



Health Informatics

Cape Cod Municipal Health Group Analysis

Prepared by BCBSMA
Period July 1, 2015 to June 30, 2018



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Introduction



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Introduction



Report Overview

- ◆ This report provides a retrospective analysis of Cape Cod Municipal Health Group's past performance based on plan experience from July 1, 2015 to June 30, 2018.
- ◆ It is a holistic view of Cape Cod Municipal Health Group's population, using aggregate financial, clinical and wellness data and offers recommendations that are aimed at helping Cape Cod Municipal Health Group moderate future costs by improving the health of its members and their families.
- ◆ The report provides insight into the drivers of health care costs and therefore can provide a basis for more informed decisions about plan design changes, communication needs, and program possibilities.
- ◆ Clinical benchmarks account for the age and gender mix of Cape Cod Municipal Health Group's membership. This allows the identification of medical issues independent of differing demographic profiles.
- ◆ In 2017, BCBSMA updated the Optum ETG Grouper to a newer version with updates to both ICD9 and ICD10 codes. This update brings the ETG rates to more accurate levels and impacts some conditions more than others, which can make comparisons of select 2017 ETG condition rates to prior years variable.
- ◆ The clinical data (medical, pharmacy and health management) in this report is provided in the following groupings. These segments allow for more cohesive reporting and better understanding of varying population risk levels, and opportunity areas to improve member health and mitigate future costs.
 - ▮ Preventive/Episodic Care: Provides data on routine care, preventive screenings, common conditions and episodic care such as emergency room utilization.
 - ▮ At-Risk/Chronic: A significant percentage of U.S. adults, this segment provides data on the different risk factors and chronic conditions that are typically drivers of cost and utilization.
 - ▮ Complex: This segment provides data on high cost claimants and their conditions.

The information in this report is to be considered confidential and is intended only for the use of the appropriately assigned individuals at Cape Cod Municipal Health Group. This report and the related presentation discuss medical conditions and cases, but no personally identifiable information will be presented or discussed. This report provides only a general estimate of an account's costs, health and quality and is for planning purposes only. It should not be used for determining the precise claims experience of any claimant, pricing for Cape Cod Municipal Health Group, guarantees or exact quality of providers. It should not be used to determine results for performance guarantee agreements. BCBSMA accepts no responsibility or liability arising from or related to the use of this report.



Financial Analysis



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Financial Analysis

Key Indicators

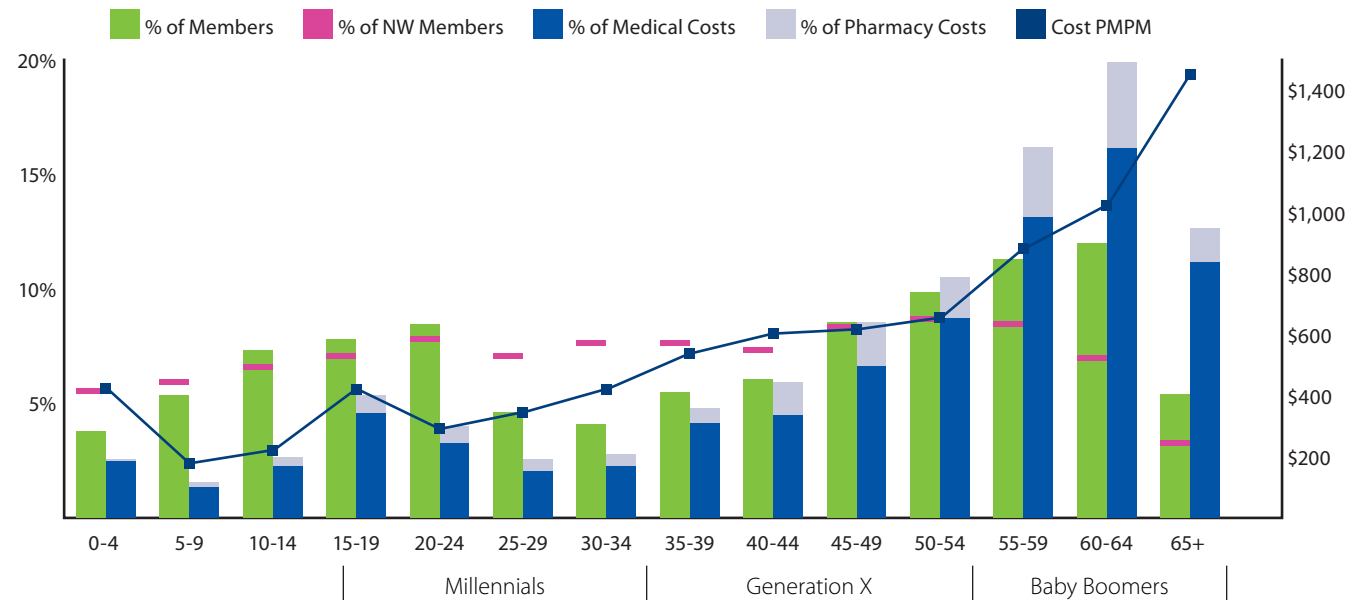
Demographics

	7/16-6/17	7/17-6/18	Network
% Female	51.9%	52.0%	51.0%
Avg Member Age	38.5	38.4	34.9
Avg Sub Age	50.9	50.8	45.1
Avg Contract Size	2.3	2.3	2.2

7/16-6/17 7/17-6/18 Benchmark

Avg Number of Subscribers	5,127	4,981
Avg Number of Members	11,887	11,573

Demographics by Age Band



Claims Metrics

	7/16-6/17	7/17-6/18	Benchmark
Total Claims	\$89,615,546	\$85,786,389	
Total PMPM	\$628.27	\$617.70	\$527.14
PMPM Change	3.9%	-1.7%	3.3%
Medical Claims	\$74,337,902	\$71,109,525	
Medical PMPM	\$521.16	\$512.02	\$423.81
PMPM Change	2.9%	-1.8%	3.2%
Pharmacy Claims	\$15,277,643	\$14,676,864	
Pharmacy PMPM	\$107.11	\$105.68	\$103.33
PMPM Change	8.7%	-1.3%	3.8%

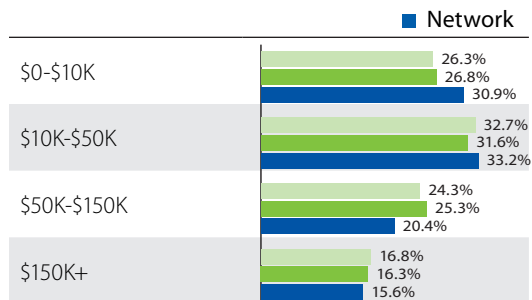
PMPM

Total	
7/16-6/17	\$628.27
7/17-6/18	\$617.70
Benchmark	\$527.14
Medical	
7/16-6/17	\$521.16
7/17-6/18	\$512.02
Benchmark	\$423.81
Pharmacy	
7/16-6/17	\$107.11
7/17-6/18	\$105.68
Benchmark	\$103.33

Member Cost Sharing

	7/16-6/17	7/17-6/18	Benchmark
Total Cost Share	\$48.51	\$53.56	\$49.69
% of Total Claims	7.2%	8.0%	8.6%
Medical Cost Share	\$36.33	\$40.48	\$38.12
% of Med Claims	6.5%	7.3%	8.3%
RX Cost Share	\$12.18	\$13.08	\$11.57
% of Rx Claims	10.2%	11.0%	10.2%

Distribution of Claims



PMPM Change by Claims Band

Account	Change
\$0-\$10K	0.1%
\$10K-\$50K	-1.6%
\$50K-\$150K	0.6%
\$150K +	-0.7%
Total Change	-1.7%

Additional Metrics

	7/16-6/17	7/17-6/18	Network
Avg. Medical Discount	42.0%	43.1%	49.1%
Network Utilization	98.0%	97.8%	98.1%

High Cost Claims

(per 1000 members)	7/16-6/17	7/17-6/18	Network
Claimants > \$50k	26.3	27.6	13.6
% of Total Claims	41.0%	41.6%	35.9%
PMPM	\$257.82	\$257.12	\$189.37
Claimants > \$150k	4.5	4.5	2.5
% of Total Claims	16.8%	16.3%	15.6%
PMPM	\$105.34	\$100.95	\$82.09

PMPM Change by Type of Service

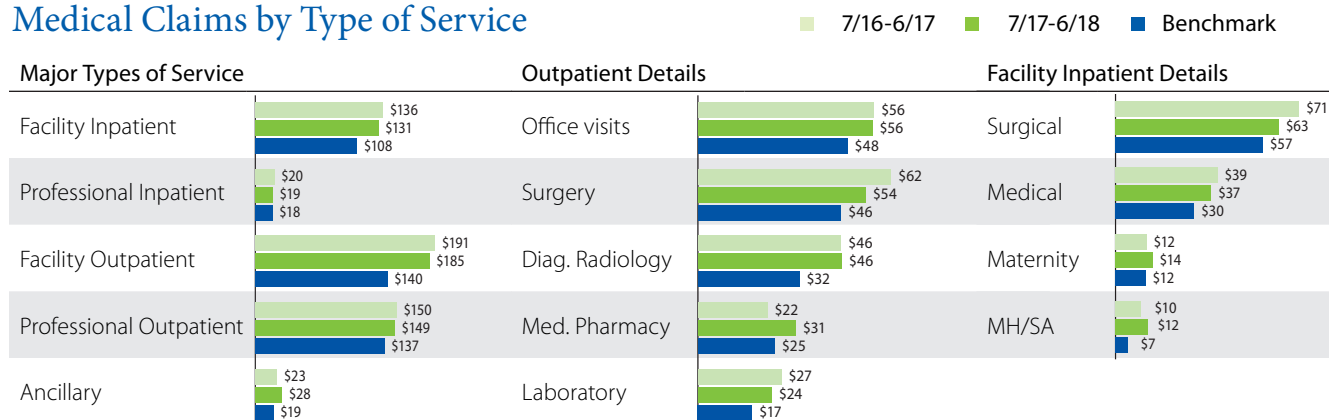
Medical	Change
Facility Inpatient	-0.9%
Professional Inpatient	-0.3%
Facility Outpatient	-1.1%
Professional Outpatient	-0.3%
Ancillary	1.0%
Total Medical Change	-1.8%

Financial Analysis

Key Indicators



Medical Claims by Type of Service



Utilization

(per 1000 members)	7/16-6/17	7/17-6/18	Benchmark
Inpatient	73	69	60
Office Visits	5,142	5,074	4,392
Prescriptions	13,068	13,011	11,917

Pharmacy Cost and Utilization

	7/16-6/17	7/17-6/18	Benchmark
Avg Plan Cost per Script	\$98.35	\$97.47	\$104.04
Avg Member Cost Share per Script	\$11.18	\$12.06	\$11.86
% Plan Cost	89.8%	89.0%	89.8%
% Mbr Contribution	10.2%	11.0%	10.2%
Scripts per Mbr per Year	13.1	13.0	11.9
% of Scripts through Mail Rx	9.8%	8.9%	9.5%

Brand vs Generic	Network		
Avg Single Source Brand Cost per Script	\$651.48	\$650.56	\$636.12
Avg Multi-Source Brand Cost per Script	\$219.95	\$154.45	\$287.05
Avg Generic Cost per Script	\$25.90	\$25.94	\$26.10
% Single Source Brand Scripts	10.8%	11.0%	12.2%
% Multi-Source Brand Scripts	2.7%	2.2%	2.0%
% Generic Scripts	86.6%	86.8%	85.8%

Specialty Drugs	7/16-6/17	7/17-6/18
% of Total Rx scripts	0.9%	1.1%
% of Total Rx dollars	46.7%	49.6%



Clinical Analysis



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Clinical Analysis

Preventive/Episodic Care

ETG Rates

7/16-6/17 7/17-6/18 Benchmark



* Additional maternity information including neonatal care provided in the Inpatient admission table.

ETGs by Contract Type

	Subscriber		Spouse	
	Prior	Current	Prior	Current
ISR	567.2	574.4	560.9	573.1
Joint Derangement	31.0	25.1	38.3	30.5
Pregnancy	10.3	8.6	16.0	18.1
Acute Bronchitis	32.6	29.7	29.8	23.2

Well Visit Utilization

	7/15-6/16	7/16-6/17	7/17-6/18	Network
Adult	57.8%	58.1%	60.5%	50.6%
Child	88.4%	88.6%	89.1%	84.6%

% of Members with No Claims

- 6.9% of members had no claims in 7/17-6/18, while 7.2% of members had no claims in the prior period.

Preventive Metrics

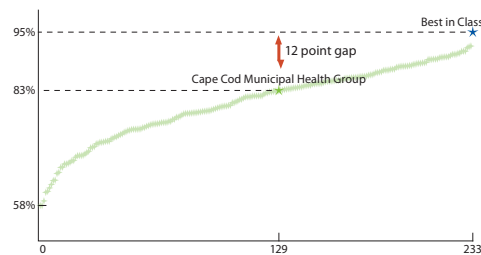
Routine Screening Rates

Cancer Screening Measures	2016	2017	HIA Average	Variance from HIA
Breast Cancer Screening Rate (Mammogram)	82.3%	82.6%	78.3%	4.3
Cervical Cancer Screening Rate (Pap Smear)	79.6%	79.6%	73.6%	6.0
Colorectal Cancer Screening Rate (Colorectal Tests)	74.1%	74.4%	65.3%	9.1

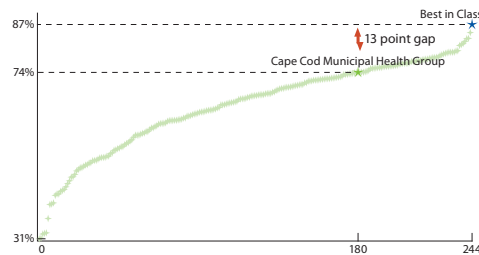
Routine Checkups

Well Child Visits in the First 15 Months of Life	96.9%	98.8%	92.9%	5.9
Well Child Visits in the First 3-6 Years of Life	94.5%	93.9%	88.0%	5.9
Adolescent Well Care Visits	77.4%	78.6%	63.4%	15.2

Breast Cancer Screening



Colon Cancer Screening



Cancer Screening Reminders

Screening	Identified		2017 Percentage Screened Post-Reminder	
	2017	2018	Cape Cod Municipal Health Group	BCBSMA
Colorectal	1,635	1,545	11.0%	7.9%
Mammography	600	579	21.2%	17.1%
Total	2,235	2,124		

Clinical Analysis

Preventive/Episodic Care

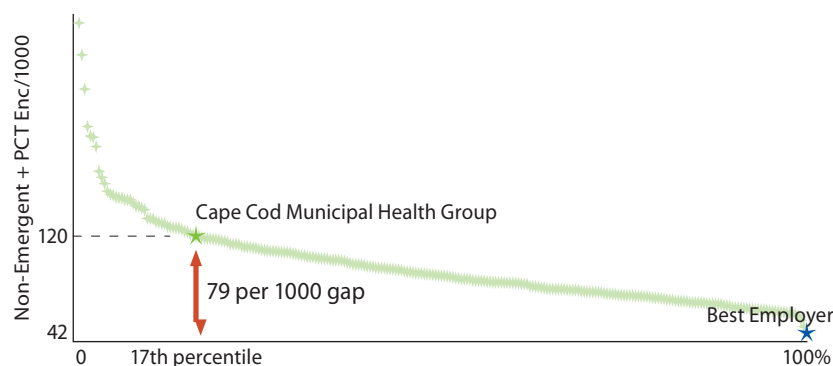
Episodic Utilization

Non Emergent/PCP-Treatable Utilization

	7/16-6/17	7/17-6/18	Benchmark
ER PMPM	\$18.46	\$18.85	\$10.12
Non-Emergent and PCP Treatable	Percent of Encounters		
	Cape Cod Municipal Health Group		
	7/16-6/17	7/17-6/18	Network
Non-Emergent	22.8%	22.4%	21.9%
Emergent PCP Treatable	42.3%	40.8%	41.5%
Total Non-Emergent and PCT	65.2%	63.2%	63.4%
Emergent	Encounters per 1000		
	Cape Cod Municipal Health Group		
	7/16-6/17	7/17-6/18	Network
Non-Emergent	46.2	42.8	37.1
Emergent PCP Treatable	85.6	77.7	70.3
Total Non-Emergent and PCT	131.8	120.5	107.4
Emergent	Encounters per 1000		
	Cape Cod Municipal Health Group		
	7/16-6/17	7/17-6/18	Network
Not Preventable/Avoidable	59.2	59.4	52.5
Preventable or Avoidable	11.3	10.8	9.6
Total Emergent	70.5	70.2	62.1

Top 5 Non-Emergent and PCP Treatable Emergency Room Diagnoses

1 Other chest pain	3.4% of encounters
2 Head injury, unspecified	3.0%
3 Headache	2.9%
4 Lumbago	2.8%
5 Pain in limb	2.6%



Urgent Care Utilization

Provider Specialty	Prior Period			Current Period		
	Visits/1000	Paid	Claimants	Visits/1000	Paid	Claimants
Retail Clinic	8.4	\$5,631	87	8.6	\$5,699	80
Urgent Care	289.1	\$588,995	2,362	309.2	\$569,585	2,516
Summary	297.5	\$594,626	2,433	317.9	\$575,283	2,580

Blue Care Line Utilization

7/15-6/16	7/16-6/17	7/17-6/18
91	100	68

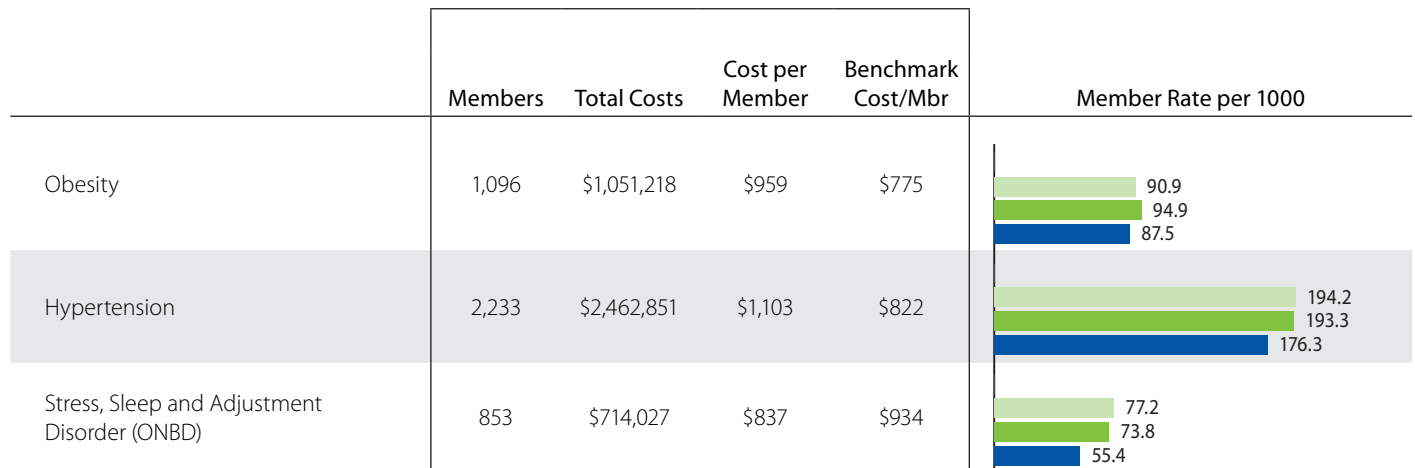
Initiative Participation

	2016	2017	2018 YTD
◆ Used the fitness benefit	576	581	208
◆ Used the weight-loss benefit	41	44	12
◆ Used smoking cessation aids	102	93	75

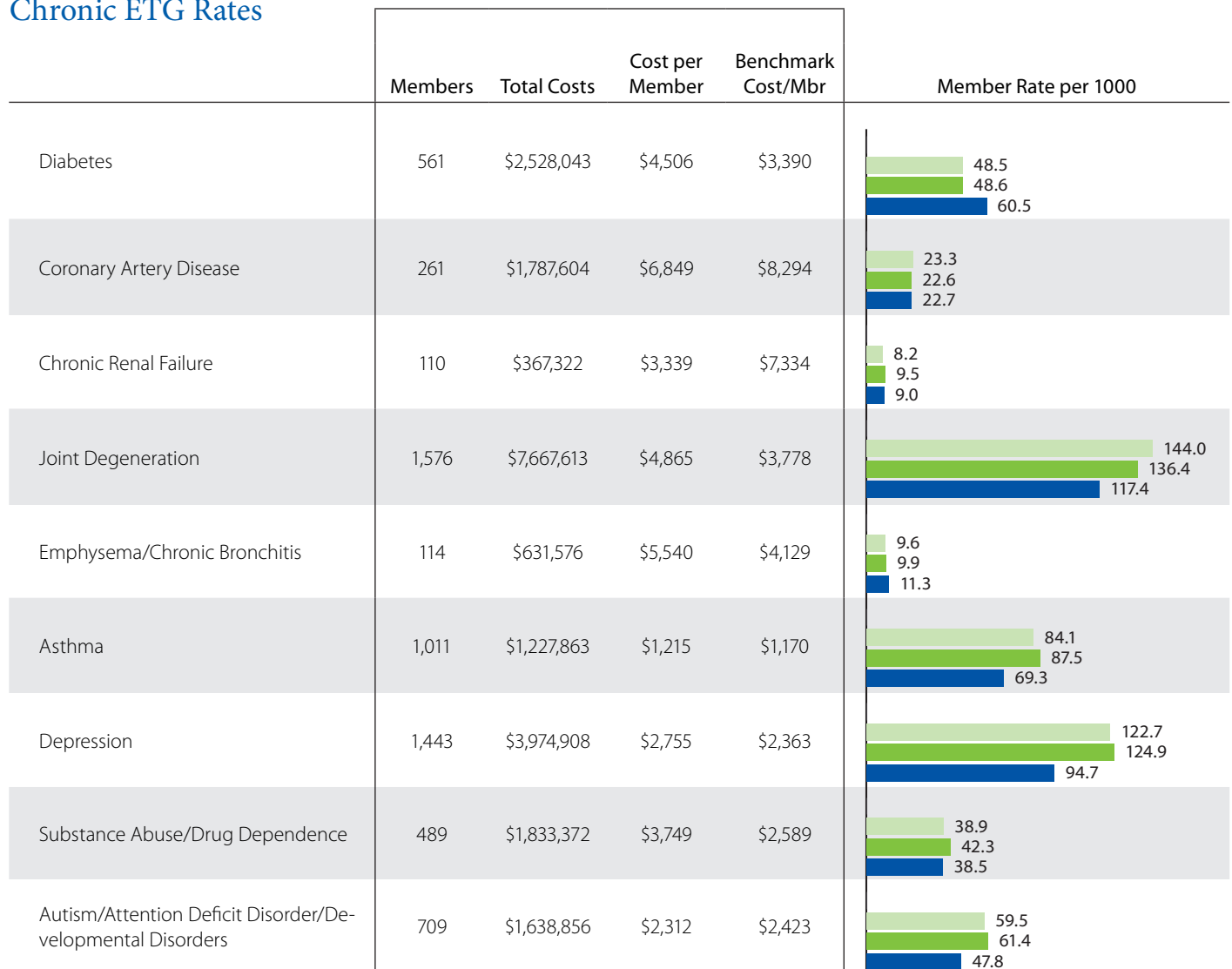
Clinical Analysis At Risk/Chronic

At-Risk ETG Rates

7/16-6/17 7/17-6/18 Benchmark



Chronic ETG Rates

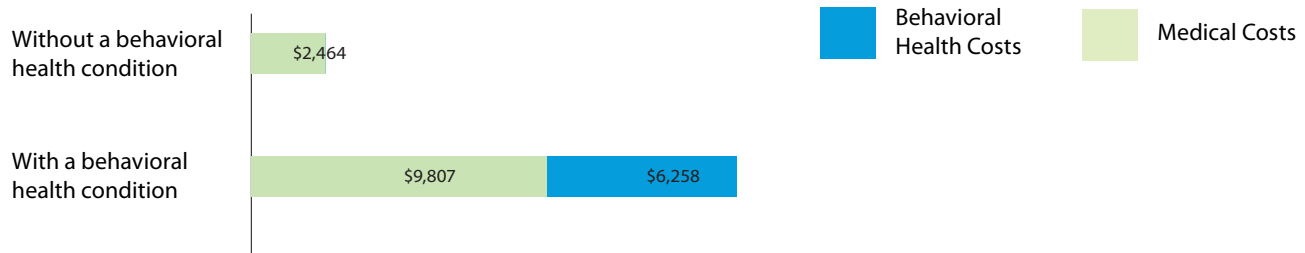


ETGs by Contract Type

At-Risk ETGs	Subscriber		Spouse	
	Prior	Current	Prior	Current
Obesity	112.0	113.2	117.5	122.7
Hypertension	282.0	288.3	308.7	296.4
Stress, Sleep and Adjustment Disorders (ONBD)	72.0	75.3	74.8	67.5
Chronic ETGs				
Diabetes	69.6	70.1	70.3	69.8
Coronary Artery Disease	32.0	31.1	41.7	40.1
Chronic Renal Failure	9.8	11.6	17.1	18.5
Joint Degeneration	191.5	181.1	220.2	210.7
Emphysema/Chronic Bronchitis	12.9	13.2	17.1	18.1
Asthma	83.3	87.7	66.9	71.0
Depression	145.3	140.3	141.7	142.8
Substance Abuse/Drug Dependence*	39.6	46.2	52.8	58.3

*Note: Dependent rate was 28.7 and 27.0 in the current period.

Behavioral Health Costs*

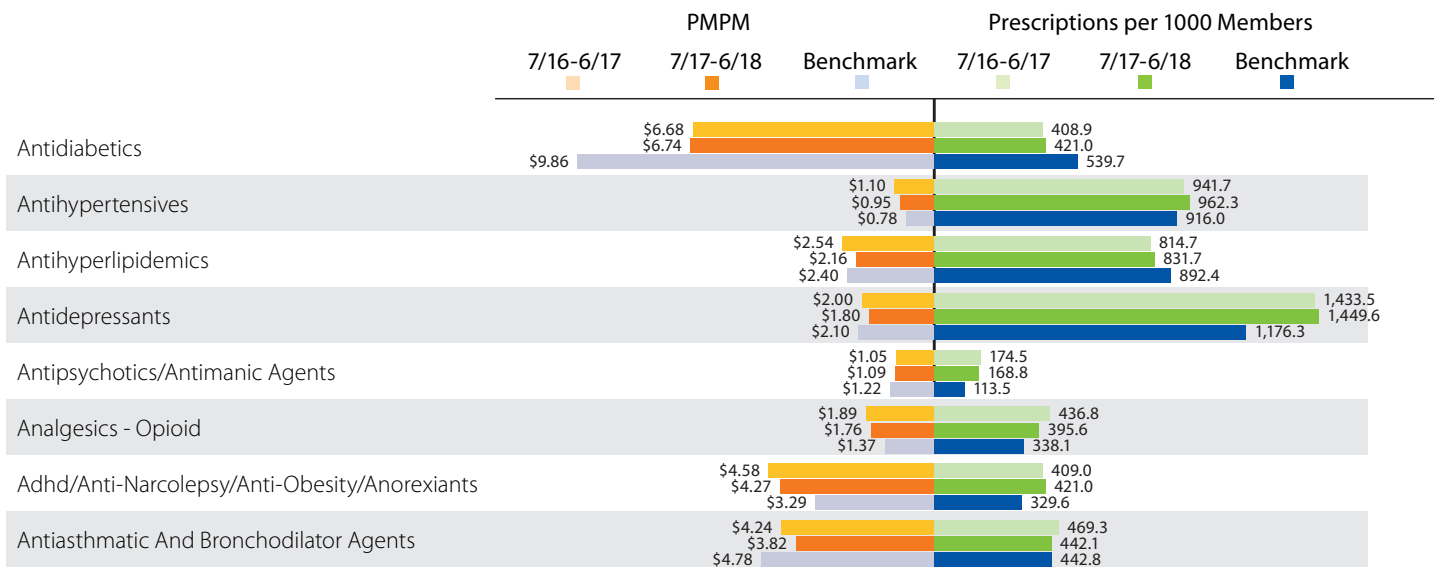


* Medical Expense costs are higher for members who have behavioral health conditions. Between 25%-45% of members have a comorbid condition and a behavioral health condition.

Clinical Analysis

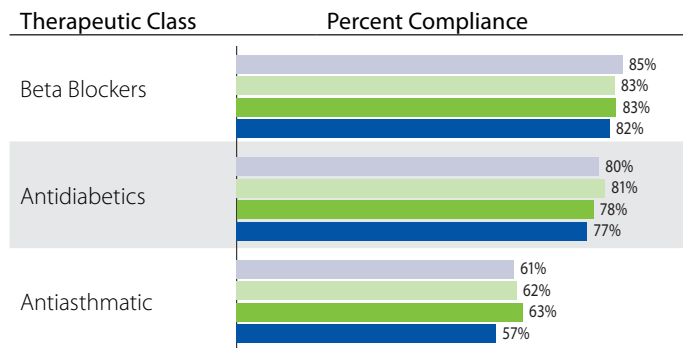
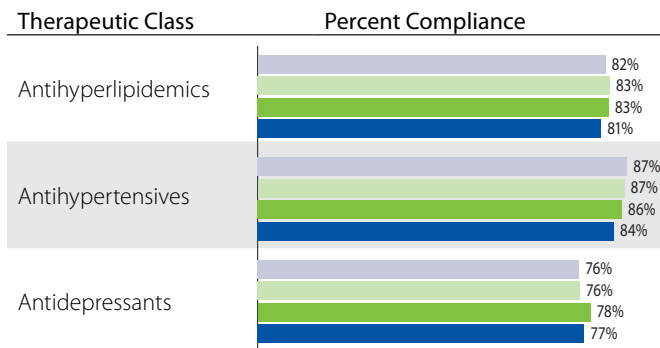
At Risk/Chronic

Pharmacy Therapeutic Classes



Medication Possession Ratio

Jan 2017 Jun 2017 Dec 2017 Network



1. Compliance is defined as having a medication possession ratio (MPR) greater than or equal to 80%. The MPR measure is an approximation of the percentage of days during a given period that a member was taking his or her prescribed medication.

2. Source: "Is Compliance Really Better in Home Delivery? Evidence Across Three Chronic Therapy Classes"; Express Scripts Study; September 2008.

* There was not sufficient continuous enrollment during this period to calculate a medication possession ratio.

HEDIS Screening Measures

Diabetes Screening Measures	2016	2017	HIA Average	Variance from HIA
Eye Exam	69.5%	73.4%	55.7%	17.7
HbA1C Testing	93.4%	92.0%	91.2%	0.8
Nephrology Screening	93.4%	93.2%	90.1%	3.1

Health Management^{*}(10/1/2017-9/30/2018)

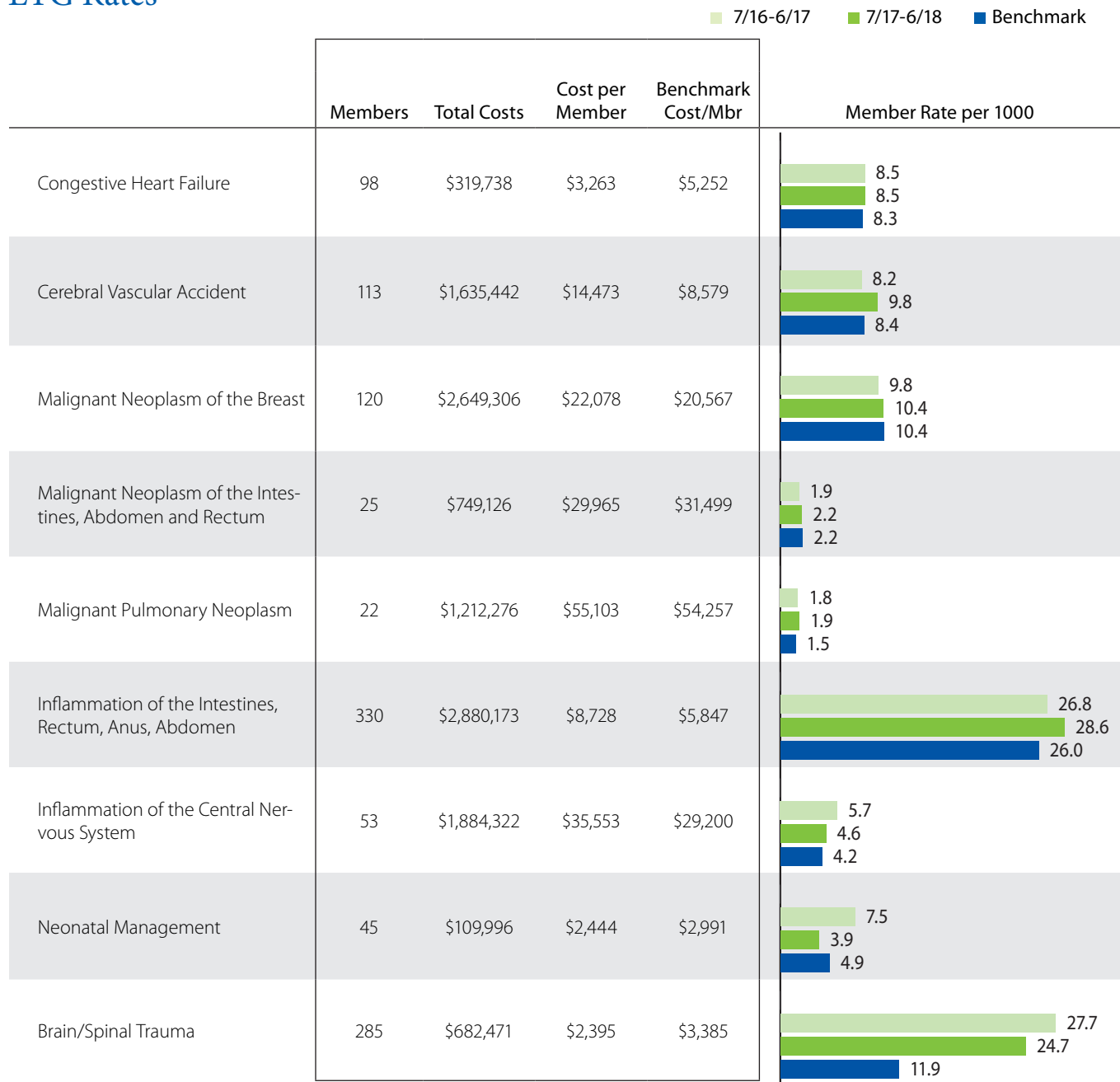
	# Identified with Chronic Condition	# Eligible for Gap Notification	# With One or More Gaps	# Without Gaps
Chronic Condition: Identification & Gap Notification	629	591	428	163
	# Identified	Provider # Notified	BCBSMA Managed # Reached	# Engaged
Chronic Condition: High Risk Coaching	378	356	4	4

Results

	Cape Cod Municipal Health Group	Plan Average
◆ Chronic Members as % of Total Population:	6%	4%
◆ % of Chronic Members with Gaps	73%	75%
◆ Overall DM Engaged; Provider Notified Rates	95%	94%
◆ Overall DM Reached / Engaged Rates	100%	73%

* BCBSMA's Chronic Condition High-Risk Coaching Program specifically targets members with Diabetes, Heart Failure, Coronary Artery Disease, Asthma and COPD. If a member with a chronic condition is identified as being high risk, and belongs to an AQC practice, we notify the provider. Provider Notified: Massachusetts-based primary care providers participating in a BCBSMA risk-based payment contract are notified when their plans trigger for a BCBSMA Chronic Condition High-Risk Coaching Program.

ETG Rates*



* This list represents common ETGs for high cost cases. The top 10 ETG conditions by cost is provided in the Appendix.

ETGs by Contract Type

	Subscriber		Spouse	
	Prior	Current	Prior	Current
Congestive Heart Failure	10.5	10.8	17.1	15.8
Cerebral Vascular Accident	10.7	13.2	13.4	15.8
Malignant Neoplasm of the Breast	16.4	17.3	12.3	13.1
Malignant Neoplasm of the Intestines, Abdomen and Rectum	1.8	2.2	4.8	5.4
Malignant Pulmonary Neoplasm	3.1	3.0	1.9	2.3
Inflammation of the Intestines, Rectum, Anus, Abdomen	28.3	29.7	30.1	35.9
Inflammation of the Central Nervous System	7.6	5.4	7.8	8.5
Brain/Spinal Trauma	26.7	22.1	25.3	23.2

Inpatient Admissions by Top 10 Major Diagnostic Categories

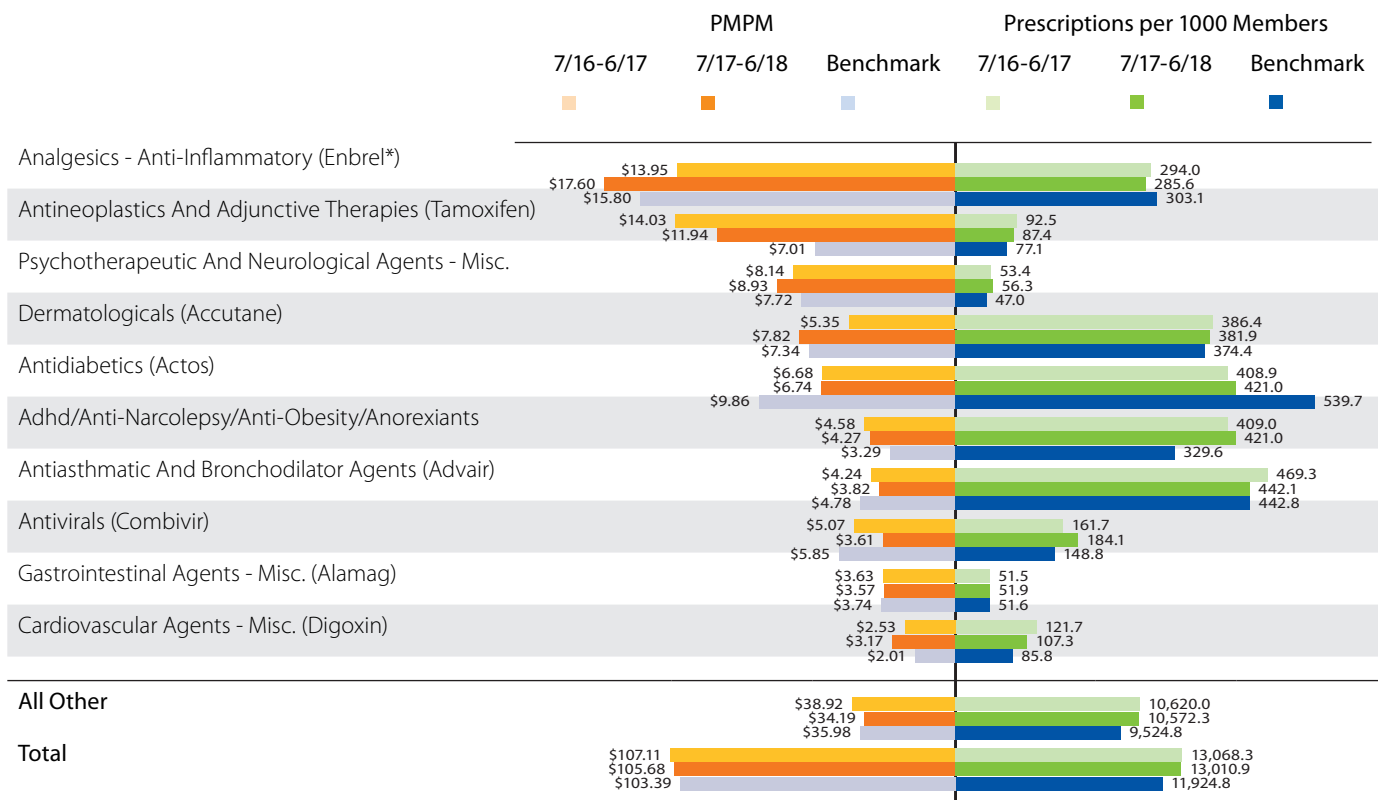
Major Diagnostic Category	Admissions per 1000			PMPM			Cost per Admit	
	7/16-6/17	7/17-6/18	Benchmark	7/16-6/17	7/17-6/18	Benchmark	7/17-6/18	Benchmark
Musculoskeletal System	11.7	10.1	8.3	\$30.44	\$28.68	\$22.73	\$34,046	\$32,707
Circulatory System	5.3	4.7	5.6	\$15.84	\$15.71	\$17.90	\$40,408	\$38,610
Nervous System	3.2	4.4	3.3	\$11.50	\$14.05	\$9.63	\$38,253	\$35,185
Digestive System	6.3	6.2	5.1	\$13.43	\$12.34	\$9.92	\$23,810	\$23,470
Pregnancy & Childbirth	8.3	8.6	8.0	\$12.12	\$12.24	\$10.31	\$17,169	\$15,541
Infectious/Parasitic Disease	4.0	3.6	2.5	\$12.91	\$11.22	\$7.61	\$37,085	\$35,909
Behavioral Health	6.8	6.0	4.3	\$7.01	\$8.46	\$4.93	\$17,021	\$13,702
Respiratory System	4.1	3.2	4.1	\$7.89	\$5.99	\$8.86	\$22,491	\$25,864
Endocrine & Metabolic Disorders	2.8	3.0	2.3	\$5.44	\$5.77	\$4.16	\$22,884	\$22,134
Neonatal Care	2.4	1.6	1.6	\$2.82	\$5.22	\$3.56	\$38,163	\$26,688
All Others	18.5	17.4	14.9	\$28.71	\$23.33	\$23.84	n/a	n/a
Total Admissions	73.4	68.8	60.0	\$148.11	\$143.01	\$123.45	\$24,951	\$24,702

Claims in Excess of \$150,000

	First ETG Description	Second ETG Description	Total Net Payments
1	Heart Transplant	Hypertension	\$740,408
2	Cerebral Vascular Accident	Hernias	\$646,229
3	Non-neoplastic Blood Disease	Inflammation of Skin & Subcutaneous Tissue	\$645,387
4	Major Infectious Disease	Malignant Neoplasm of the Intestines, Abdomen and Rectum	\$602,333
5	Malignant Neoplasm of Endocrine Glands	Chronic Pancreatitis	\$464,613
6	Neonatal Management	Other Infectious Diseases of the Intestines and Abdomen	\$413,095
7	Malignant Pulmonary Neoplasm	Emphysema/Chronic Bronchitis	\$389,323
8	Asthma	Major Infectious Disease	\$371,198
9	Behavioral Health		\$360,972
10	Malignant Neoplasm of the Breast	Major Infectious Disease	\$349,139
11	Inflammation of the Intestines, Rectum, Anus, Abdomen	Diabetes	\$344,044
12	Malignant Neoplasm of the Female Genital Tract	Malignant Neoplasm of the Bone and Connective Tissue, Head and Neck	\$327,020
13	Malignant Neoplasm of the Genitourinary System, except Prostate	Arterial Inflammation,	\$317,384
14	Malignant Neoplasm of the Breast	Vein Inflammation, Embolism, Thrombosis and Phlebitis	\$308,578
15	Malignant Pulmonary Neoplasm	Cerebral Vascular Accident	\$296,902
16	Malignant Neoplasm of the Central Nervous System	Cerebral Vascular Accident	\$290,098
17	Congestive Heart Failure	Emphysema/Chronic Bronchitis	\$287,302
18	Pulmonary Heart Disease	Complications, Environmental, Toxic Effects	\$279,444
19	Fracture or Dislocation, Open, Thigh, Hip and Pelvis	Conduction Disorder	\$268,746
20	Behavioral Health		\$257,169
21	Fracture or Dislocation, Open or Closed, Lower Extremity	Behavioral Health	\$248,382
22	Malignant Neoplasm of the Central Nervous System	Hereditary and Degenerative Diseases of the Central Nervous System	\$245,236
23	Leukemia	Infection of the Lower Genitourinary System	\$244,225
24	Inflammation of the Intestines, Rectum, Anus, Abdomen	Cirrhosis	\$239,825
25	Hereditary and Degenerative Diseases of the Central Nervous System	Inflammation of the Esophagus	\$234,198
26	Malignant Neoplasm of the Female Genital Tract	Malignant Neoplasm of the Genitourinary System, except Prostate	\$232,760
27	Neoplastic Disease of Blood and Lymphatic System except Leukemia	Malignant Neoplasm of Endocrine Glands	\$232,189
28	Malignant Neoplasm of the Skin	Malignant Neoplasm of the Central Nervous System	\$214,303

	First ETG Description	Second ETG Description	Total Net Payments
29	Malignant Neoplasm of the Breast	Fracture or Dislocation, Open or Closed, Lower Extremity	\$212,841
30	Cholelithiasis	Malignant Neoplasm of Endocrine Glands	\$212,151
31	Lupus	Infection of the Skin	\$200,443
32	Substance Abuse/Drug dependence	Vein Inflammation, Embolism, Thrombosis and Phelebitis	\$191,453
33	Vascular Disease of the Intestines and Abdomen	Coronary Artery Disease	\$190,569
34	Joint Degeneration, Localized	Complications, Environmental, Toxic Effects	\$189,789
35	Joint Degeneration, Localized	Pulmonary Heart Disease	\$185,444
36	Cerebral Vascular Accident	Malignant Neoplasm of the Prostate	\$184,470
37	Pulmonary Heart Disease	Viral/Fungal Lung Infections	\$179,259
38	Malignant Neoplasm of the Stomach and Esophagus	Diabetes	\$178,031
39	Malignant Neoplasm of the Breast	IBS	\$176,975
40	Malignant Neoplasm of the Stomach and Esophagus	Infection of the Skin	\$173,152
41	Malignant Ear, Nose and Throat neoplasm	Hypertension	\$164,077
42	Leukemia	Inflammation of the Non-cranial Nerves	\$163,956
43	Leukemia	Benign Neoplasm of the Prostate	\$161,997
44	Behavioral Health		\$161,007
45	Inflammation of the Intestines, Rectum, Anus, Abdomen	Non-neoplastic Blood Disease	\$160,446
46	Arthritis	Joint Degeneration, Localized	\$158,061
47	Leukemia	Malignant Neoplasm of the Skin	\$158,043
48	Asthma	Hyperlipidemia	\$157,555
49	Behavioral Health	Joint Degeneration, Localized	\$156,456
50	Malignant Neoplasm of the Prostate	Benign Neoplasm of the Skin	\$152,885
51	Malignant Neoplasm of the Female Genital Tract	Diabetes	\$150,417
52	Malignant Neoplasm of the Bone and Connective Tissue, Head and Neck	Malignant Neoplasm of the Female Genital Tract	\$150,235
Sum of Claims over \$150,000			\$14,020,214
Percent of Total Claims			16.3%

Top 10 Rx Classes Ranked by PMPM



Top 5 Specialty Drugs

Specialty Category	7/16-6/17			7/17-6/18		
	% of Scripts	% of Payments	PMPM	% of Scripts	% of Payments	PMPM
Inflammatory Disease	30.1%	32.2%	\$16.03	31.3%	43.1%	\$22.42
Oncology	18.2%	29.9%	\$14.84	14.8%	24.5%	\$12.76
Multiple Sclerosis	12.9%	15.3%	\$7.59	11.1%	15.5%	\$8.05
Pulmonary Arterial Hypertension	1.5%	1.9%	\$0.94	22.0%	3.8%	\$1.98
Hepatitis C	1.3%	4.4%	\$2.19	0.6%	3.8%	\$1.96
All Other Specialty	36.0%	16.4%	\$8.13	20.2%	9.3%	\$4.84
Total Specialty	1,424	\$7,133,593	\$49.72	1,606	\$7,280,856	\$52.01
% of Total Pharmacy	0.9%	46.7%	46.4%	1.1%	49.6%	49.2%

Health Management*

	Identified	Reached	Engaged
Complex Case Management: (Medical and Behavioral Health)	185	78	68

Results

	Cape Cod Municipal Health Group	Plan Average
◆ CM Engagement Rates	37%	41%
◆ CM Reached / Engagement Rates	87%	88%
◆ Disease and Case Management Engagement Rates	76%	70%

* BCBSMA's Complex Case Management Program facilitates the coordination of care and access to services for members with complex needs, chronic illnesses, catastrophic illnesses/injuries and certain behavioral health conditions.



Appendix



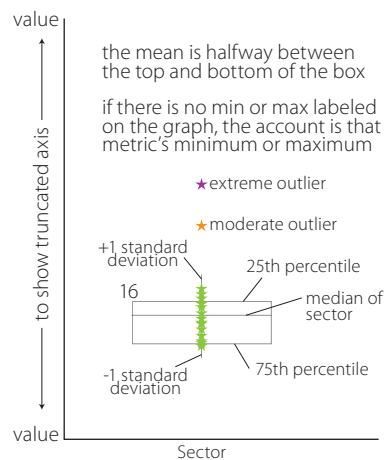
MASSACHUSETTS

Appendix

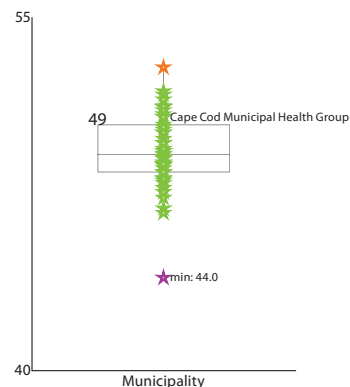
Industry Comparison

Financial Measures

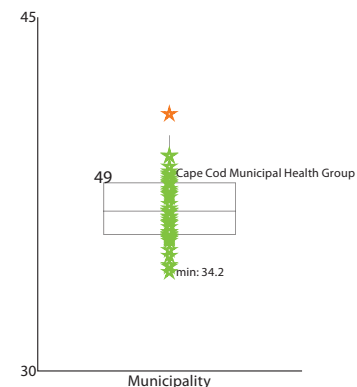
How to Read



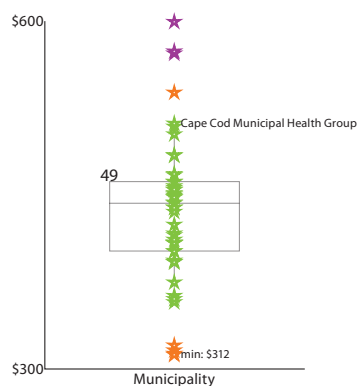
Average Subscriber Age



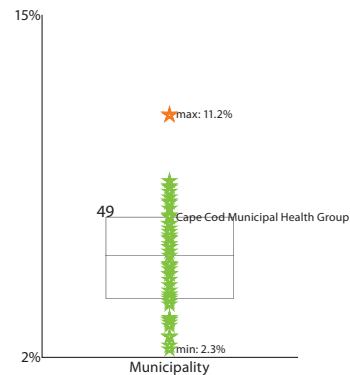
Average Member Age



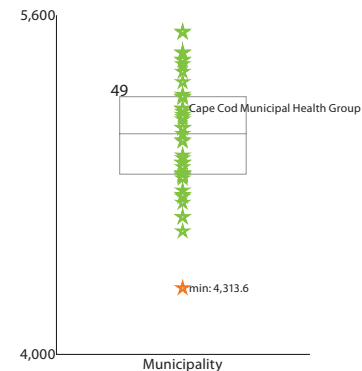
Medical PMPM



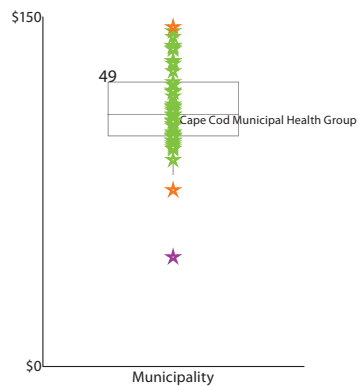
Medical Cost Share



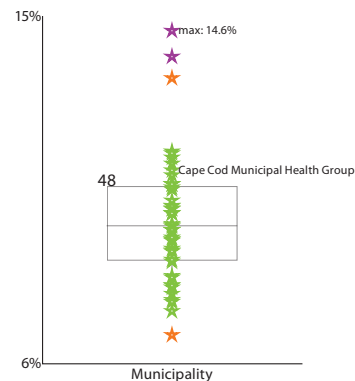
Office Visits per 1000



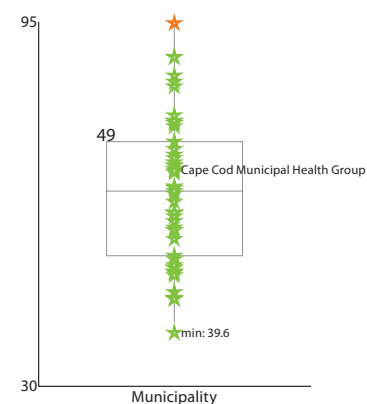
Pharmacy PMPM



Pharmacy Cost Share



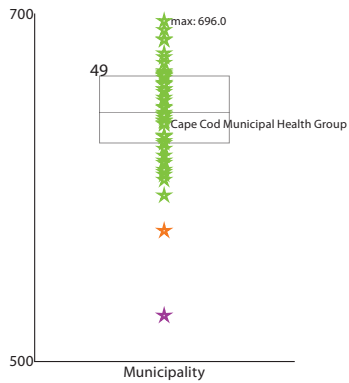
Admissions per 1000



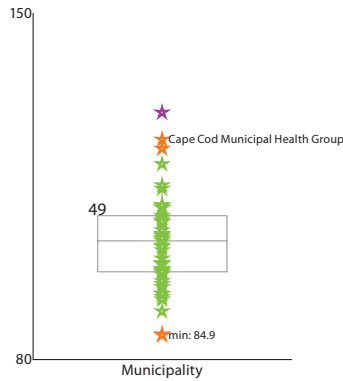
Clinical Measures



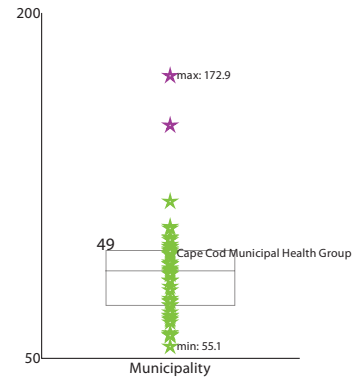
Routine Care



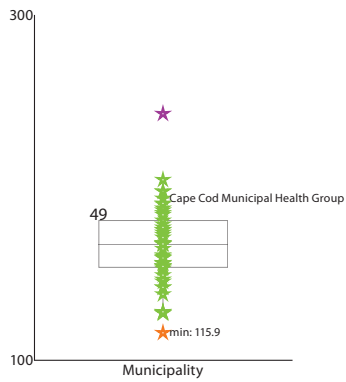
Depression



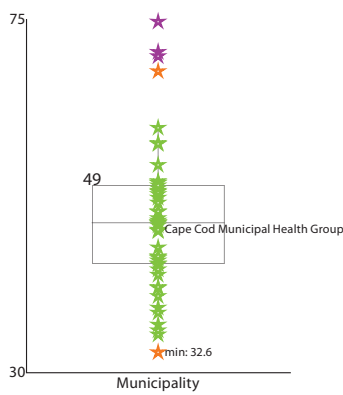
Obesity



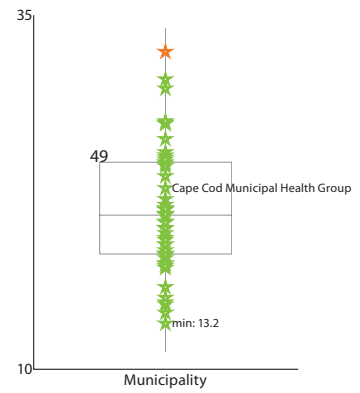
Hypertension



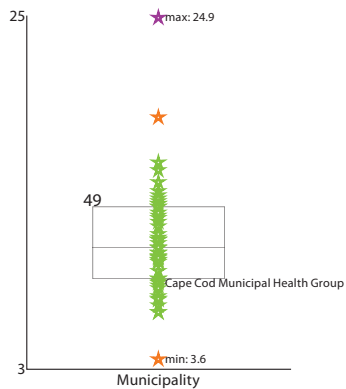
Diabetes



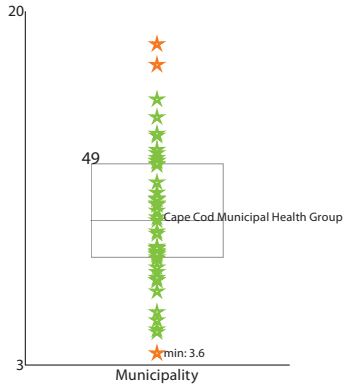
Coronary Artery Disease



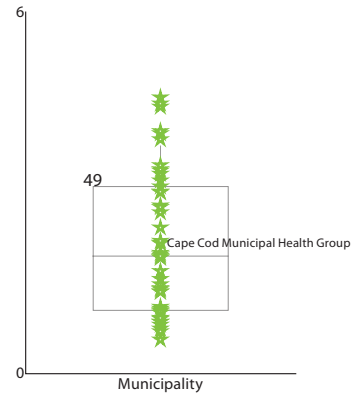
Pregnancy



Breast Cancer

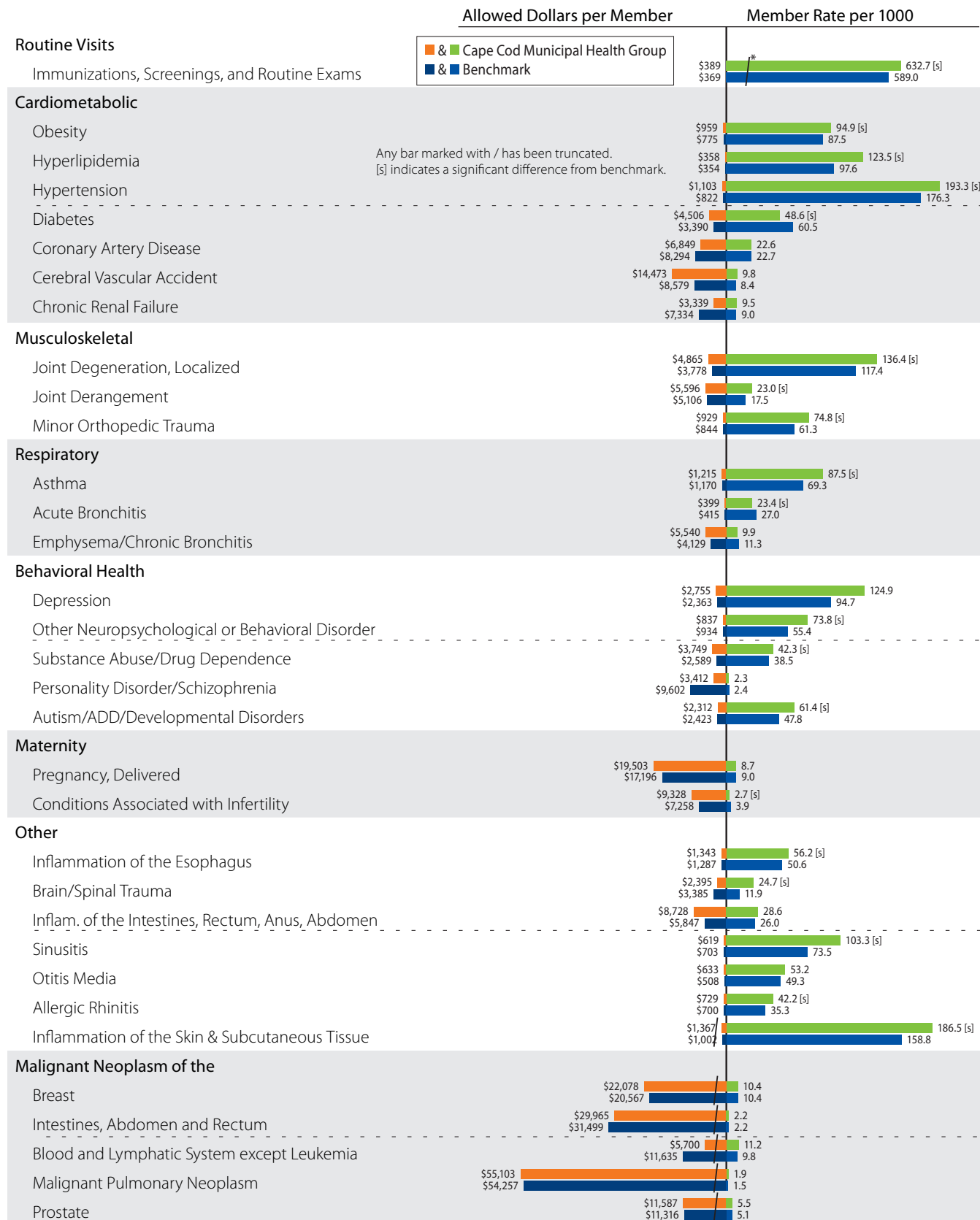


Colon Cancer

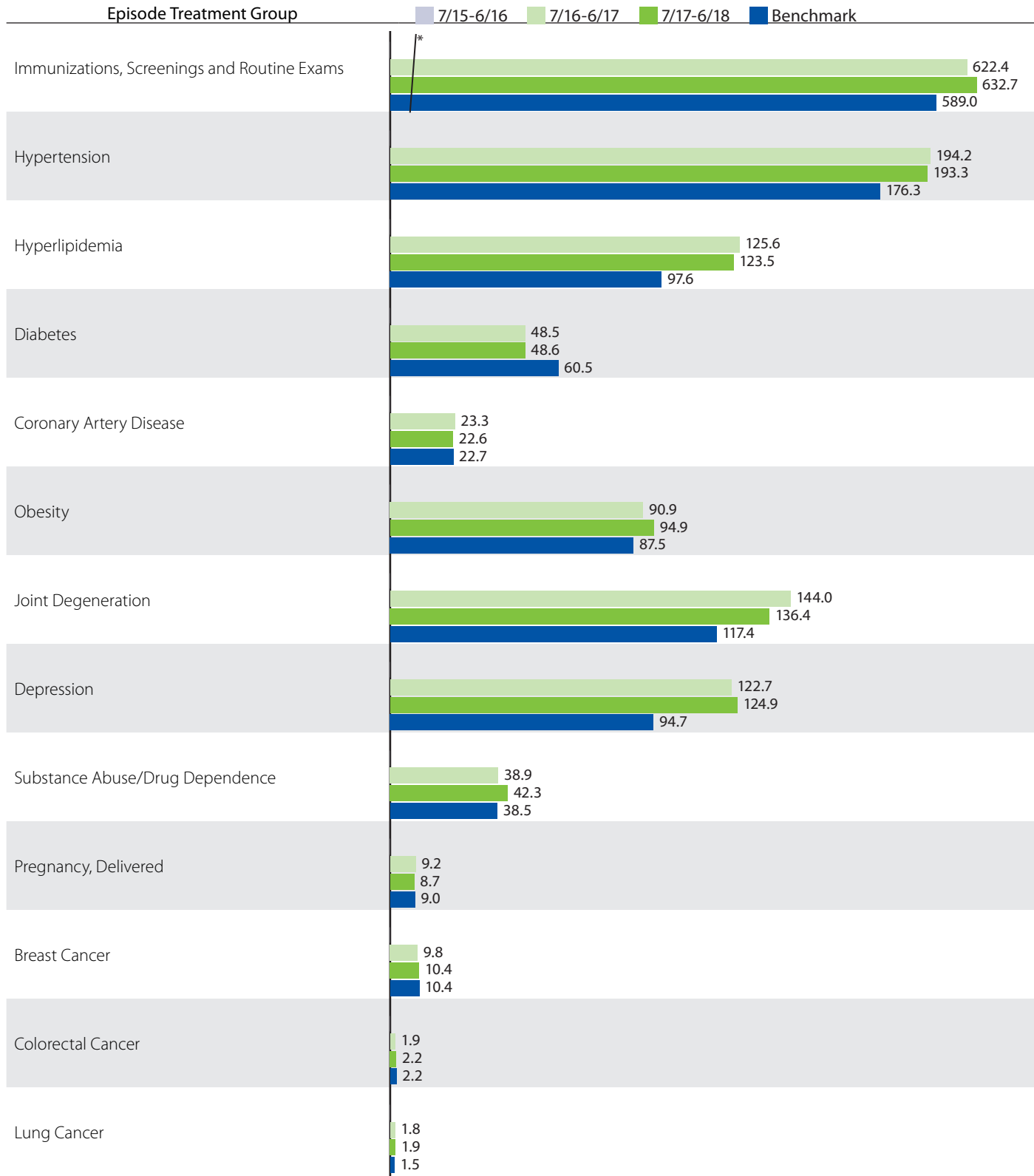


Appendix

ETG Rates



Change in Select Conditions



Appendix Additional Metrics

Top 10 Clinical Conditions by Cost

	Members	Total Costs	Cost per Member	Benchmark Cost/Mbr	Member Rate per 1000
Joint Degeneration, Localized	1,576	\$7,667,613	\$4,865	\$3,778	136.4 [s] 117.4
Depression	1,443	\$3,974,908	\$2,755	\$2,363	124.9 94.7
Inflammation of Skin & Subcutaneous Tissue	2,155	\$2,945,748	\$1,367	\$1,002	186.5 [s] 158.8
Inflammation of the Intestines, Rectum, Anus, Abdomen	330	\$2,880,173	\$8,728	\$5,847	28.6 26.0
Immunizations, Screenings and Routine Exams	7,310	\$2,841,615	\$389	\$369	632.7 [s] 589.0
Malignant Neoplasm of the Breast	120	\$2,649,306	\$22,078	\$20,567	10.4 10.4
Diabetes	561	\$2,528,043	\$4,506	\$3,390	48.6 60.5
Hypertension	2,233	\$2,462,851	\$1,103	\$822	193.3 [s] 176.3
Pregnancy, Delivered	100	\$1,950,333	\$19,503	\$17,196	8.7 9.0
Inflammation of the Central Nervous System	53	\$1,884,322	\$35,553	\$29,200	4.6 4.2

Inpatient Admissions Top 10 Hospitals

Hospital	Provider State	Net Payments	% of Payments	Admissions	Cost Per Admission
Cape Cod Healthcare	MA	\$6,303,054	36.1%	288.0	\$21,886
Marthas Vineyard Hospital	MA	\$568,258	3.3%	35.0	\$16,236
Rehab Hospital Of The Cape And	MA	\$362,232	2.1%	14.0	\$25,874
Cape Cod Area		\$7,233,544	41.5%	337.0	n/a
Massachusetts General Hospital	MA	\$1,886,475	10.8%	55.0	\$34,300
Brigham and Women's Hospital	MA	\$1,490,716	8.5%	44.0	\$33,880
Tufts Medical Center	MA	\$1,066,023	6.1%	18.0	\$59,224
Beth Israel Deaconess Medical Center	MA	\$644,547	3.7%	24.0	\$26,856
New England Baptist Hospital	MA	\$381,555	2.2%	12.0	\$31,796
Boston Area		\$5,469,316	31.3%	153.0	n/a
Southcoast Hospitals	MA	\$407,904	2.3%	25.0	\$16,316
Beth Israel Deaconess Hospital Plymouth	MA	\$374,853	2.1%	28.0	\$13,388
Total Top 10 Hospitals		\$13,485,617	77.30%	543.0	\$24,835

Inpatient Admissions

Major Diagnostic Category	Admissions per 1000			PMPM			Cost per Admit	
	7/16-6/17	7/17-6/18	Benchmark	7/16-6/17	7/17-6/18	Benchmark	7/17-6/18	Benchmark
Musculoskeletal System	11.7	10.1	8.3	\$30.44	\$28.68	\$22.73	\$34,046	\$32,707
Circulatory System	5.3	4.7	5.6	\$15.84	\$15.71	\$17.90	\$40,408	\$38,610
Pregnancy & Childbirth	8.3	8.6	8.0	\$12.12	\$12.24	\$10.31	\$17,169	\$15,541
Neonatal Care	2.4	1.6	1.6	\$2.82	\$5.22	\$3.56	\$38,163	\$26,688
Digestive System	6.3	6.2	5.1	\$13.43	\$12.34	\$9.92	\$23,810	\$23,470
Behavioral Health	6.8	6.0	4.3	\$7.01	\$8.46	\$4.93	\$17,021	\$13,702
Alcohol/Drug Use	8.2	6.3	5.0	\$2.99	\$4.58	\$2.42	\$8,722	\$5,793
Endocrine & Metabolic Disorders	2.8	3.0	2.3	\$5.44	\$5.77	\$4.16	\$22,884	\$22,134
Respiratory System	4.1	3.2	4.1	\$7.89	\$5.99	\$8.86	\$22,491	\$25,864
All Others	17.4	19.1	15.7	\$50.13	\$44.01	\$38.65	n/a	n/a
Total Admissions	73.4	68.8	60.0	\$148.11	\$143.01	\$123.45	\$24,951	\$24,702

Specialty Drugs

Specialty Category	7/16-6/17			7/17-6/18		
	% of Scripts	% of Payments	PMPM	% of Scripts	% of Payments	PMPM
Inflammatory Disease	30.1%	32.2%	\$16.03	31.3%	43.1%	\$22.42
Oncology	18.2%	29.9%	\$14.84	14.8%	24.5%	\$12.76
Multiple Sclerosis	12.9%	15.3%	\$7.59	11.1%	15.5%	\$8.05
Pulmonary Arterial Hypertension	1.5%	1.9%	\$0.94	22.0%	3.8%	\$1.98
Hepatitis C	1.3%	4.4%	\$2.19	0.6%	3.8%	\$1.96
Neutropenia	2.4%	2.7%	\$1.35	1.7%	1.7%	\$0.87
Psoriasis	1.0%	0.6%	\$0.28	2.6%	1.7%	\$0.87
Infertility	14.9%	5.0%	\$2.49	5.0%	1.2%	\$0.60
Cystic Fibrosis	1.4%	3.9%	\$1.96	0.1%	0.6%	\$0.30
Botulinum Toxin For Neuromuscular Disorders	2.8%	0.6%	\$0.30	2.4%	0.6%	\$0.30
Anemia	0.4%	0.1%	\$0.04	0.9%	0.3%	\$0.18
Autoimmune Disorders	0.8%	0.2%	\$0.09	0.1%	0.2%	\$0.12
Respiratory Syncytial Virus	n/a	n/a	n/a	0.2%	0.1%	\$0.06
Growth Hormone Deficiency	0.6%	0.2%	\$0.12	0.1%	0.1%	\$0.03
Osteoporosis	2.6%	0.01%	\$0.00	0.1%	0.00%	\$0.00
All Other Specialty	9.1%	3.0%	\$1.49	7.0%	2.9%	\$1.50
Total Specialty	1,424	\$7,133,593	\$49.72	1,606	\$7,280,856	\$52.01
% of Total Pharmacy	0.9%	46.7%	46.4%	1.1%	49.6%	49.2%

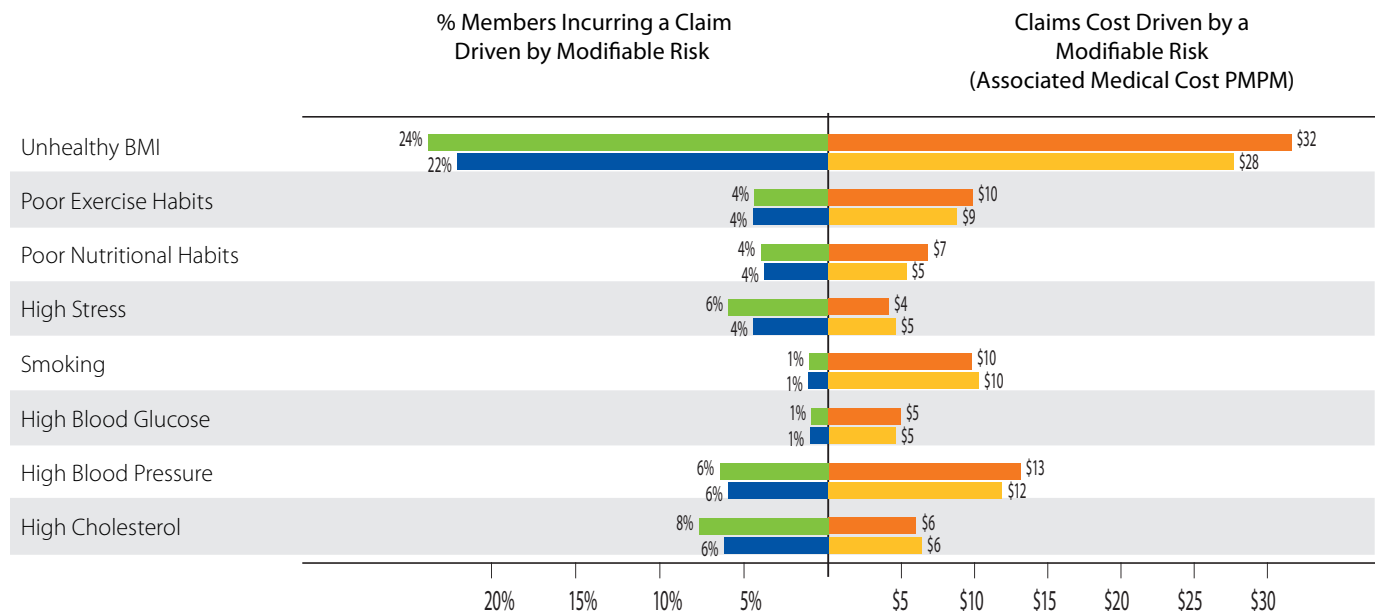
Appendix

Modifiable Risk Report

- 75% of chronic disease and associated medical costs are driven by modifiable lifestyle risks and behaviors. The Blue Cross Blue Shield of Massachusetts Modifiable Health Risk Report summarizes your claims by health outcome and can attribute a portion of those claims to modifiable risk factors using evidence-based Population Attributable Fractions (PAFs).
- This report indicates the estimated health cost that is associated with each modifiable risk. Using these insights, your Blue Cross Wellness Consultant can help you determine a targeted wellness program that is designed for impact in the areas your employees need it most.

ETG Cost Attributed to Modifiable Risk Factors *

Modifiable Risk Factor	% Members Incurring a Claim Driven by Modifiable Risk	Claims Cost Driven by a Modifiable Risk	National Prevalence
Unhealthy BMI	24%	\$4,392,647	38%
Poor Exercise Habits	4%	\$1,370,146	25%
Poor Nutritional Habits	4%	\$945,021	91%
High Stress	6%	\$571,222	NA
Smoking	1%	\$1,359,639	15%
High Blood Glucose	1%	\$684,888	44%
High Blood Pressure	6%	\$1,823,089	29%
High Cholesterol	8%	\$834,155	12%
Total		\$11,980,806	
All Other		\$73,805,583	



LEGEND

- and = Account data
- and = Benchmark data

- * The Wellness Modifiable Risk Report model is not a clinical tool. It does not imply a direct impact on event rates, nor does it guarantee savings.
- * Percentages of condition costs attributed to these lifestyle risks are based on published literature. ETG costs attributed to modifiable risk factors are based on account-specific claims for the conditions impacted by the risk. This exhibit includes pharmacy information, as applicable.

Wellness Programs Available to Impact Modifiable Risks

<p>Unhealthy BMI Poor Nutrition Habits Poor Exercise Habits High Blood Pressure High Blood Pressure</p> <ul style="list-style-type: none"> ◆ Offer/Promote Fitness and Weight Loss Reimbursement ◆ Promote ahealthyme weight management workshop, physical activity workshop healthy eating workshop ◆ Engage in ahealthyme nutrition and activity challenges ◆ Offer/Promote Fitness Reimbursement ◆ Promote ahealthyme steps and cardio logs ◆ Promote ahealthyme nutrition tracking and meal planning tools 	<p>High Stress</p> <ul style="list-style-type: none"> ◆ Promote ahealthyme Sleep workshop ◆ Promote ahealthyme Stress Management workshop ◆ Promote ahealthyme Mind Body workshop ◆ Promote Living Healthy Naturally discount program
<p>High Blood Glucose</p> <ul style="list-style-type: none"> ◆ Promote ahealthyme prediabetes workshop in addition to the programs for weight loss, nutrition and physical activity. 	<p>Smoking</p> <ul style="list-style-type: none"> ◆ Promote ahealthyme Tobacco Cessation workshop ◆ Promote National Tobacco Cessation quitline ◆ Promote pharmacy options to help one quit, if applicable ◆ Leverage ahealthyme Tobacco Attestation program