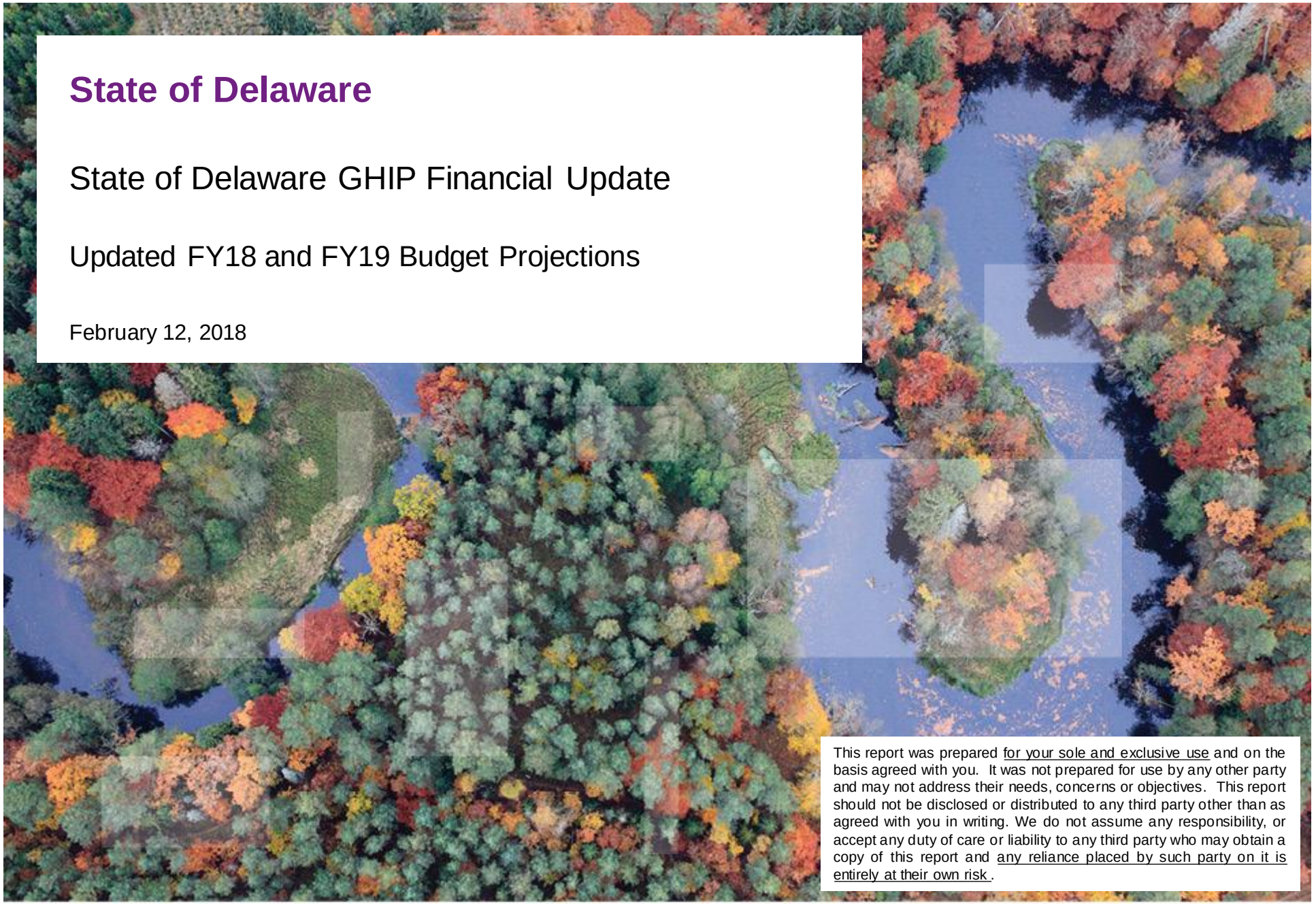
State of Delaware

State of Delaware GHIP Financial Update

Updated FY18 and FY19 Budget Projections

February 12, 2018



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Willis Towers Watson

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- Long term cost projections
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Health care budget projections

FY18 recast and FY19 projection (as presented at 12/11/17 SEBC meeting)

- At 12/11/17 SEBC meeting, Willis Towers Watson presented GHIP financial projections based on updated claims experience through September 2017 (FY18 Q1)
- $790.2M projected FY18 cost based on experience through Q1 represents a 1.1% decrease compared to original FY18 budget ($798.7M) approved 8/21/17 by SEBC, primarily driven by favorable claims experience in Q1 FY18
- FY18 budget recast through Q1 resulted in $7.5M GHIP surplus (after reserves/deposits) through FY19, assuming no additional program changes for FY19 and beyond

Health care budget projections

FY18 Q1 update – no program changes (as presented at 12/11/17 SEBC meeting)

GHIP Costs ($ millions)	FY17 Actual	FY18 Recast Projected	FY19 Projected	FY20 Projected	FY21 Projected	FY22 Projected	FY23 Projected
Average Membership	123,132	124,258	124,258	124,258	124,258	124,258	124,258
GHIP Revenue							
Premium Contributions (No Change)[1]	$799.0	$813.7	$813.7	$813.7	$813.7	$813.7	$813.7
Other Revenues[2]	$81.6	$82.9	$88.8	$93.2	$97.9	$102.8	$107.9
Total Operating Revenues	**$880.6**	**$896.6**	**$902.5**	**$906.9**	**$911.6**	**$916.5**	**$921.6**
GHIP Expenses (Claims/Fees)							
Operating Expenses (No Change)[3]	$816.8	$873.1	$932.0	$978.7	$1,026.6	$1,077.9	$1,130.8
% Change Per Member		*5.9%*	*6.7%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
Excise Tax Liability[4]	-	-	-	$0.2	$4.0	$9.1	$16.3
Adjusted Net Income (Revenue less Expense/Excise Tax)	**$63.8**	**$23.5**	**($29.5)**	**($72.0)**	**($119.0)**	**($170.5)**	**($225.5)**
Balance Forward	$38.9	$102.7	$126.2	$96.7	$24.7	($94.3)	($264.8)
Ending Balance	$102.7	$126.2	$96.7	$24.7	($94.3)	($264.8)	($490.3)
- Less Claims Liability[5]	*$54.0*	*$59.5*	*$63.4*	*$66.5*	*$69.9*	*$73.6*	*$77.6*
- Less Minimum Reserve[5]	*$24.0*	*$24.0*	*$25.8*	*$27.0*	*$28.4*	*$29.9*	*$31.5*
GHIP Surplus (After Reserves/Deposits)	**$24.7**	**$42.7**	**$7.5**	**($68.8)**	**($192.6)**	**($368.3)**	**($599.4)**

Note: FY17 Actual based on final June 2017 Fund Equity report.

[1] Includes State and employee/pensioner premium contributions and assumes no increase to premiums 7/1/2017 and beyond; premiums include 5% risk fee surcharge for participating non-State groups.

[2] Includes Rx rebates, EGWP payments and other revenues.

[3] FY18 and FY19 based on claims data for the period 10/1/2015-9/30/2017 (24 months) weighted 35% earlier / 65% later period, ESI contract savings and savings from initiatives implemented 7/1/2017, 7.4% composite health care trend assumption, and enrollment as of September 2017. FY20-FY23 projected assuming 5% annual increase over FY19 (6% long term health care trend less 1% reduction). If 6% annual trend applied for FY20-FY23, projected GHIP deficit as of the end of FY23 increases from $599.4m to $707.6m

[4] 40% excise tax on the value of employer sponsored health care coverage over specified thresholds starting CY 2020. Threshold assumed to increase at 2% annually.

[5] FY18 Claims Liability and FY19 Minimum Reserve levels updated with data through September 2017. Future years assumed to increase with overall GHIP expense growth

Health care budget projections

FY18 recast and FY19 projection

- Willis Towers Watson updated GHIP financial projections based on updated claims experience through December 2017 (FY18 Q2)
- $794.6M projected FY18 cost based on experience through Q2 represents a 0.6% increase compared to projected FY18 cost with experience through Q1 ($790.2M) driven by the following factors:
  - Slight increase in GHIP headcount
  - Although FY18 Q2 ran favorably against budget, GHIP has historically experienced a dip in claim levels in the second quarter of fiscal year (FY16 Q2 and FY17 Q2)
  - WTW will continue to review emerging FY18 claims experience
- $850.4M projected FY19 cost is a 7.0% increase over FY18 recast, and suggests a 4.8% increase in budget rates over current FY18 budget rates (if no surplus used to offset)
- FY19 projected cost reflects the impact of approved and proposed changes effective 7/1/18:
  - Expanded site-of-care steerage and COE: $2M savings ***(approved)***
  - Waive copay ($0 copay) for all generic statins for members in a certain age range: $286k additional cost ***(proposed)***
  - Cover preventive 3D mammography at no cost to members: $837k additional cost ***(proposed)***

Health care budget projections

FY18 recast and FY19 projection

Component	Description	Cost ($M)	% Impact	Rate Action over FY18 Budget*
FY18 Projected Cost (Original Approved as of 8/21/2017)		**$798.7**		
FY18 Projected Cost (Based on Recast through Q1)		**$790.2**	**-1.1%**	
Claims Experience	Claims experience updated through FY18 Q2 compared to budgeted costs	$2.0	0.3%	
Favorable Pharmacy Trend	Favorable Rx drug claims trend expected for FY18 only	($3.8)	-0.5%	
EGWP Payments	Represents decrease in expected FY18 EGWP revenue based on EGWP payments received through Dec 2017	$4.0	0.5%	
Change in Headcount	Represents increase in expected FY18 claims due to increase in enrollment levels	$2.2	0.3%	
FY18 Projected Cost (Recast)		**$794.6**	**0.6%**	
FY18 Projected Cost (Recast) less one-time $5.8m EGWP reconciliation		***$788.8***		
Health Care Trend (Medical/Rx)	6.5%/10% Active and Pre-65 Retirees 3%/10% Medicare Retirees	$63.0	7.9%	
Rx offsets	Represents increase in expected FY19 EGWP payments and pharmacy rebates	($6.3)	-0.8%	
SEBC approved design changes (effective 7/1/18)	Represents SEBC approved design changes for site-of-care steerage for imaging/outpatient lab and COE services	($2.0)	-0.3%	
Proposed design changes (to be voted on by SEBC for 7/1/18 effective date)	Represents GHIP cost increases associated with $0 statin coverage and preventive 3D mammography	$1.1	0.1%	
FY19 Projected Cost (Recommendation)		**$850.4**	**7.0%**	**4.8%**

*FY18 aggregate budget of $811.5m based on FY18 rates (excluding 5% risk fee surcharge for participating non-State groups) and December 2017 contracts

Health care budget projections

FY18 recast and FY19 projection – sensitivity analysis

- FY18 and FY19 projected costs are shown below under a range of reasonable assumptions, including varying weighting for the two experience periods and varying the health care trend factors

Vary the experience period

Key Assumption	Aggressive	Recommendation	Conservative
Experience Period	1/1/17 – 12/31/17	1/1/16 – 12/31/17	1/1/16 – 12/31/17
Experience Weighting (Prior Period / Current Period)	0% / 100% (most recent year only)	35% / 65% (2 years, emphasizes recent)	50% / 50% (2 years, even split)
Active/Pre65 Trend (Med/Rx)	6.5% / 10%	6.5% / 10%	6.5% / 10%
FY18 Aggregate Costs (Recast)	**$787.0M**	**$798.5M**	**$803.9M**
FY19 Aggregate Costs (Projected)	**$837.8M**	**$850.4M**	**$855.8M**
FY19 Overall % Change (vs FY18 Budget)	**3.2%**	**4.8%**	**5.5%**
FY19 Overall $ Change (vs FY18 Budget)	**$26.3M**	**$38.9M**	**$44.3M**

Vary the health care trend

Key Assumption	Aggressive	Recommendation	Conservative
Experience Weighting	35% / 65%	35% / 65%	35% / 65%
Medical Trend – Active/Pre65	6%	6.5%	7%
Medical Trend – Medicare	3%	3%	3%
Pharmacy Trend	8%	10%	12%
FY18 Aggregate Costs (Recast)	**$792.4M**	**$798.5M**	**$805.3M**
FY19 Aggregate Costs (Projected)	**$836.0M**	**$850.4M**	**$865.1M**
FY19 Overall % Change (vs FY18 Budget)	**3.0%**	**4.8%**	**6.6%**
FY19 Overall $ Change (vs FY18 Budget)	**$24.5M**	**$38.9M**	**$53.6M**

Note: FY18 aggregate budget of $811.5m based on FY18 rates (excluding 5% risk fee surcharge for participating non-State groups) and December 2017 contracts

GHIP long term health care cost projections

FY18 Q2 update – with FY19 program changes[1]

GHIP Costs ($ millions)	FY17 Actual	FY18 Recast Projected	FY19 Projected	FY20 Projected	FY21 Projected	FY22 Projected	FY23 Projected
Average Membership	123,132	124,613	124,613	124,613	124,613	124,613	124,613
GHIP Revenue							
Premium Contributions (No Change)[2]	$799.0	$815.0	$815.0	$815.0	$815.0	$815.0	$815.0
2020-2023 Rate Action + 2% annual premium increase[3]	-	-	-	*$16.3*	*$32.6*	*$48.9*	*$65.2*
Other Revenues[4]	$81.6	$83.5	$86.9	$91.2	$95.8	$100.6	$105.6
Total Operating Revenues	**$880.6**	**$898.5**	**$901.9**	**$922.5**	**$943.4**	**$964.5**	**$985.8**
GHIP Expenses (Claims/Fees)							
Operating Expenses	$816.8	$872.3	$937.3	$984.3	$1,032.5	$1,084.1	$1,137.3
% Change Per Member		*5.5%*	*7.5%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
Excise Tax Liability[5]	-	-	-	-	-	$9.1	$16.3
Adjusted Net Income (Revenue less Expense/Excise Tax)	**$63.8**	**$26.2**	**($35.4)**	**($61.8)**	**($89.1)**	**($128.7)**	**($167.8)**
Balance Forward	$38.9	$102.7	$128.9	$93.5	$31.7	($57.4)	($186.1)
Ending Balance	$102.7	$128.9	$93.5	$31.7	($57.4)	($186.1)	($353.9)
- Less Claims Liability[6]	*$54.0*	*$58.9*	*$63.3*	*$66.5*	*$69.8*	*$73.9*	*$78.0*
- Less Minimum Reserve[6]	*$24.0*	*$24.0*	*$25.7*	*$27.0*	*$28.3*	*$30.0*	*$31.7*
GHIP Surplus (After Reserves/Deposits)	**$24.7**	**$46.0**	**$4.5**	**($61.8)**	**($155.5)**	**($290.0)**	**($463.6)**

Note: FY17 Actual based on final June 2017 Fund Equity report.

[1] Includes approved design changes for site-of-care steerage for imaging/outpatient lab and COE services and proposed design changes for $0 statin coverage and preventive 3D mammography effective 7/1/2018; assumes no additional program changes FY2020 and beyond.

[2] Includes State and employee/pensioner premium contributions and assumes no increase to premiums 7/1/2017 and beyond; premiums include 5% risk fee surcharge for participating non-State groups.

[3] Includes State and employee/pensioner premium contributions and assumes premiums increase by 2% annually for FY20-FY23. Increases GHIP revenue by $163m over 4 years.

[4] Includes Rx rebates, EGWP payments, and other revenues. FY18 includes additional $5.8M due to FY16 EGWP federal reinsurance reconciliation timing.

[5] 40% excise tax on the value of employer sponsored health care coverage over specified thresholds starting CY 2022. Threshold assumed to increase at 2% annually.

[6] FY18 Claims Liability and FY19 Minimum Reserve levels updated with data through December 2017. Future years assumed to increase with overall GHIP expense growth.

Health care budget projections

Rate impact for FY19 and FY20

- SEBC is considering holding budget rates and employee contributions flat for FY19, i.e. no rate increase effective 7/1/2018
- Rate increase for 7/1/2018 equates to 4.8% increase based on FY19 projected expenditures, leading to a potential funding gap of $35.4m in FY19
- If FY19 rates are held flat, rates would need to increase by 10% in FY20 to cover expected GHIP expenditures, assuming 5% annual health care trend for 2020 over 2019
- Illustrative rates shown below for the HMO and Comprehensive PPO plans

	FY18		FY19 - Hold Rates Flat			FY20 - Illustrative			
	Rate	Employee Contribution	Rate	Employee Contribution	% Increase over FY18	Rate	Employee Contribution	% Increase over FY19	EE Monthly $ Increase
HMO									
Employee	$725.94	$47.16	$725.94	$47.16	0.0%	$798.82	$51.89	10.0%	$4.73
Employee + Spouse	$1,530.58	$99.50	$1,530.58	$99.50	0.0%	$1,684.25	$109.49	10.0%	$9.99
Employee + Child	$1,110.52	$72.18	$1,110.52	$72.18	0.0%	$1,222.02	$79.43	10.0%	$7.25
Family	$1,909.82	$124.12	$1,909.82	$124.12	0.0%	$2,101.57	$136.58	10.0%	$12.46
Comprehensive PPO									
Employee	$793.86	$105.18	$793.86	$105.18	0.0%	$873.56	$115.74	10.0%	$10.56
Employee + Spouse	$1,647.34	$218.26	$1,647.34	$218.26	0.0%	$1,812.73	$240.17	10.0%	$21.91
Employee + Child	$1,223.46	$162.08	$1,223.46	$162.08	0.0%	$1,346.30	$178.35	10.0%	$16.27
Family	$2,059.40	$272.86	$2,059.40	$272.86	0.0%	$2,266.16	$300.26	10.0%	$27.40

Health care trend variability analysis

FY19 minimum reserve

FY19 Cost Estimate		
Variability Description	**Lower Bound**	**Upper Bound**
Expected Value (without margin)	$850,430,000	
70% Confidence Interval	$838,146,000	$862,714,000
90% Confidence Interval	$830,934,000	$869,926,000
95% Confidence Interval	$827,199,000	$873,661,000
97% Confidence Interval	$824,709,000	$876,151,000

At the 97% confidence interval level, the upper bound is $25.7M higher than the projected budget

- Health care trend variability analysis provides statistical confidence intervals to better quantify volatility and address risk tolerance concerns
  - Confidence intervals represent the probability that the budget estimate will fall between an upper and lower bound of a health care claims distribution
- During March 6, 2017 meeting, SEBC approved a motion to set minimum reserve based on upper bound of 97% confidence interval with intent to refresh amount annually

The above analysis is based on GHIP data available through FY18 Q2, current enrollment as of December 2017, decisions approved to date by the SEBC, and other pricing assumptions as outlined in this document. The estimated confidence intervals shown are directional and intended to reflect the potential random fluctuation in claim cost given the current size and risk profile of the GHIP. The model does not contemplate potential change in cost due to shifts in enrollment, demographics or morbidity of the population, unexpected changes in provider networks, or significant changes in regulations affecting the health care market.

Source: Willis Towers Watson Trend Variability tool including proprietary Health Care Claims Continuance table based on 2017 data

Claim liability as of 12/31/2017

- GHIP Claim Liability target is set based on the estimated incurred but not paid ("IBNP") liability, calculated on a quarterly basis
- For the 12/31/2017 IBNP liability estimate, Willis Towers Watson updated the lag factors for each vendor (Aetna, Highmark, and ESI) as of 12/31/2017
  - Lag factors represent the average period of time between when a claim is incurred and then paid by the State, and were developed separately for Aetna, Highmark, and ESI based on data provided by each vendor
  - Lag factors are reviewed and updated annually
- Highmark and ESI average lag factors decreased slightly compared to prior factors, while Aetna's lag factor increased from 12.3% to 13.9%
  - Aetna factor increase largely attributable to slower claim processing after 7/1/2017
  - Given that data for FY18 is still emerging, recommend reviewing Aetna's lag factor in 6 months

Vendor	Revised Lag Factor	Prior Lag Factor
Highmark	0.98 months or 8.2%	1.01 months or 8.4%
Aetna	1.67 months or 13.9%	1.47 months or 12.3%
ESI	0.38 months or 3.2%	0.42 months or 3.5%

- Recommended Claim Liability is $58.9M based on paid claims for the period 1/1/2017 – 12/31/2017 and the above lag factors

Appendix

Budget Development Methodology

Health care budget development

Overview of budget development process

step 1 — Data Collection

- Groups: Active employees and pre-65 retirees (Aetna/Highmark/ESI) and post-65 Medicare retirees (Highmark/ESI)
- Headcount: Employees and dependents enrolled within the recent 24 months of experience
- Utilizing this data from vendor experience reports (claims, enrollment, rebates) and OMB's monthly health fund report (expenses), self-insured medical/Rx budget rates and employee contributions are developed

step 2 — Assumption & Pricing Analysis

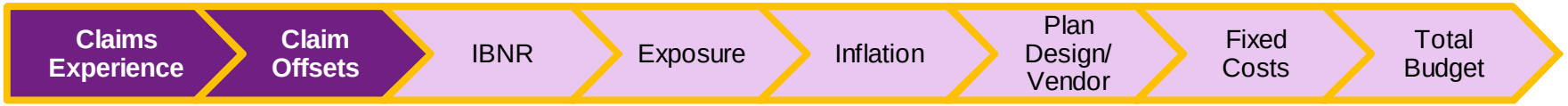
- Claims experience is adjusted to reflect:
  - Plan design/vendor/network changes
  - Legislative changes
- IBNR factors complete the claims experience, estimating the value of claims *incurred but not reported*
- Health care inflation factors, determined annually from marketplace and Willis Towers Watson survey data, and with approval from SEBC, project past claims into the future
- Offsets for prescription drug rebates and Medicare EGWP income reduce claims cost
- Health care administrative and legislative fees, including applicable ACA fees, are added to projected claims experience
- Blended health care rate: projected claims experience with health care administrative fees divided by headcount (*per person* cost)
- Blended health care rate allocated based on *actuarial value* of plan options

step 3 — Aggregate Budget Development

- State of Delaware's July 1st fiscal year budget is based on the developed budget rates calculated in Steps 1-2, leveraging prior year claims experience and current enrollment patterns to project future cost
  - Timing requires that the claims data used to project the upcoming plan year is nearly two years old (e.g., CY17 data primarily used to set FY19 budget rates)
  - Preliminary FY19 budget developed in late 2017 based on claims experience through Q1 FY18
  - Budget projection was revised with data through Q2 FY18
  - Prior to SEBC approval of final budget in April/May timeframe, review claims experience through Q3 FY18 and update if experience deviates from current projection

Health care budget development

Assumption and pricing analysis details



- **Claims experience** provided by vendors (Highmark, Aetna, and ESI) reflected paid claims and enrollment for the most recent available 24 months, or two experience periods, from October 2015 through September 2017
  - Period 1 (1/1/2016 – 12/31/2016) weighted 35%
  - Period 2 (1/1/2017 – 12/31/2017) weighted 65%
  - WTW recommends using 1-2 years of claims experience for large employer groups
  - Aetna is reporting that inpatient and outpatient utilization levels decreased in Q1-Q2 FY18 for most key metrics compared to Q1-Q2 FY17, and anticipate that these metrics will return to expected levels as HMO plan matures with new membership; recommend using 24 months of claims data until HMO claim levels stabilize
- Claims experience was adjusted for **claim offsets** from pharmacy rebates and EGWP funding, including:
  - Commercial Drug Rebates: Prescription drug claims are offset by actual prescription rebate payments received from ESI for the quarter payment was attributable (actual rebates currently updated through FY17)
  - Medicare EGWP: Medicare costs offset by actual and projected[1] EGWP income; includes income from Direct Subsidy, Coverage Gap Discount, Reinsurance/LICS, and applicable Medicare drug rebates (actual rebates currently updated through FY17)
  - Claims experience was also adjusted based on revised ESI contract terms effective 7/1/2016[2]

[1]Retiree Medicare plan runs on a calendar year basis, and a portion of CY2016 EGWP income is based on future projections
[2]Additional ESI contract savings projections independently verified by WTW

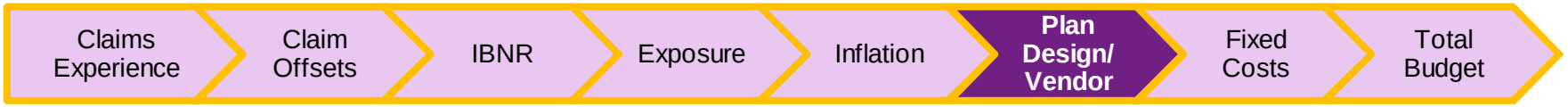
Health care budget development

Assumption and pricing analysis details

- **Incurred But Not Reported (IBNR)** adjustments convert paid claims to an incurred basis based on the lag between when a claim is incurred and when it is paid. Budget reflects average lag factors as of 12/31/2017
- **Exposure** adjustments reflect GHIP's FY18 plan elections following termination of Highmark HMO and CDH plans (no material shifts in age distribution/demographic mix for overall GHIP); adjusted claims experience for each period converted into a *per adult* equivalent claims cost
  - Period 1 Enrollment (1/16 – 12/16): 68,427 total contracts (+1.4% from prior period)
    - Active and pre-65 retiree: 43,821
    - Medicare: 24,606
  - Period 2 Enrollment (1/17 – 12/17): 69,634 total contracts (+1.8% from prior period)
    - Active and pre-65 retiree: 44,096
    - Medicare: 25,538
- **Inflation and trend** adjustments increased the claims costs to reflect expected year-over-year increases to the cost of services; trend assumption set based on review of national survey data and GHIP-specific experience
  - The following factors were used to project GHIP claims to FY19:
    - Active and non-Medicare retirees: 6.5% medical trend, 10% prescription drug trend
    - Medicare retirees: 3% medical trend, 10% prescription drug trend

Health care budget development

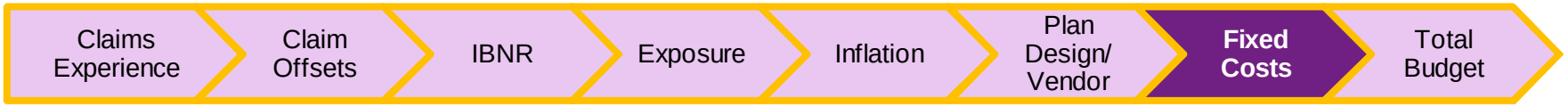
Assumption and pricing analysis details



- **Plan Design** adjustments applied to the claims costs to reflect any plan design changes or movement across plans, and were based on the relative difference in *actuarial value* of the plans
  - Underlying claims experience reflects all plan design changes made to date
  - No further plan design changes assumed for FY19
- **Vendor adjustments** reflect results from medical TPA RFP and other vendor initiatives adopted for FY18, and changes approved/proposed for FY19
  - Adjustments were made for the following 7/1/2017 program changes:
    - 1.4% savings applied to Highmark plans (excluding Medicfill) due to implementation of CCMU program effective 7/1/2017
    - 2% savings applied to Aetna HMO claims due to implementation of Aetna AIM effective 7/1/2017
  - Adjustments were made for the following 7/1/2018 program changes:
    - $2M savings for site-of-care steerage and COE
    - $286k cost for waiving copay for all generic statins for members in a certain age range
    - $837k cost for preventive 3D mammography coverage at no cost to members

Health care budget development

Assumption and pricing analysis details



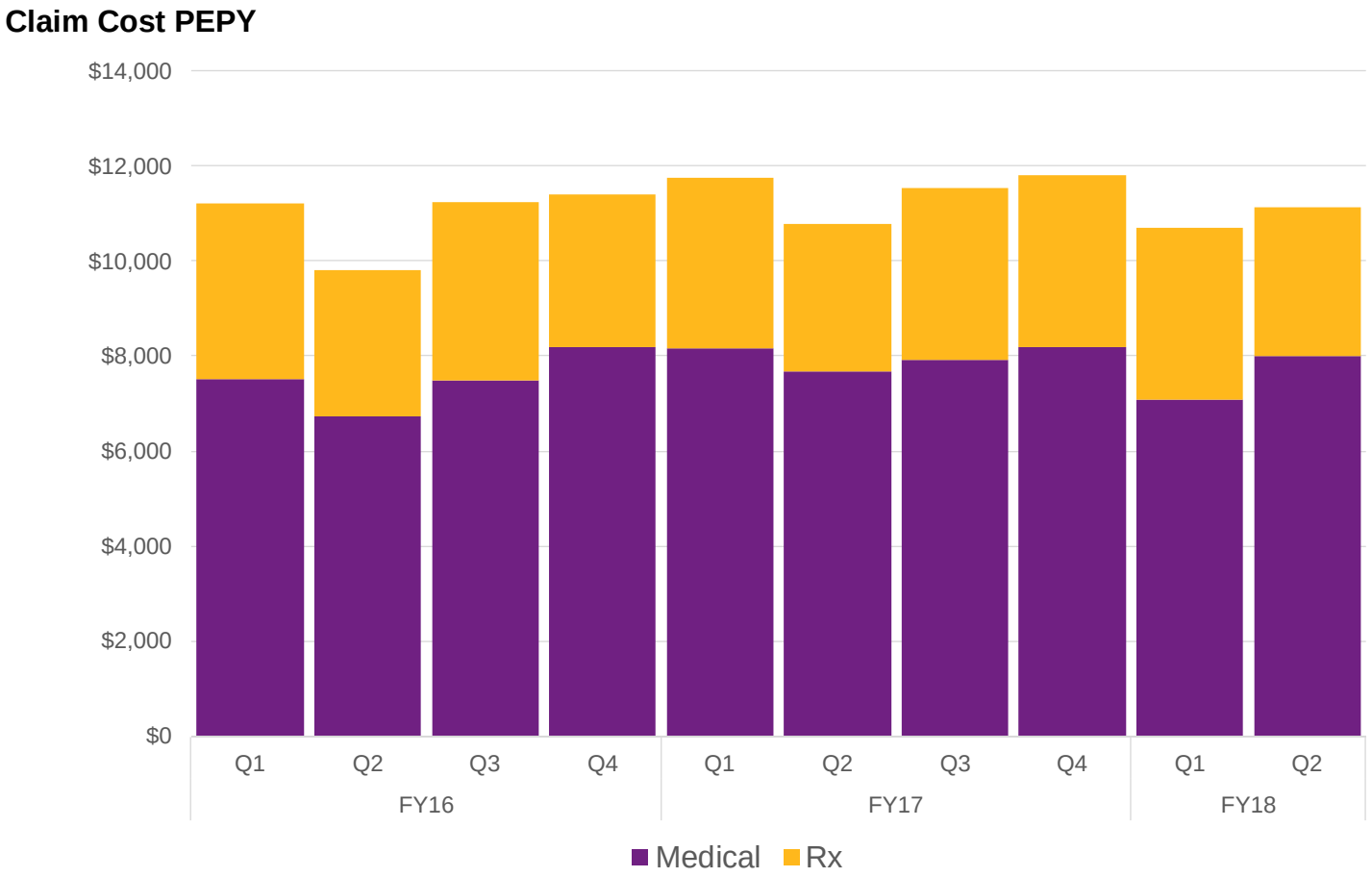
- **Self-insured fixed costs** were added to the adjusted claims cost to develop the total budget; this includes the following administrative service fees and expenses:

Fee	Payable
Active/Pre-65 Retiree Medical ASO Fee[1]	Aetna & Highmark
Commercial Pharmacy Drug ASO Fee	ESI
Medicare Retiree Medical ASO Fee[1]	Highmark
EGWP Pharmacy Drug ASO Fee	ESI
OMB Office Expenses[2]	OMB Expenses
ACA Fees	Federal Government/HHS

[1] Medical ASO fees reflect the results of the FY18 medical TPA RFP; Aetna HMO fees reflect AIM model including Care Link fees
[2] OMB Office Expenses includes the cost of HMS-Health Advocate Inc. EAP, Truven Analytics, Ceridian/Conexis, Willis Towers Watson Consulting, Vanguard Direct (ACA reporting), OMB salaries, wages, and other employer costs

Historical GHIP claims costs

Medical and pharmacy gross claims per employee per year



*Based on combined active, pre-65 retiree, and post-65 Medicare retiree gross medical and pharmacy claims, provided by Highmark, Aetna, and ESI; does not include offsets from drug rebates and EGWP payments, administrative fees or operational expenses