ACTUARIAL MEMORANDUM

3Q and 4Q 2018 Small Group Grandfathered AR44 Filing

Purpose and Scope of Filing

The purpose of this filing is to demonstrate the development of premium rates in support of MVP Health Plan's Small Group High Deductible HMO grandfathered product portfolio and seek approval of the premium rates. The premium rates included in this filing are for group effective dates between 7/1/2018 and 12/31/2018. The rates are effective for 12 months. This rate filing has been prepared to satisfy the requirements of 8 V.S.A § 5104 and is not intended to be used for other purposes.

Note that MVP has previously filed these products on MVP Health Insurance Company (MVPHIC). MVP has moved these products to MVP Health Plan effective upon renewal starting 7/1/2018. Where applicable, both the old MVPHIC product name and the new MVPHP product name have been displayed in the rate filing, and increases are comparing the new MVPHP product to the previous MVPHIC product.

This is a closed block of business and as of January 2018, there were 1,361 members enrolled in plans impacted by this rate filing. Of those 1,361 members, 120 members have 3Q contract effective dates and 144 have 4Q contract effective dates. MVP is proposing quarterly rate increases of 0.9% over the approved 2Q 2018 rates and 1.1% over the proposed 3Q 2018 rates. These translate to annual rate increases of 2.1% and 0.9% for 3Q and 4Q 2018 renewals, respectively.

Derivation of Annual Rate Increases Based on Quarterly Rate Changes

	4Q '17 / 3Q '17	1Q '18 / 4Q '17	2Q '18 / 1Q '18	3Q '18 / 2Q '18	4Q '18 / 3Q '18	3Q '18 Annual Increase	4Q '18 Annual Increase
HDHP	2.4%	-2.4%	1.3%	0.9%	1.1%	2.1%	0.9%

Experience Period Claims

Small group grandfathered MVPHIC high deductible claims incurred between November 2016 and October 2017, paid through January 2018 (with incurred estimates updated through February 2018) were the basis of MVP's rate analysis. Fee-for-service (FFS) medical and pharmacy claims were projected to the 3Q 2018 rating period by applying 20 months of trend to the experience period data. The capitation and non-FFS costs included in the rate development represent MVP's best estimate of these costs during the rating period.

MVP has chosen to only use claims for groups which are currently active as of January 2018 as their base for rating. In addition, MVP is retiring its PPO offerings on this block of business effective 7/1/18. There are two groups (totaling 118 members in January 2018) who are currently active but whose experience has been excluded, since they will not be active during the rating period. Because this is a closed block, it is prudent to only rate the block based on the groups that are currently eligible to renew in the rating period. This is consistent with prior versions of this filing.

IBNR Factor

As previously stated, MVP has used claim data with three months of paid claim runout. We have completed the claims using an IBNR factor of 6.4% which is our best estimate of ultimate liabilities as of 2/28/18. MVP uses a combined trended PMPM and completion factor method to value its ultimate claim liabilities. Please see the following table comparing incurred and paid claim amounts by month for the experience period. Note that this IBNR model is not exclusive to this block of business, so the paid and incurred claim amounts will not tie out to the experience in the filing.

Incurred Month	Paid Claims	Incurred Claims	IBNR Factor
201710	$1,273,834	$1,608,127	1.262
201709	$1,027,128	$1,516,923	1.477
201708	$1,303,326	$1,429,264	1.097
201707	$1,057,664	$1,061,116	1.003
201706	$1,322,623	$1,325,363	1.002
201705	$1,434,177	$1,435,859	1.001
201704	$1,105,092	$1,106,277	1.001
201703	$1,481,008	$1,481,932	1.001
201702	$853,410	$853,479	1.000
201701	$1,223,229	$1,217,037	0.995
201612	$1,190,661	$1,190,991	1.000
201611	$1,677,536	$1,678,799	1.001
Total	$14,949,688	$15,905,169	1.064

MVP is applying an IBNR factor of 0.995 to January 2017 incurred claims to reflect that fact that there are claims which were paid on or before January 2018 and were reversed out of the claim triangle in February 2018. MVP is not expected to have to re-pay for this claims, so the incurred estimate is ultimately lower than the paid claims as of January 2018.

The reason for the higher than normal IBNR factor is that MVP has received several large claims between January 31, 2018 and today. These claims total $112,741 for August 2017, $461,000 for September 2017 and $202,267 for October 2017. The IBNR factor including these as paid claims instead of incurred claims is 1.1%. Because these claims are not included as paid in the data in the filing, however, we have excluded them from the paid amounts when calculating the IBNR factor.

Pooling Charge

To account for volatility in high cost claims, medical and Rx claims in excess of $100,000 are being removed from the claim projection and being replaced by a pooling charge. The pooling charge of 15.2% represents the arithmetic average cost of claims in excess of $100,000 for the grandfathered small group high deductible (active-only) block over rolling 12 month time periods with ending dates between October 2015 and October 2017. A summary of the high cost claim ratio can be found in the attached file, “Rolling 12 Medical and Rx Data - SG HDHP”.

Development of Base Premium Rates

Exhibit 3a demonstrates the development of the proposed 3rd quarter rate action. Claims adjusted with the pooling charge described above and completed with IBNR are projected to the rating period. Non-FFS claim expenses and New York’s paid claim surcharge expense (HCRA) are added to the claim projection. Please see the table below for a summary of non-FFS and capitation expenses reflected in MVP’s rate development for this filing.

Summary of Capitations and Non-FRDM Claim Expenses	
Other Medical Expense not in warehouse	$2.27
ASH Cap	$0.28
Net Reinsurance Expense	$0.21
Medical Home and PCP Incentive	$2.06
18 V.S.A § 9374(h) Billback	$1.14
Total	**$5.96**

The expected non-FFS medical expenses added to the claim projection reflect costs associated with net reinsurance expense, PCP incentive payments and Medical Home, and other miscellaneous MVP claim expenses not included in the historical experience period data such as manual checks and Massachusetts surcharges. The Other Medical Expense data is comprised of a 3-year average of data for all Vermont group sizes and companies (MVPHP and MVPHIC) in order to minimize random variation in this small block of business.

Experience period Rx claims are adjusted for pooling and projected to the rating period. MVP has received 2018 forecasted Rx rebate information from its PBM which is reflected in the projected Rx rebate calculation. Separate rebate per script information has been provided for brand and specialty drugs. These amounts were applied to MVP's projection period brand and specialty script utilization to obtain a PMPM estimate of the rebates in the projection period and equals $16.71 PMPM for 3Q 2018 renewals $16.90 PMPM for 4Q 2018 renewals.

Consistent with the prior filing, MVP is reflecting the new regulation regarding the use of statins for the prevention of cardiovascular disease (CVD) in adults which will go into effect in November 2017. The United States Preventive Service Task Force has given low- and moderate-dose statins a grade of "B" when prescribed to adults aged 40 to 75 with no prior history of CVD but evidence of risk factors. This means that it will become mandatory that carriers cover these drugs in full with no member cost sharing. Because these drugs were previously covered by MVP but with the applicable member cost sharing applied, an adjustment needs to be made to the experience period data to reflect the removal of cost sharing. MVP has estimated the cost sharing during the experience period based on member's age and a lack of a CVD diagnosis, and the result was a $0.35 PMPM increase to the experience period pharmacy incurred claims. This has been reflected in line 8c of Exhibit 3a in the rate filing.

The claim projection is then being adjusted to account for the impact of membership not representing a full 12-month contract over the experience period. Because deductibles are present in all of these products, paid claims are suppressed in the early months of a member's contract and are higher than average in later contract months. Therefore, if the experience period membership is not evenly distributed by contract month, an adjustment to the claim costs should be made to reflect the expected claim costs for a 12-month contract period.

To determine the adjustment factor for the experience period claims cost, MVP used deductible suppression factors which were developed by analyzing commercial claims for members with 12 months of medical and Rx benefit coverage. MVP assumed that allowed claims were uniformly distributed by month and determined the expected paid claim cost for a given month relative to the average paid amount for 12 months. Factors were developed for a number of different deductible levels, and MVP split its experience period membership by these deductible levels to compute the appropriate adjustment factors. This adjustment factor equals 1.001 and can be found in Exhibit 3a. A quantitative derivation of this factor can be found in the file, "Impact of Membership Growth_Decline on Experience Pd Claims".

To arrive at the required rate change for 3Q 2018, projected net claims are converted to a gross claims cost. This is achieved by accounting for taxes/assessments being charged in 3Q 2018, making an adjustment for changes to the single conversion factor, age/gender factor and other retention items. Other retention items include administrative costs, contribution to reserves, and bad debt. The projected rating period required gross premium is compared to the prior rating period gross premium to indicate the suggested quarterly rate change.

MVP used January 2018 membership to determine the single conversion factor for the rating period. MVP also has made an adjustment for the age and gender of the expected population as compared to the experience period population.

Age/Gender Factor Change- Exp. Pd. To Rating Pd.

Block	Time Period	Age/Gender Factor
Active Only	Experience Period	1.137
Active Only	Current Snapshot	1.144
	Change in Factor	0.59%

MVP has also developed 4Q 2018 premium rates for this rate filing. Please see Exhibit 3b which is identical to Exhibit 3a except for the fact that one more quarter of trend has been applied to the experience period claims and changes in taxes/fees between 3Q and 4Q 2018 contract effective dates is also being captured. The required quarterly rate change for 4Q 2018 is calculated by comparing the required rate change for 4Q 2018 to the proposed 3Q 2018 gross premium rates.

Medical Trend Factors

The development of annual medical paid claim trend factors for 3Q 2018 is illustrated in Exhibit 2a. MVP is reflecting 0.0% medical utilization trends in the current filing, and the assumed unit cost trends reflect known and assumed price increases from MVP's provider network as of the filing date.

As stated previously, MVP has assumed 0.0% for medical utilization trends in the current filing. MVP analyzed its combined MVPHIC and MVPHP Vermont data for 36 months between 2015 and 2017. In performing this analysis, we were concerned with the large impact that membership growth in other blocks of business (MVPHP small group and individual exchange) was having on the total utilization trend for Vermont. Because removing MVPHP data from the calculation would leave a block that was not considered credible, we elected to reflect no utilization trend.

The assumed unit cost trends reflect known and assumed price increases from MVP's provider network. The 2018 unit cost trends for VT hospitals reflect the budgets proposed by each hospital back to the Green Mountain Care Board. Please see Exhibit 2A for the unit cost trends by claim category by year. MVP has assumed that the 2019 annual trend is equal to the 2018 trend, as we lack information on unit cost trends for 2019 at this time.

In addition to the medical cost inflation rate assumed from the historical experience period to the rating period, an adjustment is needed to reflect the impact of cost share leveraging on the carrier's share of the medical cost. Leveraging is a result of the fixed nature of deductibles and copays in health benefit plans. When there are fixed member deductibles and copays, the carrier bears a greater portion of the cost of medical inflation. Therefore, an additional factor adjustment is made to the trend assumption to capture this cost.

The trend applied to the deductible portion of the experience period was derived using the distribution of claims for MVP's VT book of business. Claims below the average deductible amount over the experience period were trended at the applicable allowed trend rate while claims greater than the deductible were held flat.

Also included in this filing is a paid trend development exhibit for 4Q 2018. Please see Exhibit 2c which is identical to Exhibit 2a except there is one quarter of 2018 trend reflected in the calculation.

Rx Trend Factors

Annual Rx trend factors split by generic, brand and specialty drugs are illustrated in Exhibit 2a. These trend factors were supplied by MVP's pharmacy benefit manager (PBM) and reflect their best estimate of expected changes to pharmacy costs and drug utilization, given MVP's data as a starting point. Supporting documentation illustrating how the Rx trends shown on Exhibit 2a were converted to paid trends for 3Q 2018 can be found in Exhibit 2b.

MVP has revised its trend forecasts from the previous version of this filing to reflect changes in the underlying utilization patterns as well as updated unit cost increases provided by MVP's PBM. The PBM has provided trends for 2017, 2018 and 2019. The trend forecast provided by MVP's PBM accounts for drugs coming off patent, changes in average wholesale price, new drugs being released to the market, and price competitiveness amongst generic and brand drug manufacturers. Please see the following tables which display MVP's pharmacy trends in this filing and the previous version of this filing.

Rx Trends Used in 3Q 2018 MVP VT Small Group Grandfathered Filing

	2017 Trend		2018 Trend		2019 Trend	
	Unit Cost	Utilization	Unit Cost	Unit Cost	Unit Cost	Utilization
Generic	-8.3%	0.8%	-0.4%	2.7%	4.6%	3.1%
Brand	9.9%	-4.4%	14.9%	2.5%	12.5%	1.4%
Specialty	10.9%	9.6%	6.9%	7.5%	10.6%	7.4%

Please see the attached file, "Rolling 12 Medical and Rx Data – SG HDHP" which contains a rolling 12 month summary of total Rx claim costs as well as Rx data broken out by Generic, Brand, and Specialty.

Also included in this filing is an Rx paid trend development exhibit for 4Q 2018. Please see Exhibit 2d which is identical to Exhibit 2b except there is one additional quarter of 2019 Rx trend reflected in the calculation.

Retention Expenses

Exhibit 5 in the rate filing illustrates the non-claim expense loads included in the proposed premium rates. This portion of the premium rates is intended to cover MVP's general administrative expenses, taxes/assessments, bad debt expense, and a contribution to reserves.

The proposed premium rates reflect an administrative charge equal 8.4% of premium for this filing. This is unchanged from the previous SG AR42 filing. Please see the following table for a summary of MVP's administrative expenses from 2013 – 2016 for Small Group business in Vermont:

Administrative Expense Summary - Data Taken from Supplemental Health Care Exhibit

	Small Group - AR42 & AR44			
	Member Months	Premium PMPM	Admin PMPM	Expense Ratio
2013	178,794	$394.67	$46.56	11.8%
2014	87,545	$410.60	$38.11	9.3%
2015	53,993	$416.49	$34.04	8.2%
2016	60,883	$431.29	$38.07	8.8%

Admin PMPM reflects the following lines from Part I of the SHCE: 6.6, 8.3, 10.1, and 10.4

A summary of the taxes/assessments included in the premium rates are provided below:

ACA Insurer Tax
Since 2014, carriers have been taxed based on earned premium. This tax was reinstated for the 2018 plan year but has been removed for 2019. The tax is based on MVP's share of 2017 nationwide revenue relative to the total tax liability collected by the Federal Government. MVP estimates that this amount will be 1.0% for the 2018 plan year for MVPHP. The assumptions in this filing reflect a blend of 2018 and 2019 plan years, based on member-weighted renewal month for each quarter in question. The formula to calculate this is (number of months in 2018 / 12 * 1.0%) + (number of months in 2019 / 12 * 0.0%). The values assumed in the filing are 0.4% and 0.1% for 3Q 2018 and 4Q 2018 renewals (rounded to the nearest 0.1%), respectively.

Paid Claim Taxes
In addition to the State of Vermont 0.999% tax on paid claims, MVP is subject to New York HCRA taxes which are based on paid medical claims. The New York HCRA tax is based only on claims paid for services performed by New York hospitals. The New York HCRA load is assumed to be 0.25% and is based on historical HCRA fees incurred by Vermont members.

Comparative Effectiveness Research Fee
This is a prescribed Federal fee equal to $0.21 PMPM to fund the Federal Research Fund.

VT Vaccine Pilot
This is a Vermont state assessment based on plan premiums which is used to fund immunizations provided by the state. This assessment has been maintained at 0.5% of premium for this filing based on 2017 assessments from the State of Vermont for the Kids Vax program.

Contribution to Reserves/Risk Charge
MVP is building a 2% contribution to reserves/risk charge into the premium rates for the filing. This charge is added to premium rates to meet statutory reserve requirements for MVP's VT block of business and protect against adverse experience relative to pricing assumptions.

Bad Debt Expense
A plan level adjustment equal to 0.25% of premium was added to account for non-payment of premium risk. This charge is unchanged from the previous filing.

Vermont Premium Tax
The state of Vermont charges a premium tax to for-profit insurers. Because MVP is moving this block of business from MVPHIC (for-profit) to MVPHP (not-for-profit), this premium tax has been removed from the filing.

Loss Ratio Information

The traditional target loss ratio (claims cost / premium) for the rates proposed in this rate filing is 88.4%. After making adjustments for taxes/assessments and expenses associated with quality improvements, the Federal target loss ratio for the rates proposed in this filing is 90.1%. Please see the following table for more detail:

Target Loss Ratio for SG HDHP in 3Q 2018

	Small Group AR42 HDHP
A) Claims Expense	$425.19
B) Taxes/Assessments	$4.54
C) Quality Improvement	$4.04
D) Premium	$480.95
E) Traditional Loss Ratio *= A) / D)*	**88.4%**
F) Federal Loss Ratio *= [A) + C)] / [D) - B)]*	**90.1%**

Please note that the traditional target loss ratio has increased from 85.6% in the 3Q 2017 filing to 88.4% for this filing. This is due to the removal of the VT premium tax, the reduction in the ACA tax assumption for 2018 dates (MVP assumes that it will have to pay 1.0% of premium on MVPHP versus 2.0% on MVPHIC), and the delay of the ACA tax for 2019.

For calendar year 2017, the actual loss ratio for this block of business as of the filing is 94.6%. MVP did not rebate customers for its Small Group AR42 VT block in 2015 or 2016, and does not anticipate having to pay an MLR rebate for the block for the 3 year average of 2015-2017.

Retired Products

Due to the company change from MVPHIC to MVPHP, the entire previous portfolio must be retired and filed on the new license. The following medical base plans from the previous filing that have been retired and not replaced include: VPHD-03S, VPHD-04S, and VPHD-06S. The following medical riders have also been retired and not replaced in this filing: VPHD 312 (all versions), VHD306, VHD702, VHD316, VHDC317, VHDC343, VHDC344, VHDC345, and VHD510 (versions c, d, f, aj).

New/Modified Products

Because of IRS minimum deductible requirements for qualified HDHPs, MVP was forced to modify the benefit previously known as VEHD-49. MVP has chosen to do this in two different ways in the filing: filing the same benefits as VEHD-49 but without the qualified status, and filing a new qualified HDHP benefit changing the family deductible and maximum out of pocket from embedded to aggregate.

VT3HMO049XSG represents the non-qualified version of VEHD-49. MVP has set the premium relativity for this plan equal to the prior premium relativity for VEHD-49 because the benefits are the same with the exception of qualified status. This base plan would no longer be eligible to purchase rider RXVT3HDH510, as that is for qualified plans only.

VT3HDH54AXS represents the change in family cost-sharing from embedded to aggregate. MVP utilized the same version of its internal benefit relativity model as it used the last time these plans were “sloped” to value the premium relativity for this new plan.

MVP is still in discussion with the groups affected by this change to determine the best course of action going forward. Based upon discussions with MVP’s legal team, we believe that neither option will jeopardize these groups’ grandfathered status. Therefore, we have filed rates for both benefits in the current filing.

Rider RXVT3HDH510-ao represents the Safe Harbor preventative Rx rider for new plan VT3HDH54AXS. The value of this benefit was determined consistent with the other versions of RXVT3HDH510, by using MVP's benefit relativity model to value the benefits before and after the rider is applied. The difference between those two benefits is then the value of the rider.

Rider VEHD 312 was previously filed with different versions that attached to each base medical benefit. These versions had different per-contract prices depending on which plan that they attached to. MVP has removed the versions in the current filing and proposed to fix the value of the benefit at 0.5% of the premium charged for the base benefit. The previous version method for this rider was administratively complex and not providing enough value to justify the continuation. The previous versions ranged from approximately 0.3% to 0.7% of the base benefit price, so MVP has chosen 0.5% to represent the value of the rider. Therefore, no quarterly or annual increase is displayed for this rider, and the 5 subscribers (11 members) active as of January 2018 that purchase this rider may see quarterly or annual increases slightly higher or lower than what is shown on Exhibits 3a and 3b.

Supplemental Exhibits

Also included with this filing is a historical claim and membership summary for the past 36 months grouped into rolling 12 month periods. Incurred claims from November 2014 – October 2017 completed through February 2018 are reflected in the data.

Actuarial Certification

I, Eric Bachner, am an Associate of the Society of Actuaries. I have examined the assumptions and methods used in determining MVP's requested rates. Based on my review and examination, it is my opinion that the proposed premium rates are reasonable in relation to the benefits provided and that they are not excessive, inadequate, nor unfairly discriminatory. This rate filing conforms to the applicable Standards of Practice as promulgated by the Actuarial Standards Board.

03/21/2018

Eric Bachner, ASA
Senior Actuarial Analyst
MVP Health Care, Inc.

Date