900				
		Costs that Accumulate				
			OOP			
		Deductible	Medical	Rx	Deductible /	
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type	
					Stacked	
					5	
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a7ebb; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>				
Results						
		Medical	Rx	Total		
Allowed PMPM		\$315.99	\$49.25	\$365.24		
Plan PMPM		\$229.58	\$36.15	\$265.73		
Actuarial Value		72.7%	73.4%	72.8%		

10. Silver Deductible CSR – 77%, Continued

HDHP Model – With Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		2,200	200		
Family Deductible		4,400	400		
Individual Out-of-Pocket		4,900	1,000		
Family Out-of-Pocket		9,800	2,000		
Coinsurance (50% or Less)		34%	33%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings		Medical & Rx	Medical & Rx	Rx Only	Stacked
					2
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$315.99	\$49.25	\$365.24	
Plan PMPM		\$228.46	\$39.08	\$267.54	
Actuarial Value		72.3%	79.4%	73.3%	

11. Silver Deductible CSR – 87%

AV from AVC = 87.4%

Adjustments

- HDHP Model with drug adjustments / HDHP Model without drug adjustments = $85.7\%/85.5\% = 1.002 \times .874 = 87.6\%$

Adjusted AV = 87.6%

AVC Screen Shot:

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?
 Apply Inpatient Copay per Day?
 Apply Skilled Nursing Facility Copay per Day?
 Use Separate MOOP for Medical and Drug Spending?
 Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
 Desired Metal Tier: Gold

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)	\$800.00	\$150.00				
Coinsurance (% Insurer's Cost Share)	60.00%	50.00%				
MOOP (\$)	\$1,800.00					
MOOP if Separate (\$)						

Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input type="checkbox"/>	<input type="checkbox"/>		\$10.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input type="checkbox"/>	<input type="checkbox"/>		\$10.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input type="checkbox"/>	<input type="checkbox"/>		\$10.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?
 Specialty Rx Coinsurance Maximum: _____
 Set a Maximum Number of Days for Charging an IP Copay?
 # Days (1-10): _____
 Begin Primary Care Cost-Sharing After a Set Number of Visits?
 # Visits (1-10): _____
 Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?
 # Copays (1-10): _____

Plan Description:
 2019 Deductible Plan CSR Variations - 150-200% FPL (87% AV)
Name: _____
Plan HIOS ID: _____
Issuer HIOS ID: _____

Output

Status/Error Messages: CSR Level of 87% (150-200% FPL), Calculation Successful.
 Actuarial Value: 87.43%
 Metal Tier: Gold
 NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Additional Notes:
 Calculation Time: 0.0391 seconds

Final 2019 AV Calculator

11. Silver Deductible CSR – 87%, Continued

HDHP Model – Without Prescription Drug Adjustments:

Inputs					
<p><i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i></p> <p><i>Press 'Calculate' anytime an input or dropdown selection is changed.</i></p> <p><i>Note that the model run-time will vary based on the computers processing speed.</i></p> <p><i>A message box will appear to indicate that the calculations are done.</i></p>					
		Medical	Rx		
Individual Deductible		800	150		
Family Deductible		1,600	300		
Individual Out-of-Pocket		1,800	1,800		
Family Out-of-Pocket		3,600	3,600		
Coinsurance (50% or Less)		33%	29%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
					5
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$321.35	\$50.08	\$371.43	
Plan PMPM		\$275.74	\$41.68	\$317.42	
Actuarial Value		85.8%	83.2%	85.5%	

11. Silver Deductible CSR – 87%, Continued

HDHP Model – With Prescription Drug Adjustments:

Inputs					
<p><i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i></p> <p><i>Press 'Calculate' anytime an input or dropdown selection is changed.</i></p> <p><i>Note that the model run-time will vary based on the computers processing speed.</i></p> <p><i>A message box will appear to indicate that the calculations are done.</i></p>					
		Medical	Rx		
Individual Deductible		800	150		
Family Deductible		1,600	300		
Individual Out-of-Pocket		1,800	400		
Family Out-of-Pocket		3,600	800		
Coinsurance (50% or Less)		33%	29%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		Deductible /
		Deductible	Medical	Rx	OOP Type
Settings	Medical & Rx	Medical & Rx	Rx Only		Stacked
					2
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px 0;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$321.35	\$50.08	\$371.43	
Plan PMPM		\$274.48	\$43.86	\$318.34	
Actuarial Value		85.4%	87.6%	85.7%	

12. Silver Deductible CSR – 94%

AV from AVC = 94.7%

Adjustments

- HDHP Model with drug adjustments / HDHP Model without drug adjustments = $95.1\%/94.9\% = 1.002 \times .946 = 94.9\%$

Adjusted AV = 94.9%

AVC Screen Shot:

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?
 Apply Inpatient Copay per Day?
 Apply Skilled Nursing Facility Copay per Day?
 Use Separate MOOP for Medical and Drug Spending?
 Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
 Desired Metal Tier: Platinum

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:	\$0.00	1st Tier Utilization:	100%
		2nd Tier Utilization:	0%

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)	\$150.00	\$0.00				
Coinsurance (% Insurer's Cost Share)	90.00%	70.00%				
MOOP (\$)	\$900.00					
MOOP if Separate (\$)						

Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$75.00	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input type="checkbox"/>	<input type="checkbox"/>		\$15.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$15.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$15.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input type="checkbox"/>	<input type="checkbox"/>		\$20.00	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?
 Specialty Rx Coinsurance Maximum: _____

Set a Maximum Number of Days for Charging an IP Copay?
 # Days (1-10): _____

Begin Primary Care Cost-Sharing After a Set Number of Visits?
 # Visits (1-10): _____

Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?
 # Copays (1-10): _____

Plan Description:
 2019 Deductible Plan CSR Variations - 133-150% FPL (94% AV)
Name: _____
Plan HIOS ID: _____
Issuer HIOS ID: _____

Output

Status/Error Messages: CSR Level of 94% (100-150% FPL), Calculation Successful.
 Actuarial Value: 94.66%
 Metal Tier: Platinum
 NOTE: Office-visit-specific cost-sharing is applying to x-rays in office settings.

Additional Notes:

Calculation Time: 0.0391 seconds
Final 2019 AV Calculator

12. Silver Deductible CSR – 94%, Continued

HDHP Model – Without Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		150	0		
Family Deductible		300	0		
Individual Out-of-Pocket		900	900		
Family Out-of-Pocket		1,800	1,800		
Coinsurance (50% or Less)		9%	15%		
Individual Embedded Moop:		7,900			
Costs that Accumulate					
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Medical & Rx	OOP Type
					Stacked
					5
<div style="border: 1px solid black; border-radius: 15px; padding: 10px 40px; display: inline-block; background-color: #4a86e8; color: white; text-decoration: none;">Calculate</div>					
Results					
		Medical	Rx	Total	
Allowed PMPM		\$337.42	\$52.59	\$390.00	
Plan PMPM		\$321.17	\$49.04	\$370.20	
Actuarial Value		95.2%	93.3%	94.9%	

12. Silver Deductible CSR – 94%, Continued

HDHP Model – With Prescription Drug Adjustments:

Inputs					
<i>Enter values in the blue cells below, choose a setting option from the drop down box, and press 'Calculate'.</i>					
<i>Press 'Calculate' anytime an input or dropdown selection is changed.</i>					
<i>Note that the model run-time will vary based on the computers processing speed.</i>					
<i>A message box will appear to indicate that the calculations are done.</i>					
		Medical	Rx		
Individual Deductible		150	0		
Family Deductible		300	0		
Individual Out-of-Pocket		900	200		
Family Out-of-Pocket		1,800	400		
Coinsurance (50% or Less)		9%	15%		
Individual Embedded Moop:		7,900			
		Costs that Accumulate			
			OOP		
		Deductible	Medical	Rx	Deductible /
Settings	Medical & Rx	Medical & Rx	Medical & Rx	Rx Only	OOP Type
					Stacked
		<div style="border: 1px solid black; border-radius: 10px; background-color: #4a86e8; color: white; padding: 10px 20px; display: inline-block; margin: 10px auto;">Calculate</div>			
Results					
		Medical	Rx	Total	
Allowed PMPM		\$337.42	\$52.59	\$390.00	
Plan PMPM		\$320.71	\$50.01	\$370.72	
Actuarial Value		95.0%	95.1%	95.1%	

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Introduction

On December 28, 2017, CMS released the final methodology on the Actuarial Value and the final Actuarial Value Calculator (AVC) for 2019. CMS made few changes in the 2019 AVC. Most notably, they trended the underlying claims to calendar year 2019.

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, 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 2015 claims from BCBSVT Qualified Health Plans members that maintain their benefit and tier type throughout the year are

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS
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included in the analysis. We compared the allowed claims per member per month (PMPM) and the modelled paid-to-allowed ratio for this population relative to the entire QHP population and found the differences to be immaterial. The model uses calendar year 2015 claims, trended to 2019 using 3.25 percent trend from 2015 to 2019 and 5.4 percent trend for 2018 to 2019 for Medical claims and 11.5 percent trend for 2015 to 2019 for Pharmacy claims¹. 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 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.

On April 18, 2017, CMS finalized the Market Stabilization rule. In this rule, CMS widened the Actuarial Value (AV) de minimis included in 45 CFR 156.140(c) from +/- 2 percent to -4/+2 percent. For the two Blue Rewards Gold plans described below, we utilized the wider range of acceptable AV.

Under Vermont's Act 165 of 2016, QHP issuers were given the option to alter the pharmacy-specific out-of-pocket maximum (Rx OOPM) to amounts higher than allowed under 8 V.S.A §4089i. On February 9, 2017, BCBSVT presented a request to the Green Mountain Care Board (GMCB) to remove the specific Rx OOPM from its existing Blue Rewards Bronze CDHP plan and from its new proposed Blue Rewards Bronze Copayment plan. The GMCB approved this request. The Bronze plans described below reflect a combined Medical and Pharmacy OOPM, without a specific Rx OOPM.

¹ BCBSVT used the same trend that CMS used in the 2019 Final AV Calculator (see page 3 of <https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Final-2019-AV-Calculator-Methodology.pdf>)

**BLUE CROSS AND BLUE SHIELD OF VERMONT
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Actuarial Opinion

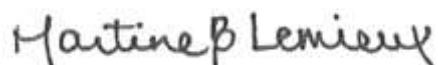
The purpose of this calculation is to comply with the requirements of 45 CFR 156.135(b)(3). The Actuarial Values were determined based on the plans' benefits and coverage data, the standard population, utilization and continuance tables published by HHS for purposes of valuation of Actuarial Value. These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

I am an Associate 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 States 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 2019.

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.



Martine Lemieux, A.S.A., M.A.A.A.
Associate Actuary
Blue Cross and Blue Shield of Vermont

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Blue Rewards CDHP Plans

Plan : Blue Rewards (Non-Standard) CDHP Plan - Gold		
Items supported by the AV Calculator	Deductible	\$3,000
	Coinsurance	0%
	OOPM	\$3,000
AVC Output for items supported by the AVC		(a) 76.1%
BCBSVT Model Output for items supported by the AVC		(b) 79.7%
BCBSVT Model Output for complete benefit design		(c) 80.3%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a) 76.7%

Items not supported by the AV Calculator for this plan are the Pharmacy OOPM of \$1,350 and Wellness (Safe Harbor) pharmaceuticals not subject to the deductible.

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?

Apply Inpatient Copay per Day?

Apply Skilled Nursing Facility Copay per Day?

Use Separate MOOP for Medical and Drug Spending?

Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Gold

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$3,000.00			
Coinsurance (% Insurer's Cost Share)			100.00%			
MOOP (\$)			\$3,000.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? <input type="checkbox"/>	Plan Description: Name: Blue Rewards Gold CDHP Plan HIOS ID: 13627VT0390001 and 13627VT0370001 Issuer HIOS ID: 13627
Specialty Rx Coinsurance Maximum: <input type="checkbox"/>	
Set a Maximum Number of Days for Charging an IP Copay? <input type="checkbox"/>	
# Days (1-10): <input type="text"/>	
Begin Primary Care Cost-Sharing After a Set Number of Visits? <input type="checkbox"/>	
# Visits (1-10): <input type="text"/>	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? <input type="checkbox"/>	
# Copays (1-10): <input type="text"/>	

Output

Status/Error Messages: Calculation Successful.

Actuarial Value: 76.12%

Metal Tier: Gold

Additional Notes:

Calculation Time: 0.1719 seconds

Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver		
Items supported by the AV Calculator	Deductible	\$4,100
	Coinsurance	0%
	OOPM	\$4,100
AVC Output for items supported by the AVC		(a) 70.8%
BCBSVT Model Output for items supported by the AVC		(b) 75.4%
BCBSVT Model Output for complete benefit design		(c) 76.5%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a) 71.8%

Items not supported by the AV Calculator for this plan are the Pharmacy OOPM of \$1,350 and Wellness (Safe Harbor) pharmaceuticals not subject to the deductible.

User inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?
 Apply Inpatient Copay per Day?
 Apply Skilled Nursing Facility Copay per Day?
 Use Separate MOOP for Medical and Drug Spending?
 Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Silver

Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
Medical	Drug	Combined	Medical	Drug	Combined
		\$4,100.00			
		100.00%			
		\$4,100.00			

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Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Tier 1 Copay applies only after deductible?	Tier 2 Copay applies only after deductible?		
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All		
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>		
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All		
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input type="checkbox"/>
# Visits (1-10):	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver CDHP
Plan HIOS ID: 13627VT0390002 and 13627VT0370002
Issuer HIOS ID: 13627

Output

Status/Error Messages: Calculation Successful.
 Actuarial Value: 70.80%
 Metal Tier: Silver

Additional Notes:

Calculation Time: 0.1094 seconds
Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 73% CSR		
Items supported by the AV Calculator	Deductible	\$3,550
	Coinsurance	0%
	OOPM	\$3,550
AVC Output for items supported by the AVC	(a)	73.1%
BCBSVT Model Output for items supported by the AVC	(b)	77.4%
BCBSVT Model Output for complete benefit design	(c)	78.3%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a) 73.9%

Items not supported by the AV Calculator for this plan are the Pharmacy OOPM of \$1,350 and Wellness (Safe Harbor) pharmaceuticals not subject to the deductible.

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible? <input checked="" type="checkbox"/> Apply Inpatient Copay per Day? <input type="checkbox"/> Apply Skilled Nursing Facility Copay per Day? <input type="checkbox"/> Use Separate MOOP for Medical and Drug Spending? <input type="checkbox"/> Indicate if Plan Meets CSR or Expanded Bronze AV Standard? <input checked="" type="checkbox"/> Desired Metal Tier: Silver	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">HSA/HRA Options</th> <th style="text-align: left;">Tiered Network Option</th> </tr> </thead> <tbody> <tr> <td>HSA/HRA Employer Contribution? <input type="checkbox"/></td> <td>Tiered Network Plan? <input type="checkbox"/></td> </tr> <tr> <td>Annual Contribution Amount:</td> <td>1st Tier Utilization:</td> </tr> <tr> <td></td> <td>2nd Tier Utilization:</td> </tr> </tbody> </table>	HSA/HRA Options	Tiered Network Option	HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>	Annual Contribution Amount:	1st Tier Utilization:		2nd Tier Utilization:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">Tier 1 Plan Benefit Design</th> </tr> <tr> <th style="text-align: center;">Medical</th> <th style="text-align: center;">Drug</th> <th style="text-align: center;">Combined</th> </tr> </thead> <tbody> <tr> <td>Deductible (\$)</td> <td></td> <td style="text-align: center;">\$3,550.00</td> </tr> <tr> <td>Coinsurance (% , Insurer's Cost Share)</td> <td></td> <td style="text-align: center;">100.00%</td> </tr> <tr> <td>MOOP (\$)</td> <td></td> <td style="text-align: center;">\$3,550.00</td> </tr> <tr> <td>MOOP if Separate (\$)</td> <td></td> <td></td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">Tier 2 Plan Benefit Design</th> </tr> <tr> <th style="text-align: center;">Medical</th> <th style="text-align: center;">Drug</th> <th style="text-align: center;">Combined</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Tier 1 Plan Benefit Design			Medical	Drug	Combined	Deductible (\$)		\$3,550.00	Coinsurance (% , Insurer's Cost Share)		100.00%	MOOP (\$)		\$3,550.00	MOOP if Separate (\$)			Tier 2 Plan Benefit Design			Medical	Drug	Combined									
HSA/HRA Options	Tiered Network Option																																										
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>																																										
Annual Contribution Amount:	1st Tier Utilization:																																										
	2nd Tier Utilization:																																										
Tier 1 Plan Benefit Design																																											
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Deductible (\$)		\$3,550.00																																									
Coinsurance (% , Insurer's Cost Share)		100.00%																																									
MOOP (\$)		\$3,550.00																																									
MOOP if Separate (\$)																																											
Tier 2 Plan Benefit Design																																											
Medical	Drug	Combined																																									

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Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?		Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input type="checkbox"/>
# Visits (1-10):	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver CDHP - 73%
Plan HIOS ID: 13627VT0390002 and 13627VT0370002
Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages: CSR Level of 73% (200-250% FPL), Calculation Successful.
 Actuarial Value: 73.11%
 Metal Tier: Silver

Additional Notes:

Calculation Time: 0.125 seconds
Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 77% CSR		
Items supported by the AV Calculator	Deductible	\$2,800
	Coinsurance	0%
	OOPM	\$2,800
AVC Output for items supported by the AVC		(a) 76.7%
BCBSVT Model Output for items supported by the AVC		(b) 80.4%
BCBSVT Model Output for complete benefit design		(c) 81.0%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a) 77.2%

Items not supported by the AV Calculator for this plan are the Pharmacy OOPM of \$1,350 and Wellness (Safe Harbor) pharmaceuticals not subject to the deductible.

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?

Apply Inpatient Copay per Day?

Apply Skilled Nursing Facility Copay per Day?

Use Separate MOOP for Medical and Drug Spending?

Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier:

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount: <input type="text"/>	1st Tier Utilization: <input type="text"/>
	2nd Tier Utilization: <input type="text"/>

Tier 1 Plan Benefit Design				Tier 2 Plan Benefit Design		
Medical	Drug	Combined		Medical	Drug	Combined
Deductible (\$)		\$2,800.00				
Coinsurance (% Insurer's Cost Share)		100.00%				
MOOP (\$)		\$2,800.00				
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1 Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All <input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
All Inpatient Hospital Services (inc. MHI/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input type="checkbox"/> All <input type="checkbox"/> All
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All <input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/> All <input type="checkbox"/> All

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? <input type="checkbox"/>	Specialty Rx Coinsurance Maximum: <input type="text"/>
Set a Maximum Number of Days for Charging an IP Copay? <input type="checkbox"/>	# Days (1-10): <input type="text"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? <input type="checkbox"/>	# Visits (1-10): <input type="text"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? <input type="checkbox"/>	# Copays (1-10): <input type="text"/>

Plan Description:
Name: Blue Rewards Silver CDHP - 77%
Plan HIOS ID: 13627V0390002 and 13627V0370002
Issuer HIOS ID: 13627

Output

Status/Error Messages: Error: Result is outside of +/- 1 percent de minimis variation for CSRs.
Actuarial Value: 76.69%
Metal Tier:
Additional Notes:
Calculation Time: 0.125 seconds
Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 87% CSR		
Items supported by the AV Calculator	Deductible	\$1,300
	Coinsurance	0%
	OOPM	\$1,300
AVC Output for items supported by the AVC		(a) 86.6%
BCBSVT Model Output for items supported by the AVC		(b) 88.4%
BCBSVT Model Output for complete benefit design		(c) 88.5%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a) 86.7%

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

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: Silver

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

Tier 1 Plan Benefit Design		
Medical	Drug	Combined
Deductible (\$)		\$1,300.00
Coinsurance (% Insurer's Cost Share)		100.00%
MOOP (\$)		\$1,300.00
MOOP if Separate (\$)		

Tier 2 Plan Benefit Design		
Medical	Drug	Combined
Deductible (\$)		
Coinsurance (% Insurer's Cost Share)		
MOOP (\$)		
MOOP if Separate (\$)		

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Type of Benefit	Tier 1				Tier 2				Tier 1 Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MHI/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? <input type="checkbox"/>
Specialty Rx Coinsurance Maximum: <input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay? <input type="checkbox"/>
Days (1-10): <input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? <input type="checkbox"/>
Visits (1-10): <input type="checkbox"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? <input type="checkbox"/>
Copays (1-10): <input type="checkbox"/>

Plan Description:

Name: Blue Rewards Silver CDHP - 87%
 Plan HIOS ID: 13627V/T0390002 and 13627V/T0370002
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages: CSR Level of 87% (150-200% FPL), Calculation Successful.

Actuarial Value: 86.61%

Metal Tier: Gold

Additional Notes:

Calculation Time: 0.1719 seconds

Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver 94% CSR		
Items supported by the AV Calculator	Deductible	\$550
	Coinsurance	0%
	OOPM	\$550
AVC Output for items supported by the AVC		(a) 93.7%
BCBSVT Model Output for items supported by the AVC		(b) 94.1%
BCBSVT Model Output for complete benefit design		(c) 94.2%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a) 93.7%

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

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$550.00			
Coinsurance (% , Insurer's Cost Share)			100.00%			
MOOP (\$)			\$550.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?		Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input type="checkbox"/>
# Visits (1-10):	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver CDHP - 94%
 Plan HIOS ID: 13627VT0390002 and 13627VT0370002
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages: CSR Level of 94% (100-150% FPL), Calculation Successful.
 Actuarial Value: 93.66%
 Metal Tier: Platinum

Additional Notes:

Calculation Time: 0.0781 seconds
 Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Bronze			
Items supported by the AV Calculator	Deductible	\$6,650	
	Coinsurance	0%	
	OOPM	\$6,650	
AVC Output for items supported by the AVC		(a)	61.4%
BCBSVT Model Output for items supported by the AVC		(b)	67.9%
BCBSVT Model Output for complete benefit design		(c)	68.5%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	62.0%

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

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?
 Apply Inpatient Copay per Day?
 Apply Skilled Nursing Facility Copay per Day?
 Use Separate MOOP for Medical and Drug Spending?
 Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
 Desired Metal Tier: Bronze

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

Tier 1 Plan Benefit Design		
Medical	Drug	Combined
Deductible (\$)		\$6,650.00
Coinsurance (%; Insurer's Cost Share)		100.00%
MOOP (\$)		\$6,650.00
MOOP if Separate (\$)		

Tier 2 Plan Benefit Design		
Medical	Drug	Combined
Deductible (\$)		
Coinsurance (%; Insurer's Cost Share)		
MOOP (\$)		
MOOP if Separate (\$)		

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Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?		Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? <input type="checkbox"/>
Specialty Rx Coinsurance Maximum: <input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay? <input type="checkbox"/>
Days (1-10): <input type="checkbox"/>
Begin Primary Care Cost-Sharing After a Set Number of Visits? <input type="checkbox"/>
Visits (1-10): <input type="checkbox"/>
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? <input type="checkbox"/>
Copays (1-10): <input type="checkbox"/>

Plan Description:

Name: Blue Rewards Bronze
Plan HIOS ID: 13627V/T0390003 and 13627V/T0370003
Issuer HIOS ID: 13627

Output

Status/Error Messages: Calculation Successful.
 Actuarial Value: 61.44%
 Metal Tier: Bronze

Additional Notes:

Calculation Time: 0.125 seconds
Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan : Blue Rewards (Non-Standard) CDHP Plan - Silver Reflective			
Items supported by the AV Calculator	Deductible	\$4,125	
	Coinsurance	0%	
	OOPM	\$4,125	
AVC Output for items supported by the AVC		(a)	70.7%
BCBSVT Model Output for items supported by the AVC		(b)	75.3%
BCBSVT Model Output for complete benefit design		(c)	76.4%
Adjustment to the AVC	Estimated AVC value	(d)=(c)/(b)*(a)	71.8%

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

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$4,125.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$4,125.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1		Tier 2	
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?		
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All		
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>		
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All		
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input type="checkbox"/>
# Visits (1-10):	
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver CDHP Reflective
 Plan HIOS ID: 13627VT0390004 and 13627VT0370004
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages: Calculation Successful.
 Actuarial Value: 70.70%
 Metal Tier: Silver

Additional Notes:

Calculation Time: 0.1094 seconds
 Final 2019 AV Calculator

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS
METAL ACTUARIAL VALUES CERTIFICATION**

Blue Rewards Copayment Plans

Items not supported by the AV Calculator for all of these plans are

- Three Mental Health office visits at no cost share before the deductible
- Class I Pediatric Dental at no cost share
- Copayment on Urgent Care, Emergency Medical Transportation, DME services and Home Health Care

Items not supported by the AV Calculator for Gold, Silver, CSR 73%, CSR 77% and CSR 87% plans are

- Specific Pharmacy out-of-pocket maximum of \$1,350

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.

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Gold		
Items supported by the AV Calculator	Deductible	\$1,550
	Coinsurance	0%
	OOPM	\$5,150
	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) 75.0%
BCBSVT Model Output for items supported by the AVC		(b) 81.6%
BCBSVT Model Output for complete benefit design		(c) 82.7%
Estimated AVC value		(d)=(c)/(b)*(a) 76.1%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$1,550.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$5,150.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$20.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$19.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Gold
 Plan HIOS ID: 13627VT0380001 and 13627VT0360001
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages:

Error: Result is outside of [-4, +2] percent de minimis variation.
75.03%

Actuarial Value:

Metal Tier:

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

Additional Notes:

Calculation Time:

0.125 seconds

Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver		
Items supported by the AV Calculator	Deductible	\$2,850
	Coinsurance	0%
	OOPM	\$7,900
	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) 66.7%
BCBSVT Model Output for items supported by the AVC		(b) 73.5%
BCBSVT Model Output for complete benefit design		(c) 75.5%
Estimated AVC value		(d)=(c)/(b)*(a) 68.5%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier Silver

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization: 2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$2,850.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$7,900.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$450.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$29.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments? <input type="checkbox"/>	
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay? <input type="checkbox"/>	
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits? <input checked="" type="checkbox"/>	
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays? <input type="checkbox"/>	
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver
 Plan HIOS ID: 13627VT0380002 and 13627VT0360002
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages:

Calculation Successful.

Actuarial Value:

66.74%

Metal Tier:

Silver

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

Additional Notes:

Calculation Time:

0.0781 seconds

Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 73%		
Items supported by the AV Calculator	Deductible	\$2,100
	Coinsurance	0%
	OOPM	\$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) 71.8%
BCBSVT Model Output for items supported by the AVC		(b) 77.5%
BCBSVT Model Output for complete benefit design		(c) 78.8%
Estimated AVC value		(d)=(c)/(b)*(a) 73.0%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$2,100.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$5,700.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$400.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$29.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver - 73%
 Plan HIOS ID: 13627V T0380002 and 13627V T0360002
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages:

Error: Result is outside of +/- 1 percent de minimis variation for CSRs.
71.83%

Actuarial Value:

Metal Tier:

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

Additional Notes:

Calculation Time:

0.125 seconds

Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 77%		
Items supported by the AV Calculator	Deductible	\$1,000
	Coinsurance	0%
	OOPM	\$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) 76.1%
BCBSVT Model Output for items supported by the AVC		(b) 82.0%
BCBSVT Model Output for complete benefit design		(c) 82.9%
Estimated AVC value		(d)=(c)/(b)*(a) 76.9%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$1,000.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$5,200.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$400.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$29.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver - 73%
 Plan HIOS ID: 13627V T0380002 and 13627V T0360002
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages:

Error: Result is outside of +/- 1 percent de minimis variation for CSRs.
76.05%

Actuarial Value:

Metal Tier:

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

Additional Notes:

Calculation Time:

0.0938 seconds

Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver CSR 87%		
Items supported by the AV Calculator	Deductible	\$200
	Coinsurance	0%
	OOPM	\$2,000
	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) 87.2%
BCBSVT Model Output for items supported by the AVC		(b) 91.1%
BCBSVT Model Output for complete benefit design		(c) 91.2%
Estimated AVC value		(d)=(c)/(b)*(a) 87.2%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$200.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$2,000.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$29.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$500.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver - 87%
 Plan HIOS ID: 13627V0380002 and 13627V0360002
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages:

Actuarial Value:

Metal Tier:

Additional Notes:

Calculation Time:

Final 2019 AV Calculator

CSR Level of 87% (150-200% FPL), Calculation Successful.

87.20%

Gold

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

0.1094 seconds

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

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.

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible?

Apply Inpatient Copay per Day?

Apply Skilled Nursing Facility Copay per Day?

Use Separate MOOP for Medical and Drug Spending?

Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

Desired Metal Tier: **Platinum**

HSA/HRA Options		Tiered Network Option	
HSA/HRA Employer Contribution?	<input type="checkbox"/>	Tiered Network Plan?	<input type="checkbox"/>
Annual Contribution Amount:		1st Tier Utilization:	
		2nd Tier Utilization:	

Tier 1 Plan Benefit Design				Tier 2 Plan Benefit Design		
Medical	Drug	Combined		Medical	Drug	Combined
		\$0.00				
		100.00%				
		\$950.00				

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
Medical	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$15.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$14.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver - 94%

Plan HIOS ID: 13627VT0380002 and 13627VT0360002

Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages: CSR Level of 94% (100-150% FPL), Calculation Successful.

Actuarial Value: 93.39%

Metal Tier: Platinum

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

Additional Notes:

Calculation Time: 0.0781 seconds

Final 2019 AV Calculator

² The AV calculator produces an AV of 93.46% 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.

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Bronze		
Items supported by the AV Calculator	Deductible	\$7,900
	Coinsurance	0%
	OOPM	\$7,900
	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) 61.1%
BCBSVT Model Output for items supported by the AVC		(b) 66.7%
BCBSVT Model Output for complete benefit design		(c) 66.7%
Estimated AVC value		(d)=(c)/(b)*(a) 61.2%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?
- Desired Metal Tier: Bronze

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$7,900.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$7,900.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Bronze
 Plan HIOS ID: 13627VT0380003 and 13627VT0360003
 Issuer HIOS ID: 13627

Output

Status/Error Messages: Calculation Successful.
 Actuarial Value: 61.13%
 Metal Tier: Bronze

Additional Notes:

Calculation Time: 0.125 seconds
 Final 2019 AV Calculator

BLUE CROSS AND BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS METAL ACTUARIAL VALUES CERTIFICATION

Plan: Blue Rewards (Non-Standard) Copayment Plan - Silver Reflective		
Items supported by the AV Calculator	Deductible	\$2,850
	Coinsurance	0%
	OOPM	\$7,900
	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) 66.7%
BCBSVT Model Output for items supported by the AVC		(b) 73.5%
BCBSVT Model Output for complete benefit design		(c) 75.5%
Estimated AVC value		(d)=(c)/(b)*(a) 68.5%

User Inputs for Plan Parameters

- Use Integrated Medical and Drug Deductible?
- Apply Inpatient Copay per Day?
- Apply Skilled Nursing Facility Copay per Day?
- Use Separate MOOP for Medical and Drug Spending?
- Indicate if Plan Meets CSR or Expanded Bronze AV Standard?

HSA/HRA Options	Tiered Network Option
HSA/HRA Employer Contribution? <input type="checkbox"/>	Tiered Network Plan? <input type="checkbox"/>
Annual Contribution Amount:	1st Tier Utilization:
	2nd Tier Utilization:

	Tier 1 Plan Benefit Design			Tier 2 Plan Benefit Design		
	Medical	Drug	Combined	Medical	Drug	Combined
Deductible (\$)			\$2,850.00			
Coinsurance (%; Insurer's Cost Share)			100.00%			
MOOP (\$)			\$7,900.00			
MOOP if Separate (\$)						

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	
Medical	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Emergency Room Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$450.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MH/SUD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$30.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Use Disorder Outpatient Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$29.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational and Physical Therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,750.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Generics	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60%		<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Options for Additional Benefit Design Limits:

Set a Maximum on Specialty Rx Coinsurance Payments?	<input type="checkbox"/>
Specialty Rx Coinsurance Maximum:	
Set a Maximum Number of Days for Charging an IP Copay?	<input type="checkbox"/>
# Days (1-10):	
Begin Primary Care Cost-Sharing After a Set Number of Visits?	<input checked="" type="checkbox"/>
# Visits (1-10):	3
Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?	<input type="checkbox"/>
# Copays (1-10):	

Plan Description:

Name: Blue Rewards Silver Reflective
 Plan HIOS ID: 13627VT0380004 and 13627VT0360004
 Issuer HIOS ID: 13627

Output

Calculate

Status/Error Messages:

Error: Result is outside of +/- 1 percent de minimis variation for CSRs.
66.74%

Actuarial Value:

Metal Tier:

NOTE: Service-specific cost-sharing is applying for service(s) with fac/prof components, overriding outpatient inputs for those service(s).

Additional Notes:

Calculation Time:

0.0898 seconds

Final 2019 AV Calculator

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS
METAL ACTUARIAL VALUES CERTIFICATION**

Appendix – Complete Benefit Designs

	Gold	Silver	Silver Reflective	Bronze
Deductible/OOP Max	Copayment	Copayment	Copayment	Copayment
Medical Deductible	\$1,550	\$2,850	\$2,850	\$7,900
Rx Deductible	Combined	Combined	Combined	Combined
Integrated Deductible	Yes	Yes	Yes	Yes
Medical OOPM	\$5,150	\$7,900	\$7,900	\$7,900
Rx OOPM	\$1,350	\$1,350	\$1,350	Combined
Integrated OOPM	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900
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
Drug Deductible waived for:	N/A	N/A	N/A	N/A
Service Category				
Preventive	\$0	\$0	\$0	\$0
PCP Office Visit	3 visits per member combined PCP/MH at no cost share before deductible then \$20 copay	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	3 visits per member combined PCP/MH at no cost share before deductible then \$0 copay
MH/SA Office Visit				
Specialist Office Visit	\$30	\$50	\$50	\$0
Urgent Care	\$30	\$50	\$50	\$0
Ambulance	\$30	\$50	\$55	\$0
DME	\$30	\$50	\$50	\$0
ER	\$250	\$450	\$450	\$0
Radiology (MRI, CT, PET)	\$750	\$1,750	\$1,750	\$0
Inpatient / Outpatient	\$750	\$1,750	\$1,750	\$0
Rx Generic	\$5	\$5	\$5	\$0
Rx Preferred Brand	40%	40%	40%	0%
Rx Non-Preferred Brand	60%	60%	60%	0%
Estimated 2019 AVC Value	76.1%	68.5%	68.5%	61.2%

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS
METAL ACTUARIAL VALUES CERTIFICATION**

	73% AV	77% AV	87% AV	94% AV
Deductible/OOP Max	Copayment	Copayment	Copayment	Copayment
Medical Deductible	\$2,100	\$1,000	\$200	\$0
Rx Deductible	Combined	Combined	Combined	Combined
Integrated Deductible	Yes	Yes	Yes	Yes
Medical OOPM	\$5,700	\$5,200	\$2,000	\$950
Rx OOPM	\$1,350	\$1,350	\$1,350	\$950
Integrated OOPM	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	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
Drug Deductible waived for:	N/A	N/A	N/A	N/A
Service Category				
Preventive	\$0	\$0	\$0	\$0
PCP Office Visit	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	3 visits per member combined PCP/MH at no cost share before deductible then \$30 copay	3 visits per member combined PCP/MH at no cost share before deductible then \$15 copay
MH/SA Office Visit				
Specialist Office Visit	\$50	\$50	\$50	\$35
Urgent Care	\$50	\$50	\$50	\$35
Ambulance	\$50	\$50	\$50	\$35
DME	\$50	\$50	\$50	\$35
ER	\$400	\$400	\$250	\$250
Radiology (MRI, CT, PET)	\$1,500	\$1,500	\$500	\$0
Inpatient / Outpatient	\$1,500	\$1,500	\$500	\$0
Rx Generic	\$5	\$5	\$5	\$5
Rx Preferred Brand	40%	40%	40%	40%
Rx Non-Preferred Brand	60%	60%	60%	60%
Estimated 2019 AVC Value	73.0%	76.9%	87.2%	93.4%

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS
METAL ACTUARIAL VALUES CERTIFICATION**

	Gold	Silver	Silver Reflective	Bronze
Deductible/OOP Max	CDHP	CDHP	CDHP	CDHP -
Medical Deductible	\$3,000	\$4,100	\$4,125	\$6,650
Rx Deductible	Combined	Combined	Combined	Combined
Integrated Deductible	Yes	Yes	Yes	Yes
Medical OOPM	\$3,000	\$4,100	\$4,125	\$6,650
Rx OOPM	\$1,350	\$1,350	\$1,350	Combined
Integrated OOPM	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900	Aggregate, 2x Family, Embedded Individual OOPM of \$7,900
Medical Deductible waived for:	Preventive Care	Preventive Care	Preventive Care	Preventive Care
Drug Deductible waived for:	Wellness Scripts	Wellness Scripts	Wellness Scripts	Wellness Scripts
Service Category				
Preventive	\$0	\$0	\$0	\$0
PCP Office Visit	0%	0%	0%	0%
MH/SA Office Visit	0%	0%	0%	0%
Specialist Office Visit	0%	0%	0%	0%
Urgent Care	0%	0%	0%	0%
Ambulance	0%	0%	0%	0%
DME	0%	0%	0%	0%
ER	0%	0%	0%	0%
Radiology (MRI, CT, PET)	0%	0%	0%	0%
Inpatient/Outpatient	0%	0%	0%	0%
Rx Generic	\$5	\$15	\$15	\$25
Rx Preferred Brand	40%	40%	40%	40%
Rx Non-Preferred Brand	60%	60%	60%	60%
Estimated 2019 AVC Value	76.1%	71.8%	71.8%	62.0%

**BLUE CROSS AND BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP PLANS
METAL ACTUARIAL VALUES CERTIFICATION**

	73% AV	77% AV	87% AV	94% AV
Deductible/OOP Max	CDHP	CDHP	CDHP – Not HSAQ	CDHP - Not HSAQ
Medical Deductible	\$3,550	\$2,800	\$1,300	\$550
Rx Deductible	Combined	Combined	Combined	Combined
Integrated Deductible	Yes	Yes	Yes	Yes
Medical OOPM	\$3,550	\$2,800	\$1,300	\$550
Rx OOPM	\$1,350	\$1,350	\$1,300	\$550
Integrated OOPM	Yes	Yes	Yes	Yes
Family Deductible / OOP	Aggregate, 2x Family	Aggregate, 2x Family	Aggregate, 2x Family	Aggregate, 2x Family
Medical Deductible waived for:	Preventive Care	Preventive Care	Preventive Care	Preventive Care
Drug Deductible waived for:	Wellness Scripts	Wellness Scripts	Wellness Scripts	Wellness Scripts
Service Category				
Preventive	\$0	\$0	\$0	\$0
PCP Office Visit	0%	0%	0%	0%
MH/SA Office Visit	0%	0%	0%	0%
Specialist Office Visit	0%	0%	0%	0%
Urgent Care	0%	0%	0%	0%
Ambulance	0%	0%	0%	0%
DME	0%	0%	0%	0%
ER	0%	0%	0%	0%
Radiology (MRI, CT, PET)	0%	0%	0%	0%
Inpatient/Outpatient	0%	0%	0%	0%
Rx Generic	\$15	\$15	\$15	\$15
Rx Preferred Brand	40%	40%	40%	40%
Rx Non-Preferred Brand	60%	60%	60%	60%
Estimated 2019 AVC Value	73.9%	77.2%	86.7%	93.7%



BlueCross BlueShield of Vermont

An Independent Licensee of the Blue Cross and Blue Shield Association.

MEMORANDUM

To: Paul Schultz, Chief Actuary

From: Don George, President and CEO
Ruth Greene, VP and CFO

Date: May 11, 2018

Subject: Contribution to Reserves for 2019 Vermont Individual and Small Group filing

Upon consideration of the points documented in this memorandum, we are requesting that you file a contribution to reserves (CTR) of 1.5 percent for the 2019 Vermont Individual and Small Group rate filing.

BCBSVT CTR Philosophy

Prior to the Tax Cuts and Job Act of 2017, we held that a long-term CTR of two percent represents an adequate, yet not excessive, contribution to reserves. CTR at this level within a typical trend and growth environment allows us to manage short-term fluctuations in order to maintain surplus levels that are within our established, modest target range.

Should BCBSVT's surplus level fall outside our target range, we would adjust our filed CTR accordingly. That is, in the event that surplus exceeds our targeted range, we would reduce our filed CTR from the long-term rate, all else being equal. Similarly, we would need to file a CTR that exceeds the long-term rate should surplus fall below our target range.

BCBSVT believes that CTR should be managed to an adequate long-term level, rather than fluctuating significantly from year to year with changes in membership and health care cost trend. For this reason, we file a CTR equal to our long-term target. It is our expectation that our future filings will also include contribution to reserves equal to this target. While the long-term CTR target may exceed or fall below that required to maintain our surplus position in any given year, maintaining an adequate long-term assumption will allow us to avoid rate shocks in years of high growth in projected claims costs.

BCBSVT also chooses to file consistent CTR across product lines. Many insurers file higher CTR for products with more inherent risk. For instance, the dynamic regulatory environment means that the individual and small group market is considered to be riskier

than many other market segments. However, BCBSVT considers it to be more equitable to all Vermonters to use the same CTR target across filings.

An adequate long-term contribution to reserves should exceed the minimum required to keep pace with increases in total claims costs. While best estimate assumptions are by definition expected to lead to equal likelihood of gains and losses, unexpected events or periods of sustained losses may lead to financial deterioration of sufficient magnitude to threaten a company's solvency.

Apart from modest income from investments and subsidiaries, CTR is the only source of surplus for BCBSVT. While any rate filing is by definition an estimate of future costs and is therefore subject to gains or losses, BCBSVT files no additional margin beyond the required CTR. Any rate shortfall will first be paid out of CTR, while any shortfall beyond the approved CTR for a particular filing will be funded from existing reserves.

Maintaining an adequate surplus level is critical for any insurer. Consequences of low surplus include reduced flexibility in responding to customer needs, a need for higher margins in rates in order to avoid further deterioration, and a reduced ability to attract or retain business or to handle membership growth. Stability is particularly important in times of unprecedented change, such as the continuing evolution at both the federal and Vermont levels of the individual and small group market, as well as the health care reform environment in Vermont.

BCBSVT must remain financially strong in order to continue to provide Vermonters with access to high quality care, outstanding member experiences, and responsible cost management.

Tax Cuts and Jobs Act

The Tax Cuts and Jobs Act enacted in late 2017 is anticipated to have two specific impacts on BCBSVT's financials. First, beginning with the 2018 tax year, the BCBSVT legal entity will no longer be subject to federal income taxes (note that BCBSVT subsidiaries will continue to be taxable). The savings resulting from the elimination of BCBSVT's annual federal tax obligation are being passed on directly to our customers via premium rates, and that is what has led us to reduce our long-term CTR requirement from 2.0 percent to 1.5 percent.

The second expected impact results from the repeal of the corporate alternative minimum tax (AMT) in the new law. As a low to moderately capitalized Blue Plan, BCBSVT has been subject to federal income taxes at an AMT rate since 1987. AMT credits accumulated by BCBSVT since 1987 have become refundable under the law, and the total AMT credit balance is scheduled to be paid to BCBSVT over a four year period from 2019 through 2022, based on filed federal tax returns from 2018 through 2021. Assuming the credits are refunded to BCBSVT in accordance with the provisions set out in the Tax Cuts and Jobs Act, these funds will also be used for the direct benefit of our customers as they are received from the IRS. The method(s) for returning the AMT credits to customers will be determined

at that time, and may include lower premium rates than would otherwise have been necessary, replenishment of member surplus shortfalls, or other appropriate measures designed to protect and minimize the costs incurred by our members.

Market Considerations

In selecting a filed CTR for any given filing, BCBSVT must consider competitive and marketplace conditions while maintaining the framework of our overarching CTR philosophy.

BCBSVT's surplus position as of December 31, 2017 and March 31, 2018 falls within our established, modest target range. Therefore, an adjustment from the long-term assumption after tax reform of 1.5 percent is unnecessary for surplus reasons.

BCBSVT worked closely with the Department of Vermont Health Access (DVHA) throughout 2017 and into 2018 in an effort to understand the amount due to BCBSVT from DVHA for the QHP 2016 plan year enrollment reconciliation. The end result of the reconciliation required DVHA to pay BCBSVT \$4.5 million. The payment will be made to BCBSVT on or before June 30, 2018. BCBSVT has recorded the expected recovery in its 2017 financial results, which were filed on March 1, 2018. Going forward, we expect there to be much lower outstanding amounts due from DVHA to BCBSVT as a result of process improvements made in early 2017. Any amount payable from DVHA as part of a 2017 reconciliation would keep us well within our target surplus range. Accordingly, there is no need to adjust our CTR from the 1.5 percent long-term assumption due to the enrollment reconciliation process.

On October 12, 2017, the federal government stopped funding plans for the claims incurred within the Cost Share Reductions (CSR) program. Vermont carriers were not permitted to resubmit rates to recoup the CSR benefits expected to be utilized by members for of 2018. BCBSVT expects to realize losses of nearly \$7 million due to the defunding of CSR and subsequent decision of the GMCB to not revisit 2018 rates. BCBSVT has a long history of not recouping past losses from current policyholders. Despite these extraordinary circumstances, we elect to continue the tradition of keeping our rates more affordable for Vermonters by refusing to increase our requested CTR to offset past losses.

BCBSVT experienced a significant loss of QHP membership from 2017 to 2018. BCBSVT is committed to the health of all Vermonters through outstanding member experiences and responsible cost management; however, we can only accomplish this mission from a position of financial stability. BCBSVT has experienced losses of \$15 million from 2014 through 2017 in the Vermont individual and small group line of business. While we will continue to strive to maintain or grow our market share of the single risk pool, we cannot do so by intentionally underfunding premiums or by filing a CTR that does not adequately protect us from short-term fluctuations or unforeseen events. While it would be reasonable to decrease CTR to counteract membership losses, it would also be reasonable to increase CTR to counteract financial losses.

Conclusion

In consideration of all the above, we choose to file a 1.5 percent CTR for the 2019 Vermont Individual and Small Group rate filing.



Don George, President and CEO



Ruth Greene, VP and CFO

2019 Rates Table Template v8.1		All fields with an asterisk (*) are required. To validate press Validate button or Ctrl + Shift + I. To finalize, press Finalize button or Ctrl + Shift + F.									
		If you are in a community rating state, select Family-Tier Rates under Rating Method and fill in all columns.									
		If you are not in a community rating state, select Age-Based Rates under Rating Method and provide an Individual Rate for every age band.									
		If Tobacco is Tobacco User/Non-Tobacco User, you must give a rate for Tobacco Use and Non-Tobacco Use.									
		To add a new sheet, press the Add Sheet button, or Ctrl + Shift + H. All plans must have the same dates on a sheet.									
HIOS Issuer ID*	13627										
Federal TIN*	03-0277307										
Rate Effective Date*	1/1/2019										
Rate Expiration Date*	12/31/2019										
Rating Method*	Family-Tier Rates										
Family Tier											
Plan ID*	Rating Area ID*	Individual Rate*	Couple*	Primary Subscriber and One Dependent*	Primary Subscriber and Two Dependents*	Primary Subscriber and Three or More Dependents*	Couple and One Dependent*	Couple and Two Dependents*	Couple and Three or More Dependents*		
<small>Required: Enter the 14-character Plan ID</small>	<small>Required: Select the Rating Area ID</small>	<small>Required: Enter the rate of an Individual Non-Tobacco or No Preference enrollee on a plan</small>	<small>Required: Enter the rate of a couple based on the pairing of a primary enrollee and a secondary subscriber (e.g. husband and spouse)</small>	<small>Required: Enter the rate of a family based on a single parent with one dependent</small>	<small>Required: Enter the rate of a family based on a single parent with two dependents</small>	<small>Required: Enter the rate of a family based on a single parent with three or more dependents</small>	<small>Required: Enter the rate of a family based on a couple with one dependent</small>	<small>Required: Enter the rate of a family based on a couple with two dependents</small>	<small>Required: Enter the rate of a family based on a couple with three or more dependents</small>		
13627VT0320001	Rating Area 1	803.23	1606.46	1550.23	1550.23	1550.23	2257.08	2257.08	2257.08		
13627VT0320002	Rating Area 1	688.05	1376.10	1327.94	1327.94	1327.94	1933.42	1933.42	1933.42		
13627VT0320003	Rating Area 1	647.04	1294.08	1248.79	1248.79	1248.79	1818.18	1818.18	1818.18		
13627VT0320006	Rating Area 1	580.77	1161.54	1120.89	1120.89	1120.89	1631.96	1631.96	1631.96		
13627VT0320004	Rating Area 1	506.12	1012.24	976.81	976.81	976.81	1422.20	1422.20	1422.20		
13627VT0320005	Rating Area 1	521.81	1043.62	1007.09	1007.09	1007.09	1466.29	1466.29	1466.29		
13627VT0330001	Rating Area 1	654.71	1309.42	1263.59	1263.59	1263.59	1839.74	1839.74	1839.74		
13627VT0330003	Rating Area 1	597.56	1195.12	1153.29	1153.29	1153.29	1679.14	1679.14	1679.14		
13627VT0330002	Rating Area 1	517.45	1034.90	998.68	998.68	998.68	1454.03	1454.03	1454.03		
13627VT0340001	Rating Area 1	249.21	498.42	480.98	480.98	480.98	700.28	700.28	700.28		
13627VT0340002	Rating Area 1	803.23	1606.46	1550.23	1550.23	1550.23	2257.08	2257.08	2257.08		
13627VT0340003	Rating Area 1	688.05	1376.10	1327.94	1327.94	1327.94	1933.42	1933.42	1933.42		
13627VT0340004	Rating Area 1	647.04	1294.08	1248.79	1248.79	1248.79	1818.18	1818.18	1818.18		
13627VT0340007	Rating Area 1	580.77	1161.54	1120.89	1120.89	1120.89	1631.96	1631.96	1631.96		
13627VT0340005	Rating Area 1	506.12	1012.24	976.81	976.81	976.81	1422.20	1422.20	1422.20		
13627VT0340006	Rating Area 1	521.81	1043.62	1007.09	1007.09	1007.09	1466.29	1466.29	1466.29		
13627VT0350001	Rating Area 1	654.71	1309.42	1263.59	1263.59	1263.59	1839.74	1839.74	1839.74		
13627VT0350003	Rating Area 1	597.56	1195.12	1153.29	1153.29	1153.29	1679.14	1679.14	1679.14		
13627VT0350002	Rating Area 1	517.45	1034.90	998.68	998.68	998.68	1454.03	1454.03	1454.03		
13627VT0360001	Rating Area 1	671.02	1342.04	1295.07	1295.07	1295.07	1885.57	1885.57	1885.57		
13627VT0360002	Rating Area 1	653.27	1306.54	1260.81	1260.81	1260.81	1835.69	1835.69	1835.69		
13627VT0360004	Rating Area 1	579.64	1159.28	1118.71	1118.71	1118.71	1628.79	1628.79	1628.79		
13627VT0360003	Rating Area 1	509.15	1018.30	982.66	982.66	982.66	1430.71	1430.71	1430.71		
13627VT0370001	Rating Area 1	638.31	1276.62	1231.94	1231.94	1231.94	1793.65	1793.65	1793.65		
13627VT0370002	Rating Area 1	642.94	1285.88	1240.87	1240.87	1240.87	1806.66	1806.66	1806.66		
13627VT0370004	Rating Area 1	577.72	1155.44	1115.00	1115.00	1115.00	1623.39	1623.39	1623.39		
13627VT0370003	Rating Area 1	513.96	1027.92	991.94	991.94	991.94	1444.23	1444.23	1444.23		
13627VT0380001	Rating Area 1	671.02	1342.04	1295.07	1295.07	1295.07	1885.57	1885.57	1885.57		
13627VT0380002	Rating Area 1	653.27	1306.54	1260.81	1260.81	1260.81	1835.69	1835.69	1835.69		
13627VT0380004	Rating Area 1	579.64	1159.28	1118.71	1118.71	1118.71	1628.79	1628.79	1628.79		
13627VT0380003	Rating Area 1	509.15	1018.30	982.66	982.66	982.66	1430.71	1430.71	1430.71		
13627VT0390001	Rating Area 1	638.31	1276.62	1231.94	1231.94	1231.94	1793.65	1793.65	1793.65		
13627VT0390002	Rating Area 1	642.94	1285.88	1240.87	1240.87	1240.87	1806.66	1806.66	1806.66		
13627VT0390004	Rating Area 1	577.72	1155.44	1115.00	1115.00	1115.00	1623.39	1623.39	1623.39		
13627VT0390003	Rating Area 1	513.96	1027.92	991.94	991.94	991.94	1444.23	1444.23	1444.23		

Please provide Company specific inputs for any cells shaded in blue that currently has dummy variables

Purpose, Scope, and Reason for Rate Increase

Insurance Company Name	Blue Cross and Blue Shield of Vermont
HIOS ID	19827
SERFF Filing Number	N/A
Date of Submission	3/11/2019
Proposed Effective Date	1/1/2019
Average Annual Premium	
Before Rate Change	\$15,481
After Rate Change	\$14,489

	Amount in SERFF's Rate Review Detail Section Explanation for differences		
Proposed Overall Rate Change	7.48%	7.48%	N/A
Proposed Minimum Rate Change	1.25%	1.25%	N/A
Proposed Maximum Rate Change	1.85%	19.87%	N/A

If the difference between the maximum and minimum rate increase is greater than 10%, Provide a statement and clear definition of contributing factors explaining why certain individual will receive a rate decrease as low as the minimum while others will face rate increases as high as the maximum.

The range of rate increase includes increase for Silver Level Exchange Plans as part of Vermont's "Silver Solution." BCBSVT collaborated with stakeholders to propose, develop, and implement the Silver Solution, a plan to offset the federal defunding of the cost-sharing reduction (CSR)

Relationship of Proposed Rate Scale to Current Rate Scale:

Provide a detailed breakdown of the average rate change from the previous approved filing by using the chart below to itemize the drivers of the average rate change. The table should include the previous assumption, current assumption, and the resulting change. Include additional lines as necessary.

Source of Change	Previous filing Assumption	Current Filing Assumption	Ratio	Relative Current Filing / Previous filing	
Base Period Experience	928.92	924.98	1.048		e.g. previous filing experience period index rate compared to the current filing experience index rate
Base Period Utilization Factor	1.0035	1.0075	1.004		
Pricing Trend	1.0859	1.1498	1.025		The change in this factor is based on the change in the trend assumption in previous filing and current filing (e.g. 1.075^2 / 1.08^2)
Mortality Adjustment	0.9978	1.0441	1.046		The change in this factor is based on the change in the mortality assumptions between previous filing and current filing.
Risk Adjustment Recoveries	0.9868	0.9749	0.975		The change in this factor is based on the change in the risk adjustment recoveries assumptions between previous filing and current filing.
Pent Up Demand	1.0000	1.0000	1.000		
Reinsurance Recoveries	1.0000	1.0000	1.000		
Reinsurance Premium	1.0000	1.0000	1.000		
Average Age Impact	1.0100	1.0101	1.000		
Additional EHB	1.0000	1.0000	1.000		
Exchange Fee	1.0000	1.0000	1.000		
Fixed Cost Adjustment	1.0786	1.0788	1.001		
SCGA	1.0000	1.0000	1.000		
Margin	1.0070	0.0000	0.000		
Taxes and Fees	1.0396	1.0128	0.974		
Benefit Design Changes	0.7353	0.8108	1.022		
Geography	1.0000	1.0000	1.000		
Tobacco	1.0000	1.0000	1.000		
Provider Networks Changes	0.9899	1.0000	1.000		
New System Change	0.9958	0.9865	0.992		
Impact of Selection	1.0159	1.0152	0.993		
Pharmacy Contract	0.9987	0.9879	0.991		
New EHB	1.0002	1.0002	1.000		
xxxxx	xxxx	xxxx	1.000		
Total Rate Change				1.075	

If applicable, Provide an explanation for difference between the Calculated Rate change and the average rate change in cell B17

The small difference between the calculated rate change and the average rate change is due to membership mix, contract mix, order of operations and methodology.

Annual Rate Change Distribution

	Impacted # of Contracts	Impacted # of Members	Impacted # of Groups
Reduction of 15.00% or more	0	0	0
Reduction of 10.01% to 14.99%	0	0	0
Reduction of 5.01% to 10.00%	0	0	0
Reduction of 0.01% to 5.00%	0	0	0
No Change	0	0	0
Increase of 0.01% to 5.00%	11,347	18,740	2,474
Increase of 5.01% to 10.00%	13,258	20,698	2,508
Increase of 10.01% to 14.99%	1,206	1,784	0
Increase of 15.00% or more	6,691	8,254	0
Total	32,570	53,664	4,982

History of Rate Changes

For Year	Average Annual Proposed Rate Change	Average Annual Approved Rate Change
2015	8.81%	7.70%
2016	8.40%	5.90%
2017	8.20%	7.30%
2018	12.88%	9.21%

Retention

	PMPM in effect during the experience period	PMPM from Most Recent Approved Rate Filing	Proposed PMPM for Effective Date	Proposed Change in PMPM Compared to Prior 12 months	Proposed Change in PMPM Compared to Most Recently Approved Filing
Dates	January 2017 - December 2017	January 2018 - December 2018	January 2019 - December 2019		
Commissions & Brokers Fees	\$0.00	\$0.00	\$0.00		
ACA Insurer Fee	\$0.00	\$19.98	\$0.00		-100.00%
Taxes, Licenses & Fees	\$1.90	\$2.58	\$2.98	56.68%	16.30%
Exchange Fee	\$0.00	\$0.00	\$0.00		
Reinsurance	\$0.00	\$0.00	\$0.00		
All Other Admin Expense	\$35.20	\$35.08	\$38.17	8.46%	8.81%
Profit/Risk Margin	\$2.98	\$3.78	\$0.00	-100.00%	-100.00%

	As % of Premium during the experience period	As % of Premium from Most Recent Approved Rate Filing	Proposed As % of Premium for Effective Date	Proposed Change in % of Premium Compared to Prior 12 months	Proposed Change in % of Premium Compared to Most Recently Approved Filing
Commissions & Brokers Fees	0.00%	0.00%	0.00%		
ACA Insurer Fee	0.00%	2.83%	0.00%		-100.00%
Taxes, Licenses & Fees	0.39%	0.52%	0.51%	31.28%	-1.16%
Exchange Fee	0.00%	0.00%	0.00%		
Reinsurance	0.00%	0.00%	0.00%		
All Other Admin Expense	7.24%	7.11%	6.58%	-9.14%	-7.52%
Profit/Risk Margin	-0.61%	-0.76%	-0.00%	-100.00%	-100.00%

The Department is requesting each carrier provide a detailed commission schedule. Include in the following text box or state where in the filing it is located.

BCBSVT does not pay commissions on plans impacted by this filing.

Trend & Projection Assumptions

Monthly Trend Analysis Based on Experience Data Time Period used for Rate Development (ACA Only)	Month	Member Months	Monthly Allowed Claims \$		Annualized Rolling 6 Mo			Average Benefit Factor	Average Age/Center Factor	Other Factor	Normalized Monthly Allowed Claims \$		Normalized Annualized Rolling 6 Mo Trend	Normalized Annualized Rolling 3 Mo
			PMPM	Rolling 12 Mo Trend	Trend	Annualized Rolling 3 Mo Trend	PMPM				Normalized Rolling 12 Mo Trend			
	Apr-2015	63,110	\$507.62		1.00		1.00		1.00		\$507.52			
	May-2015	63,534	\$450.79		1.00		1.00		1.00		\$450.79			
	Jun-2015	64,784	\$512.65		1.00		1.00		1.00		\$512.65			
	Jul-2015	64,918	\$509.91		1.00		1.00		1.00		\$509.91			
	Aug-2015	64,305	\$460.33		1.00		1.00		1.00		\$460.33			
	Sep-2015	64,314	\$522.65		1.00		1.00		1.00		\$522.65		14.73%	
	Oct-2015	63,920	\$514.44		1.00		1.00		1.00		\$514.44		15.18%	
	Nov-2015	63,447	\$470.50		1.00		1.00		1.00		\$470.50		-1.38%	
	Dec-2015	63,152	\$524.76		1.00		1.00		1.00		\$524.76		-3.43%	
	Jan-2016	63,060	\$524.06		1.00		1.00		1.00		\$524.06		-2.15%	
	Feb-2016	62,722	\$515.66		1.00		1.00		1.00		\$515.66		15.87%	
	Mar-2016	62,640	\$538.35		1.00		1.00		1.00		\$538.35		6.35%	
	Apr-2016	62,072	\$534.95		1.00		1.00		1.00		\$534.95		19.68%	
	May-2016	62,550	\$517.93		1.00		1.00		1.00		\$517.93		7.00%	
	Jun-2016	62,227	\$562.87		1.00		1.00		1.00		\$562.87		8.81%	
	Jul-2016	62,186	\$494.26		1.00		1.00		1.00		\$494.26		5.75%	
	Aug-2016	62,257	\$509.53		1.00		1.00		1.00		\$509.53		1.05%	
	Sep-2016	62,509	\$542.29		1.00		1.00		1.00		\$542.29		2.74%	
	Oct-2016	62,807	\$503.58		1.00		1.00		1.00		\$503.58		-4.47%	
	Nov-2016	62,938	\$549.35		1.00		1.00		1.00		\$549.35		2.25%	
	Dec-2016	70,118	\$550.28		1.00		1.00		1.00		\$550.28		-0.86%	
	Jan-2017	70,211	\$534.13		1.00		1.00		1.00		\$534.13		15.57%	
	Feb-2017	70,375	\$575.04		1.00		1.00		1.00		\$575.04		3.67%	
	Mar-2017	70,977	\$591.42	3.82%	1.00		1.00		1.00		\$591.42	5.82%	11.44%	
	Apr-2017	69,591	\$554.43	6.67%	1.00		1.00		1.00		\$554.43	6.67%	15.01%	
	May-2017	69,874	\$559.51	5.35%	1.00		1.00		1.00		\$559.51	5.35%	10.01%	
	Jun-2017	69,644	\$579.23	4.68%	1.00		1.00		1.00		\$579.23	4.68%	12.25%	
	Jul-2017	69,282	\$498.59	5.04%	1.00		1.00		1.00		\$498.59	5.04%	7.26%	
	Aug-2017	69,604	\$577.18	5.81%	1.00		1.00		1.00		\$577.18	5.81%	11.25%	
	Sep-2017	68,588	\$558.07	5.70%	1.00		1.00		1.00		\$558.07	5.70%	10.42%	
	Oct-2017	68,299	\$537.15	6.45%	1.00		1.00		1.00		\$537.15	6.45%	5.99%	
	Nov-2017	67,852	\$566.65	5.41%	1.00		1.00		1.00		\$566.65	5.41%	-0.16%	
	Dec-2017	67,540	\$554.51	5.03%	1.00		1.00		1.00		\$554.51	5.03%	2.67%	
	Jan-2018	67,184	\$529.13	6.33%	1.00		1.00		1.00		\$529.13	6.33%	19.85%	
	Feb-2018	66,653	\$521.21	5.67%	1.00		1.00		1.00		\$521.21	5.67%	11.66%	
	Mar-2018	66,156	\$503.45	4.78%	1.00		1.00		1.00		\$503.45	4.78%	45.09%	

Last Month in Experience Period

Historical Experience (ACA Only): Incurred or Allowed Basis⁽¹⁾ *(1) Choose the option based on how pricing is developed (i.e., if followed trends are used in projections, select "Allowed").*

Solvency

Total Adjusted Capital Authorized Control Level RBC Ratio	Most Recent Quarterly Financial Statement	Most Recent Annual Financial Statement
	N/A	N/A

Loss Ratio

Time Period	Period Beginning Date	Period Ending Date	Member Months	Incurred Claims	Earned Premium	Loss Ratio
Historical Year -4	1/1/2014	12/31/2014	0	0	0	0%
Historical Year -3	1/1/2014	12/31/2014	636,482	231,441,129	249,458,313	92.8%
Historical Year -2	1/1/2015	12/31/2015	768,292	294,107,984	320,568,002	89.0%
Historical Year -1	1/1/2016	12/31/2016	835,541	306,202,899	371,834,172	85.0%
Historical Year 0	1/1/2017	12/31/2017	820,150	373,101,581	403,284,369	90.2%
Historical Totals			3,062,482	1,256,852,660	1,360,992,866	92.9%
Interim Time Period	1/1/2018	3/31/2018	162,597	74,728,175	87,614,100	85.3%
Future Year 1	1/1/2018	12/31/2018	631,062	341,203,232	371,776,055	91.8%

Expected Incurred Claims	A-to-E Claims Ratio
245,275,629	94.4%
272,117,666	108.1%
346,544,646	103.4%
413,882,382	90.2%
1,277,769,883	98.4%
71,411,276	104.6%
341,203,232	100.0%

Quality Improvement Expenses	Adjustments to Earned Premium	Adj Loss Ratio
0	0	89.0%
1,942,478	8,982,200	87.0%
6,113,072	7,798,368	91.8%
2,387,988	1,981,489	97.5%
1,697,256	1,697,256	92.5%
0	0	85.3%
3,507,663	1,978,058	93.2%

Anticipated Pricing Loss Ratio (no adjustments)
 Anticipated LR using Federally-prescribed MLR methodology

Note:
 The historical time periods should represent calendar years since the inception date of the plan type through the most recent date available allowing for the appropriate amount of run-out.
 The interim time period the time periods available in the current year.
 The future year should represent the 12 months immediately following the rate effective date.

Consumer Adjusted Premium Rate Development

Index Rate for Projected Period PMPM	\$662.94
Risk Adjustment PMPM	(\$16.85)
Net Reinsurance Contributions PMPM	\$0.00
Exchange User Fees PMPM	\$0.00
Market Adjusted Index Rate PMPM	\$646.29

Product	Standard Platinum	xxx	Standard Gold	Blue Rewards Gold CDHP	Standard Silver CDHP	Rewards Silver CDHP - Refe	Standard Bronze Integrat	Blue Rewards Bronze	Catastrophic
Product ID	13627V1034 and 13627V1032	xxx	13627V1034 and 13627V1032	827V1037 and 13627V1032	827V1033 and 13627V1032	13627V1037 and 13627V1039	827V1034 and 13627V1032	13627V1036 and 13627V1038	13627V1034
Plan ID	13627V10340003 and 13627V10320001	xxx	13627V10340003 and 13627V10320001	10370001 and 13627V10320001	10330001 and 13627V10320001	13627V10340003 and 13627V10390001	10340001 and 13627V10320001	13627V10360003 and 13627V10380001	13627V10340001
	Platinum	Platinum	Gold	Gold	Silver	Silver	Bronze	Bronze	Catastrophic
Metal Tier	(with highest Metal AV)	(with lowest Metal AV)	(with highest Metal AV)	(with lowest Metal AV)	(with highest Metal AV)	(with lowest Metal AV)	(with highest Metal AV)	(with lowest Metal AV)	Catastrophic
Metal AV Value	0.901	0.000	0.950	0.761	0.703	0.718	0.630	0.612	0.370
Pricing AV Value	1.110	0.000	0.950	0.882	0.904	0.798	0.721	0.703	0.385
Projected Member Months	10,262	0	5,493	6,499	1,691	465	598	294	
Market Adjusted Index Rate PMPM	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29	\$646.29
<i>Plan Adjustments (in multiplicative format)</i>									
Actuarial value and cost-sharing design of the plan	1.019	0.000	0.864	0.786	0.819	0.705	0.641	0.613	0.613
Provider network, delivery system characteristics and utilization management practices	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Plan benefits in addition to EHB	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Expected impact of special eligibility categories (only for catastrophic plans)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	0.494
<i>Plan Adjustments (in % format)</i>									
Distribution and administration costs	8.1%	0.0%	9.0%	10.8%	9.4%	11.8%	11.1%	12.8%	21.2%
Plan Adjusted Index Rate	\$717.13	\$0.00	\$614.31	\$569.86	\$584.52	\$515.79	\$465.87	\$454.57	\$248.56
Age Calibration Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Geography Calibration Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Tobacco Surcharge Calibration Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Aggregate Calibration Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Consumer Adjusted Premium Rate PMPM	\$717.13	\$0.00	\$614.31	\$569.86	\$584.52	\$515.79	\$465.87	\$454.57	\$248.56

Calculated Pricing AV	1.110	0.000	0.951	0.882	0.904	0.798	0.721	0.703	0.385
Pricing AV in URRF	1.110	0.000	0.950	0.882	0.904	0.798	0.721	0.703	0.385
Difference	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Explanation for differences between implied Pricing AV and URRF	N/A	#DIV/0!							

Age 40 Factor	1.000
Tobacco Surcharge Factor	1.000
Geographic Rating Area #1	1.000
Geographic Rating Area #3	1.000
Geographic Rating Area #5	1.000

*Note: If a particular plan is not offered in a rating area, please override the formula and enter "N/A" below.

Calculated Premium Rate (Age 40, Area 1, Tobacco User)	\$803.25	\$0.00	\$688.08	\$638.28	\$654.71	\$577.72	\$521.81	\$509.15	\$278.41
Calculated Premium Rate (Age 40, Area 3, Tobacco User)	\$803.25	\$0.00	\$688.08	\$638.28	\$654.71	\$577.72	\$521.81	\$509.15	\$278.41
Calculated Premium Rate (Age 40, Area 5, Tobacco User)	\$803.25	\$0.00	\$688.08	\$638.28	\$654.71	\$577.72	\$521.81	\$509.15	\$278.41
Proposed Premium Rate (Age 40, Area 1, Tobacco User)	\$803.23		\$688.05	\$638.31	\$654.71	\$577.72	\$521.81	\$509.15	\$249.21
Proposed Premium Rate (Age 40, Area 3, Tobacco User)	\$803.23		\$688.05	\$638.31	\$654.71	\$577.72	\$521.81	\$509.15	\$249.21
Proposed Premium Rate (Age 40, Area 5, Tobacco User)	\$803.23		\$688.05	\$638.31	\$654.71	\$577.72	\$521.81	\$509.15	\$249.21
Difference (Age 40, Area 1, Tobacco User)	0.0%	#DIV/0!	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-10.5%
Difference (Age 40, Area 3, Tobacco User)	0.0%	#DIV/0!	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-10.5%
Difference (Age 40, Area 5, Tobacco User)	0.0%	#DIV/0!	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-10.5%
Explanation for differences	We used a difference Contract Conversion factor for the catastrophic plan.								

<i>Actuarial value and cost-sharing design of the plan</i>									
Actuarial value and cost-sharing design of the plan	1.019	0.000	0.864	0.786	0.819	0.705	0.641	0.613	0.613
Paid/Allowed Ratio (Cost-Sharing only)	0.930		0.844	0.789	0.841	0.735	0.681	0.656	0.658
Used Induced utilization factors	1.000		1.000	1.000	1.000	1.000	1.000	1.000	1.000
Calculated	1.020	0.000	0.865	0.787	0.820	0.706	0.641	0.613	0.303

(Intentionally left blank. See below)

Risk Adjustment

	Actual Risk Adjustment Received	Assumed in Most Recent Approved Rate Filing	Assumed in Current Rate Filing	Proposed Change in PMPM Compared to Prior 12 months	Proposed Change in PMPM Compared to Most Recently Approved Filing
Time Period	1/1/2016 - 12/31/2016	1/1/2018 - 12/31/2018	1/1/2019 - 12/31/2019		
Total Risk adjustment (Dollar amount)	\$500,153	\$534,434	\$9,719,593		
Membership/Member Month	635,541	940,420	631,055	-34.47%	-34.91%
PMPM	\$0.36	\$0.40	\$13.66	3701.62%	3331.86%
Premium	\$377,634,175	\$452,785,021	\$379,751,090	-1.03%	-17.45%
As a % of Premium	0%	0%	2%	2801.23%	3021.87%

If the actual risk adjustment payable/receivable was materially different than what was estimated in the previous filing, please provide details on how the current risk adjustment estimate has addressed the issue

Please see section 3.7.1. of the actuarial memorandum

Please provide an exhibit in excel with working formulas, demonstrating the calculation of the rate increase assuming that the current membership in terminated plans are mapped to renewal/proposed plans closest to the member's current benefit structure or Pricing AV. Include a quantitative calculation of the differences in benefits and cost sharing, as well as the Pricing and Metal AVs for the current and renewal/proposed 2019 plans. In the following text box state where in the filing the requested exhibit is located.

BCBSVT is not terminating any plans in 2019