

Wisconsin Department of Employee Trust Funds Group Insurance Board

IBM Watson Health Update
February 20, 2019



Agenda

- IBM Watson Health Engagement
- Key Performance Indicators (Dashboards)
- Key Trends Drilldown

IBM Watson Health & Wisconsin ETF

DW/VBI Primary Objectives

These goals were recommended by Segal Consulting in 2015*

- Select a partner to ETF and the Board in analyzing data and trends to lead to data driven program design and development decisions.
- Support a Total Health Management model that includes driving engagement in wellness and disease management programming.
- Provide information to evaluate self-insurance and regionalization of the health insurance program.

*<http://etf.wi.gov/boards/agenda-items-2015/gib1117/item3ar.pdf>

IBM Watson Health & Wisconsin ETF

DW/VBI Primary Objectives

- Contain future cost increases and improve the health of participants by measuring and analyzing:
 - Medical and Pharmacy Quality Adherence
 - Health Management and Wellness Program Design
 - Benefit Design and Network Management
 - Provider and Facility Quality
 - Plan Performance and Contract Adherence
 - Financial Management

These objectives were presented by ETF in the DW/VBI Request for Proposal issued in 2016.

IBM Watson Health & Wisconsin ETF

Project Status

- Solution components: Advantage Suite, Dynamic Health Insights & Benefit Modeler
- Initial contract period 03/1/2017 – 12/31/2018 with first renewal period of 01/01/2019 – 12/31/2020
- Began implementation in March 2017
 - Phase 1 completed May 2018 – Database available
 - Phase 2 completed August 2018 – Added data from three late data submitting entities and initial dashboards
- Data quality continually being evaluated and improved through collaborative work with the Data Submitting Entities (DSEs)

Key Performance Indicators

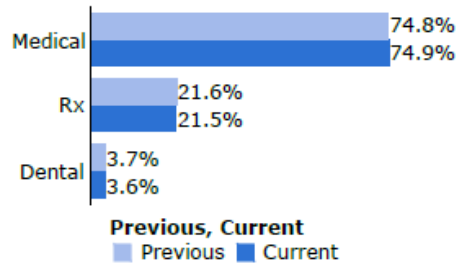
Financial

Previous Period: Sep 2016 - Aug 2017 (Incurred)
 Current Period: Sep 2017 - Aug 2018 (Incurred)

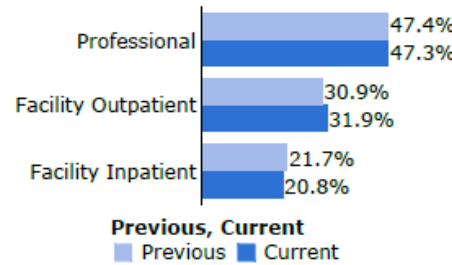


	Previous	Current	% Change
Total Net Payment	\$1.39 B	\$1.47 B	5.8% ▲

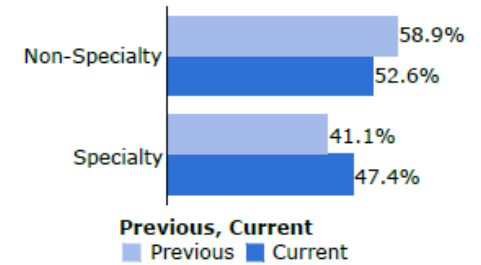
Net Payment by Summary Categories



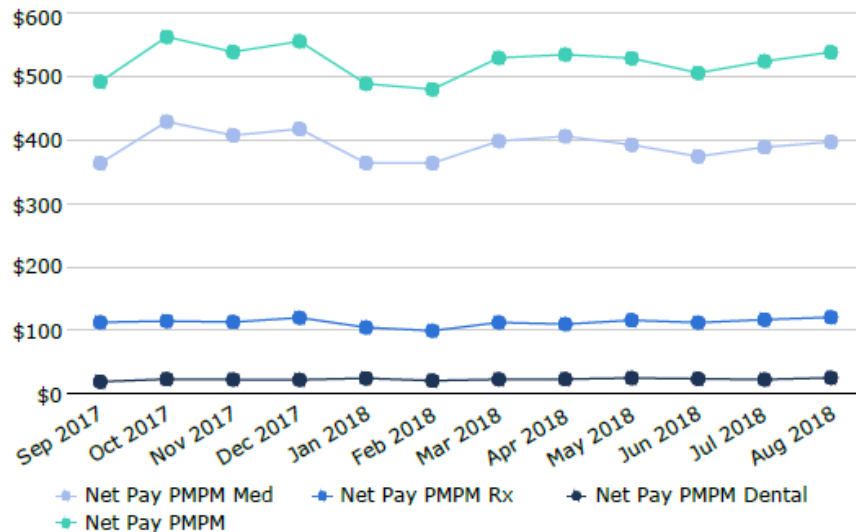
Net Payment by Medical Service Categories



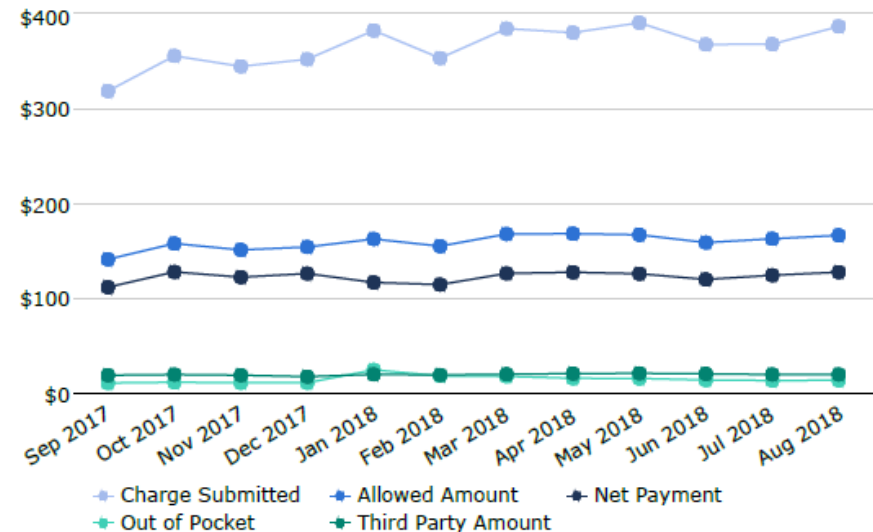
Net Payment by Non-Specialty vs Specialty Drugs



Monthly Cost Per Member



Total Monthly Costs (in Millions)



Financial

Previous Period: Sep 2016 - Aug 2017 (Incurred)

Current Period: Sep 2017 - Aug 2018 (Incurred)

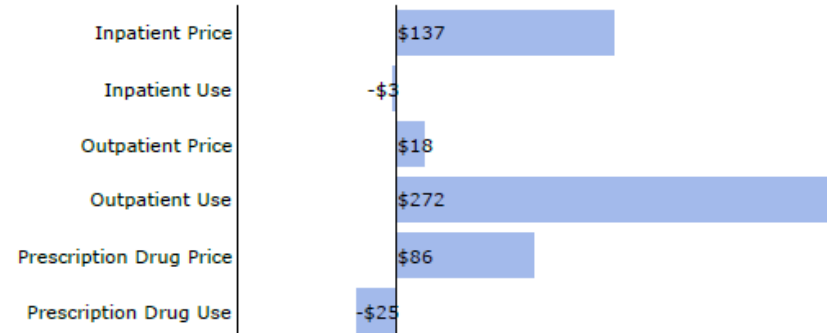


Cost Per Member

	Previous	Current	% Change		Norm	% Difference from Norm
Allow Amt PMPY Med and Rx	\$7,494	\$7,980	6.5% ▲		\$6,526	22.3% ▲
Allow Amt Per Visit Office Med	\$204	\$212	4.1% ▲			
Allow Amt Per Adm Acute	\$19,381	\$20,564	6.1% ▲		\$28,673	-28.3% ▼
Allow Amt Per Visit ER	\$1,466	\$1,559	6.3% ▲		\$1,873	-16.8% ▼
Allow Amt Per Script Rx	\$118	\$123	4.7% ▲		\$126	-2.1% ▼
Visits Per 1000 Office Med	6,956	6,941	-0.2%		5,839	18.9%
Admits Per 1000 Acute	70	70	-0.3%		57	23.9%
Visits Per 1000 ER	269	270	0.3%		213	26.9%
Scripts Per 1000 Rx	15,990	15,763	-1.4%			

Cost Drivers

Allowed Amount PMPY increased \$485 in the current period.
The factors driving this change include:



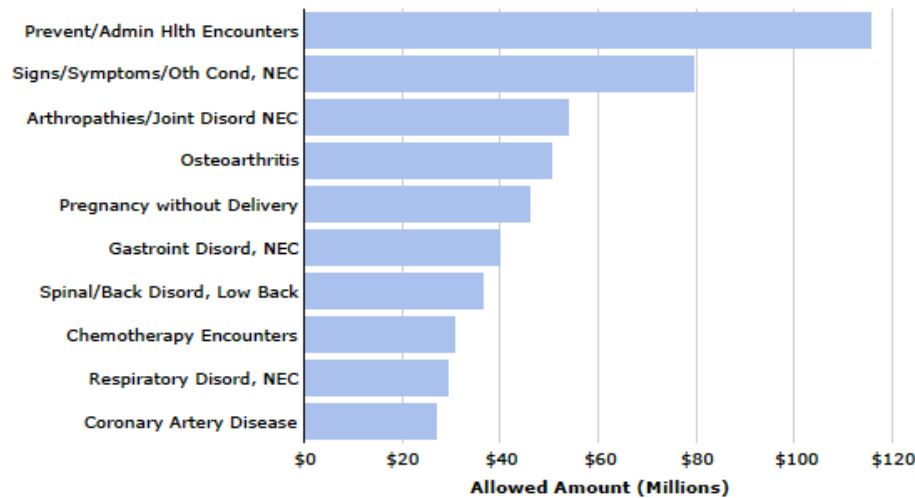
Clinical

Previous Period: Sep 2016 - Aug 2017 (Incurred)

Current Period: Sep 2017 - Aug 2018 (Incurred)



10 Most Expensive Clinical Conditions

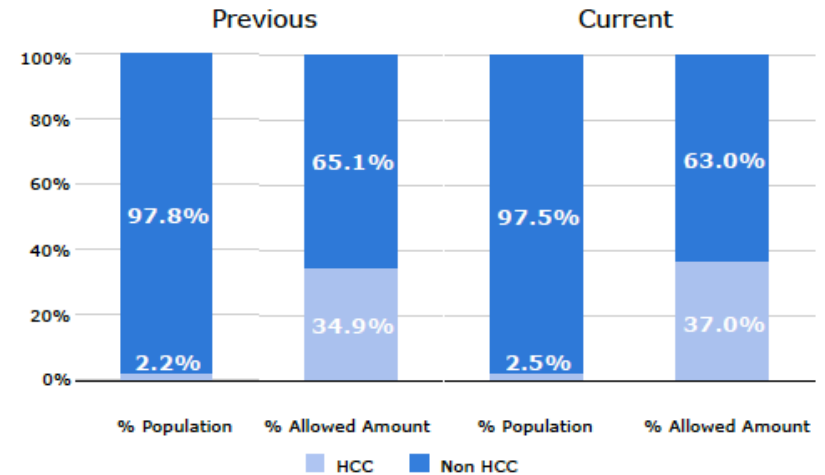


	Allow Amt Med	% of Total	+Patients	**Allow Amt Per Patient Med
Prevent/Admin Hlth Encounters	\$115,455,664	8.2%	165,417	\$699
Signs/Symptoms/Oth Cond, NEC	\$79,479,514	5.6%	68,653	\$1,158
Arthropathies/Joint Disord NEC	\$53,968,307	3.8%	47,855	\$1,128
Osteoarthritis	\$50,423,913	3.6%	14,733	\$3,423
Pregnancy without Delivery	\$46,123,645	3.3%	4,900	\$9,413
Gastroint Disord, NEC	\$39,824,885	2.8%	24,355	\$1,635
Spinal/Back Disord, Low Back	\$36,494,064	2.6%	26,219	\$1,392
Chemotherapy Encounters	\$30,817,947	2.2%	986	\$31,256
Respiratory Disord, NEC	\$29,172,092	2.1%	20,499	\$1,423
Coronary Artery Disease	\$26,925,158	1.9%	5,138	\$5,240
Top 10 Subtotal	\$508,685,187	36.1%	197,294	\$2,580
All Clinical Conditions	\$1,408,690,916	100.0%	242,912	\$6,189

+Patient counts may not be unique since some patients have multiple conditions.

**Only costs associated with this condition in the current period, patients may have multiple conditions.

High Cost Claimants (HCC) Trends



Top 10 Conditions for *Consistent HCC

	Allow Amt Med	Patients	**Allow Amt Per Patient Med
Chemotherapy Encounters	\$15,632,612	302	\$51,764
Renal Function Failure	\$9,155,344	332	\$27,576
Signs/Symptoms/Oth Cond, NEC	\$8,502,039	1,940	\$4,382
Condition Rel to Tx - Med/Surg	\$5,740,608	394	\$14,570
Infections, NEC	\$5,300,725	503	\$10,538
Respiratory Disord, NEC	\$5,121,880	991	\$5,168
Crohns Disease	\$4,553,423	210	\$21,683
Cancer - Leukemia	\$4,185,969	152	\$27,539
Multiple Sclerosis	\$4,057,306	266	\$15,253
Gastroint Disord, NEC	\$3,761,565	805	\$4,673

HCC: defined as member with allowed amount >= \$50K.

*Consistent HCC: in addition, member must meet the HCC requirement for each of the last 2 Incurred Rolling years.

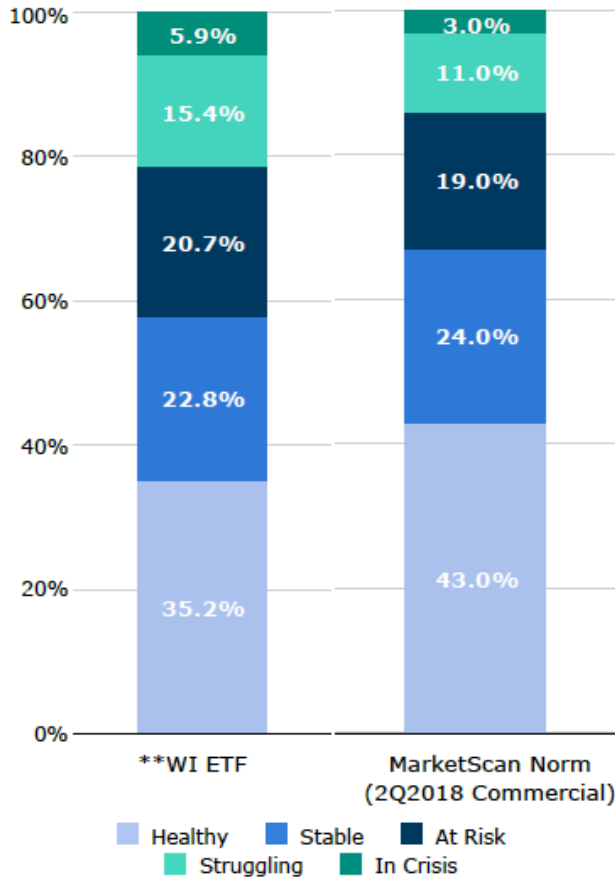
Clinical

*Current Period: Sep 2017 - Aug 2018 (Incurred)

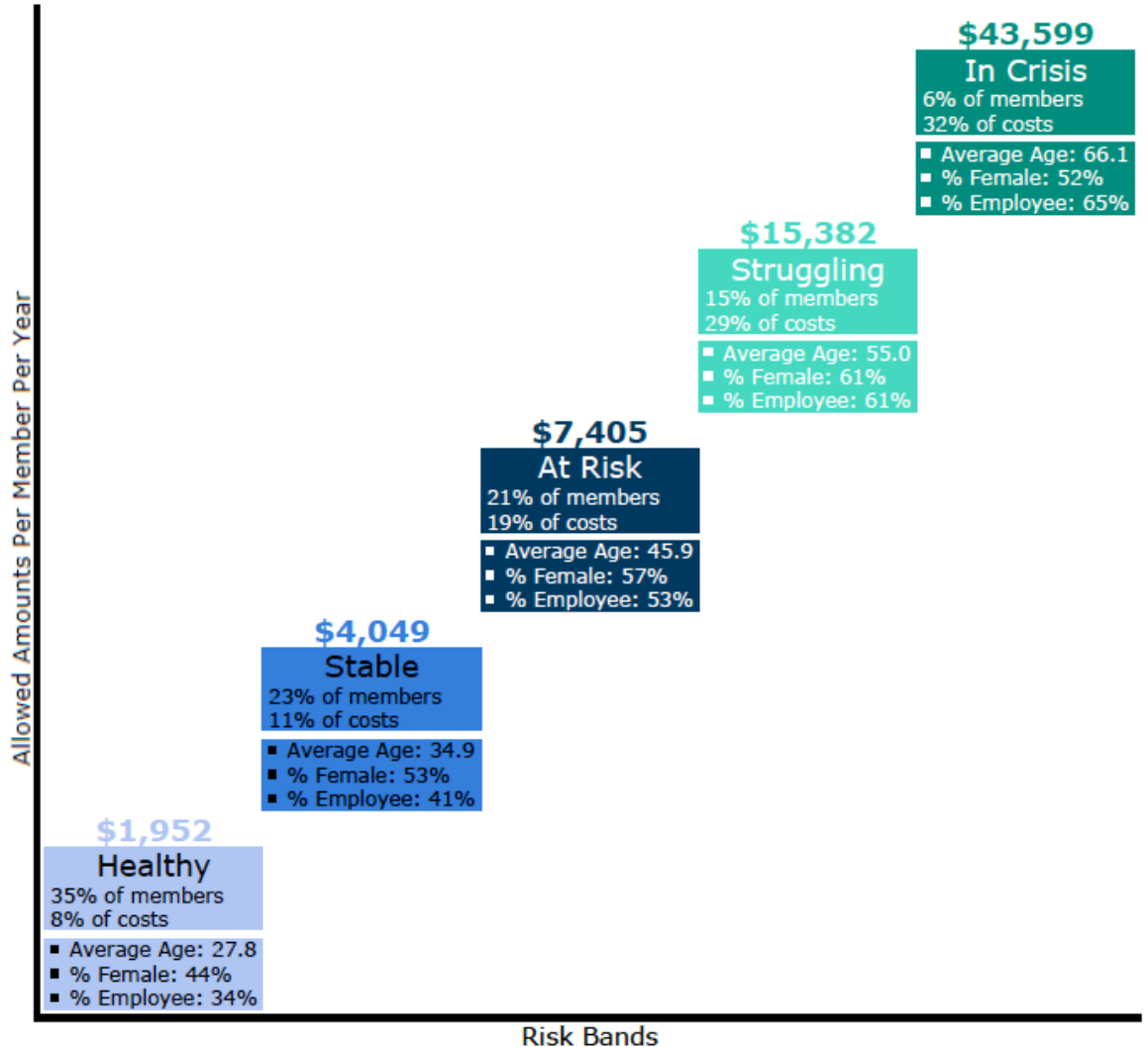
**DCG Period: Jan 2017 - Dec 2017



% of Members by Risk Band



Risk Band Profiles



*Demographic and financial metrics are for the current period

**See glossary for details on DCG Methodology

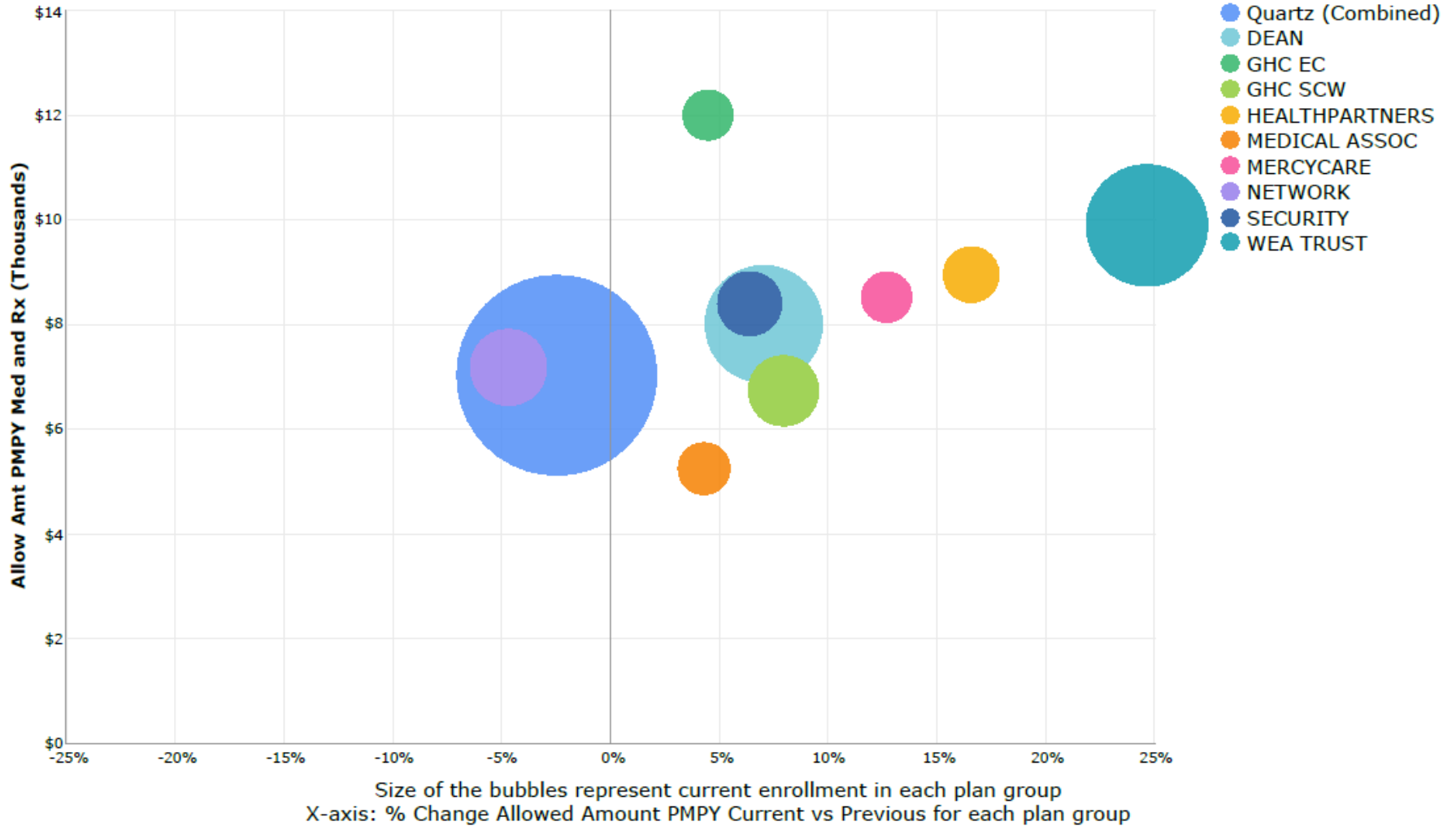
Financial

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Current Period: Sep 2017 - Aug 2018 (Incurred)



Enrollment and Allowed Amount PMPY by Plan Group



Eligibility

Previous Period: Sep 2016 - Aug 2017 (Incurred)

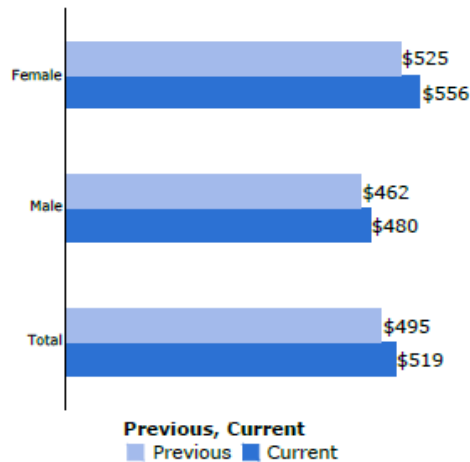
Current Period: Sep 2017 - Aug 2018 (Incurred)



	Enrollment			Average Age		
	Previous	Current	% Change	Previous	Current	% Change
Employees	120,409	119,000	-1.2%	51.1	51.0	-0.1%
Members	267,300	262,017	-2.0%	39.3	39.3	0.1%
Family Size Avg	2.2	2.2	-0.9%			

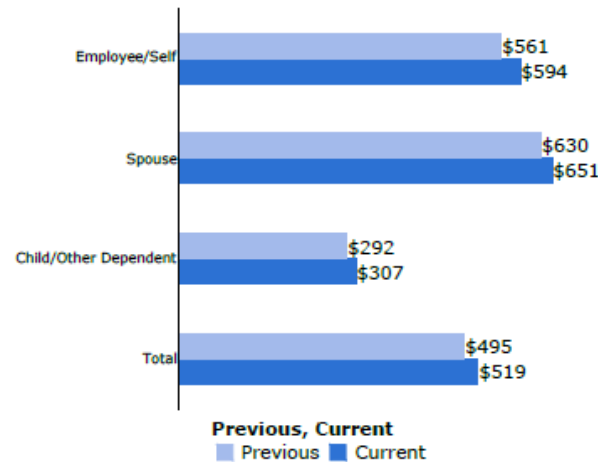
Membership and Net Pay PMPM by Gender

	Previous	Current	% Change
Female	138,048	135,627	-1.8%
Male	129,252	126,469	-2.2%



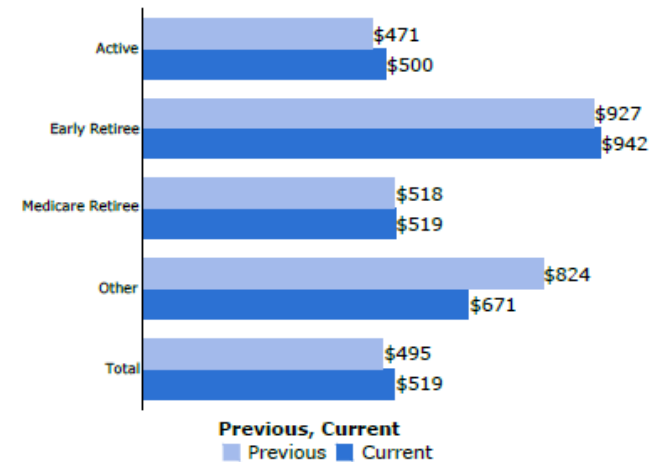
*Membership and Net Pay PMPM by Employee Relationship

	Previous	Current	% Change
Employee/Self	120,372	118,440	-1.6%
Spouse	63,235	61,591	-2.6%
Child/Other Dependent	83,690	81,986	-2.0%



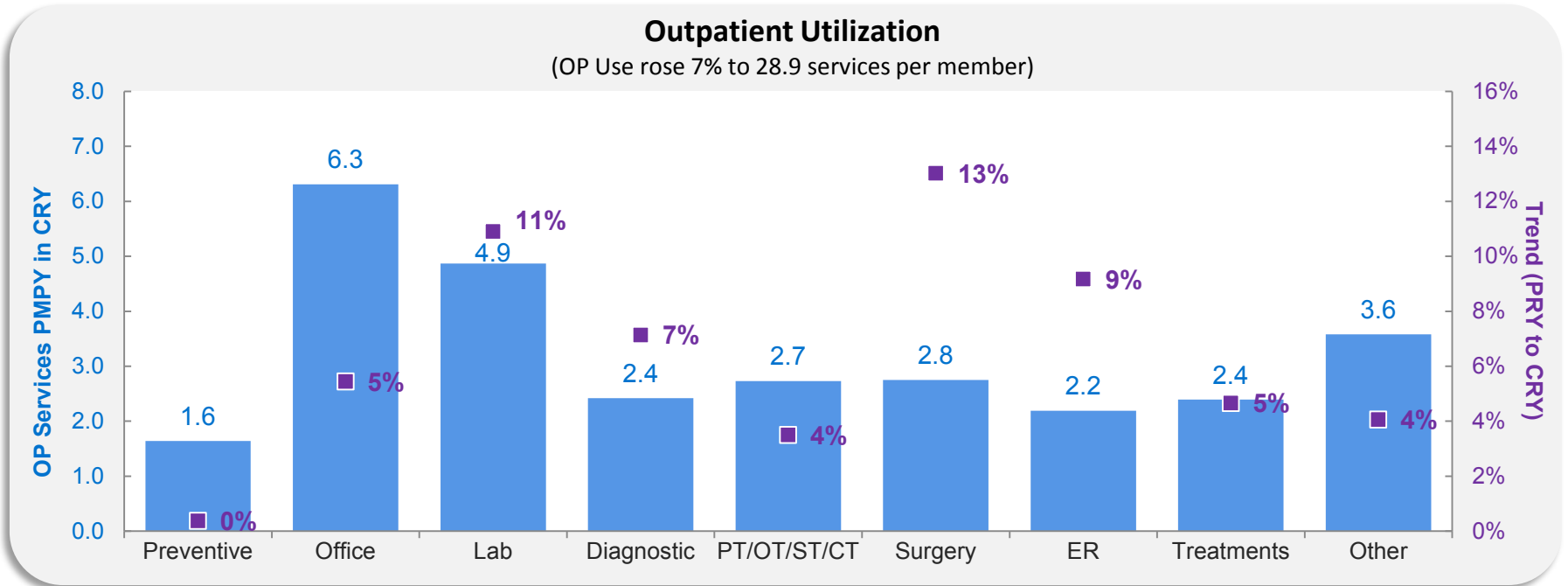
* Membership and Net Pay PMPM by Employee Status

	Previous	Current	% Change
Active	223,322	218,031	-2.4%
Early Retiree	11,743	11,323	-3.6%
Medicare Retiree	37,002	37,085	0.2%
Other	1,229	1,600	30.2%



*Membership counts may not be unique since there may be transitions between the listed categories during the reported period

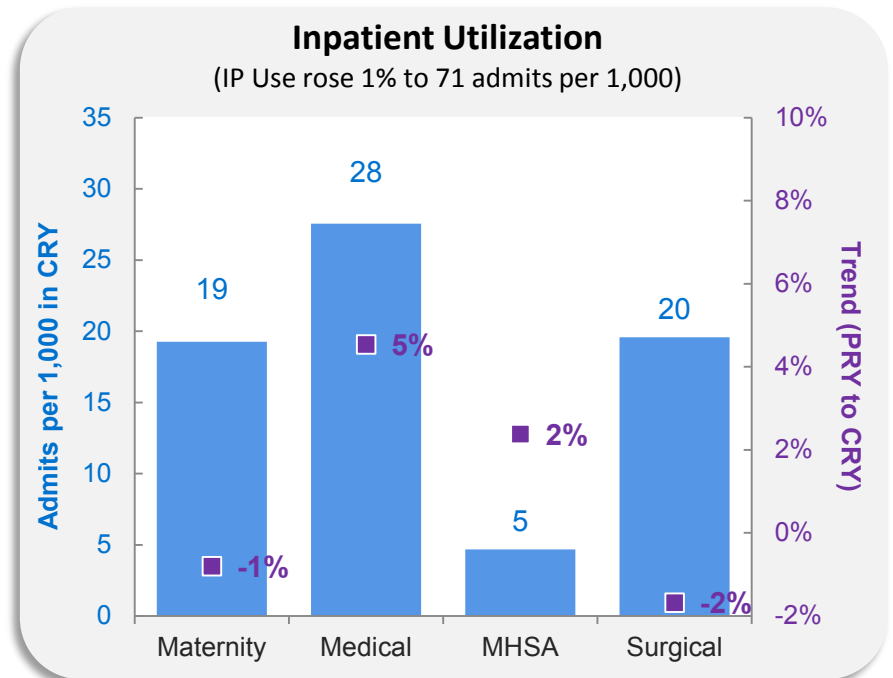
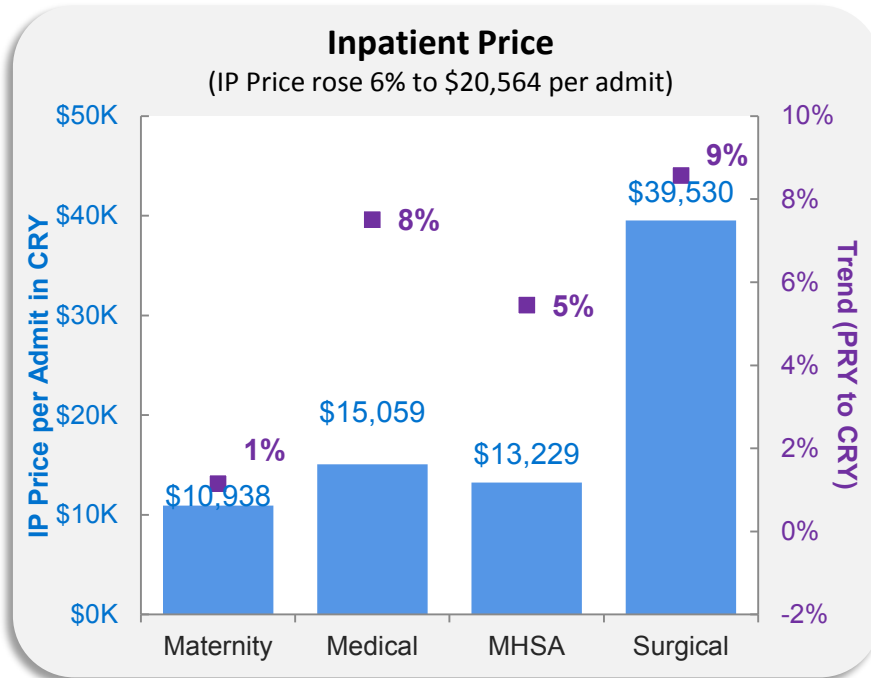
Key Trends Drilldown



Preventive: preventive visits, immunizations, blood pressure tests, screenings (e.g., mammograms, colonoscopies), lipid tests, etc. ■ Office: office visits not in preventive ■ Lab: lab services not in preventive ■ Diagnostic: radiology and other diagnostic services (e.g., EKG, echocardiogram, spirometry) not in preventive ■ PT/OT/ST/CT: physical therapy, occupational therapy, speech therapy, and chiropractic therapy ■ Surgery: surgical services not in preventive ■ ER: emergency room ■ Treatments: dialysis, specialty drugs, OP pharmacy, and injections not in preventive ■ Other: DME, medical supplies/devices, home health, minor procedures (e.g., skin lesion biopsy), etc.

- Increased utilization of laboratory services and non-preventive office (primarily physician non-specialty) accounted for about half of the overall 7% outpatient utilization trend
- Regular and high cost claimants contribute approximately equally to the 11% trend in laboratory services - high cost claimants do not use these services disproportionately

Previous Rolling Year: Sep 2016 – Aug 2017
Current Rolling Year: Sep 2017 – Aug 2018



- The 6% increase in inpatient price was largely accounted for by surgical admissions
 - The 9% jump in surgical admission price is mostly driven by increases in severity (changes in case mix accounted for eight percentage points of the 9% surgical price increase)
 - Surgeries related to musculoskeletal conditions is the highest contributor to surgical price trend, accounting for half of the increase
- The overall trend of inpatient use is 1% year over year

Comparison To Other Large Employers

Previous Rolling Year: Sep 2016 – Aug 2017

Current Rolling Year: Sep 2017 – Aug 2018

		● Above Norm	◎ Below Norm	Cost, Use, and Price Rates*			Trends**	
		✦ Similar to Norm (within 2%)		WI ETF	Norm	Comparison	WI ETF	Norm
Medical	Medical: Allowed Amounts per Member			\$5,343	\$4,855	●	6%	4%
	Medical: Net Payments per Member			\$4,932	\$3,976	●	6%	4%
	Inpatient: Admits per 1,000 Members			53	55	◎	-1%	-2%
	Inpatient: Average Length of Stay			3.5	4.1	◎	5%	-2%
	Inpatient: Allowed Amounts per Admit			\$22,306	\$24,052	◎	6%	3%
	Outpatient: Services per Member			23.8	27.5	◎	5%	1%
	Outpatient: Allowed Amounts per Service			\$170	\$126	●	2%	3%
Rx	Rx: Allowed Amounts per Member			\$1,099	\$1,346	◎	1%	4%
	Rx: Net Payments per Member			\$1,001	\$1,187	◎	2%	4%
	Rx: Allowed Amount per Days Supply			\$2.81	\$3.68	◎	0%	3%
	Rx: Days Supply per Member			392	366	●	1%	1%

¹ MarketScan (MSN) Norms were adjusted where appropriate (age/gender, geographic, severity) to the WI ETF population

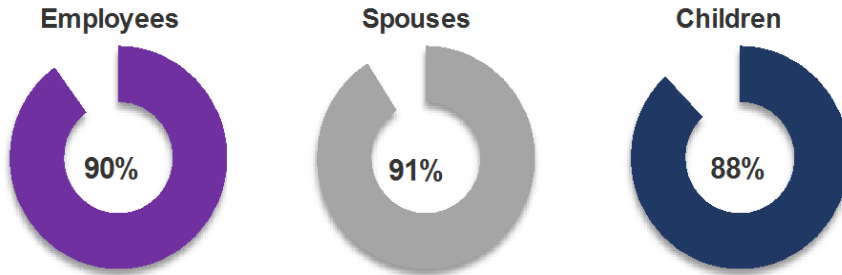
* Rates for WI ETF are CRY and for Norm are 2016 MSN U.S. Total norms trended to CRY utilizing 4Q17 and 2Q18 Employer Semi-Annual Norm trends

**Trends represent PRY to CRY for WI ETF and 2Q18 Employer Semi-Annual Norm Trends

- WI ETF had **higher** overall medical rate than the Norm, this is also trending higher
 - Utilization and costs are comparable or better than the Norm but the overall cost difference is driven by the cost per service
- Prescription drug costs are lower and trending lower than the Norm

Benefit Utilization

% of Members Utilizing Medical or Rx Benefit by Relationship

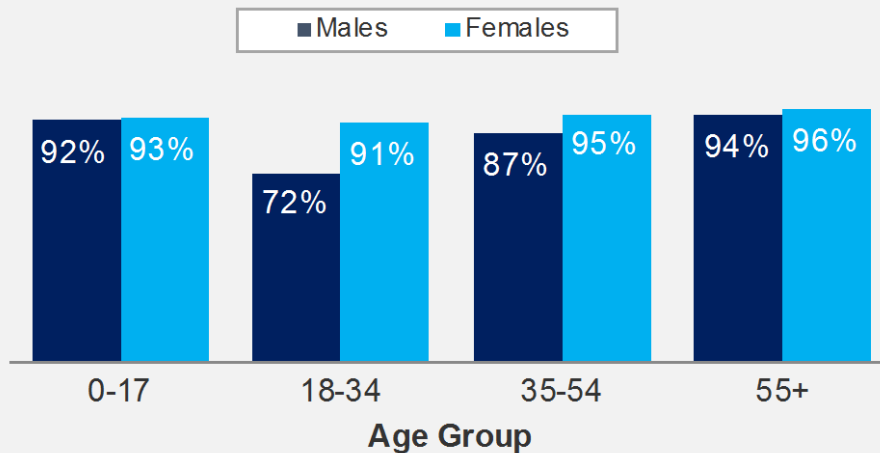


87% of members used the medical benefit

70% of members used the prescription drug (Rx) benefit

90% of members used either the medical or Rx benefit

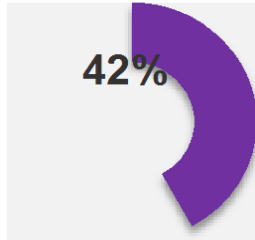
% of Members Utilizing Medical or Rx Benefit



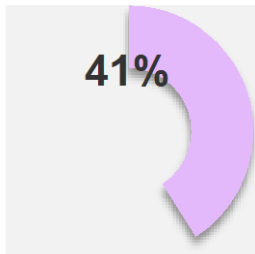
- Overall, 10% of members did not use the medical or prescription drug benefit in the current rolling year
 - Males had lower utilization than females
- Males age 18-34 had the lowest use of benefits, with 28% of members not incurring a claim

Preventive Care Utilization

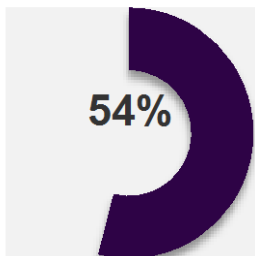
Employees with a Preventive Care Service



Spouses with a Preventive Care Service



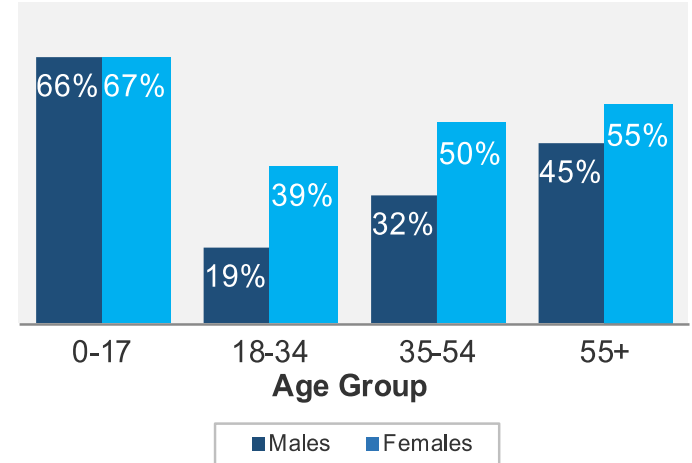
Children with a Preventive Care Service



52% of females had a preventive care service

40% of males had a preventive care service

% of Members with a Preventive Service

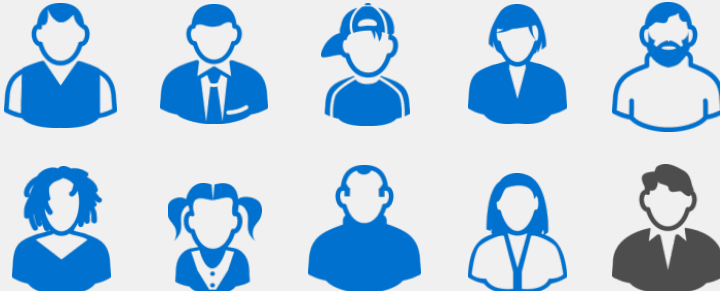


- Overall, 54% of members did not have a preventive care service in the current rolling year
- Males age 18-34 had the lowest use of preventive care with 81% of members not incurring a service; 68% of males age 35-54 did not incur a preventive service

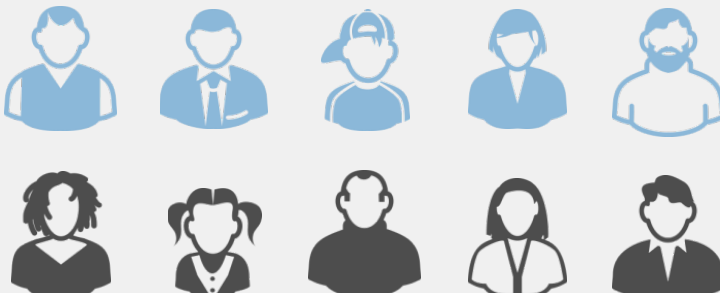
Member Engagement



9 out of 10 members utilized the **Medical or Rx** benefit



5 out of 10 members utilized preventive service benefits



Glossary of Terms

Time Periods

- CRY: Current Rolling Year
- DCG Periods
 - Related to Diagnostic Cost Group methodology and risk adjustment
 - Typically aligned with Jan – Dec plan year
- Incurred: the date a service was rendered
- Paid: the date that the claim for a service was paid
- PRY: Previous Rolling Year

Clinical

- Clinical Conditions: IBM description for a clinical condition based on valid ICD principal diagnosis
- IP: inpatient service, related to an admission
- OP: outpatient services
- Rx: prescription drugs

Eligibility

- Employees: subscriber/self
- Family Size: average number of covered members per family
- Member Age: average age of covered employees/members
- Members: subscribers and dependents

Financial

- Allowed Amount: the total amount paid to the provider by all parties—the underlying medical cost that drives spending
- Net Payment: the amount paid by the plan sponsor (WI ETF)
 - $\text{Net Payment} = \text{Allowed Amount} - (\text{OOP} + \text{Third Party Payment})$
- OOP: Out Of Pocket, cost to member
- Rates:
 - PMPM: Per Member Per Month
 - PMPY: Per Member Per Year
- Third Party Payment: e.g. Medicare, Medicaid, and other insurance

Other

- DCG: Diagnostic Cost Group (DCG) classifications are the foundation of a family of risk-adjusted payment and analysis methodologies
- Risk Scores and Categories
 - Are the predicted patient risk based on (i) Diagnosis codes (ICD 9/10) and (ii) Demographics
 - Concurrent / prospective: current and predicted risk scores
 - NonRescaled: DCG model population reference / average = 100
 - Rescaled: WI ETF population reference / average = 100
 - Risk Bands: groupings of risk scores based on IBM MarketScan®

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