



# SPENDING AND USE AMONG MARYLAND'S PRIVATELY FULLY-INSURED 2016

MAY 2018

## Highlights

- **Spending grew:** Per member per month (PMPM) expenditures for health care for privately-insured members in Maryland increased each year from 2014-2016.
  - **Growth rate slowed in the privately insured market:** The rate of spending growth slowed in 2016 (5%), compared to 12% in 2015.
  - **Growth rate slowed in the individual market:** The growth rate in 2016, 12%, was well below the 2015 growth rate of 35%, but faster than the large and small employer markets.
  
- **Outpatient Hospital and Prescription Drug utilization drove the increase in PMPM spending across all markets in 2016:**
  - Increases in service use for outpatient hospital facility and prescription drugs of 22% and 5%, respectively were the main contributors to the 5% increase in total PMPM spending across all markets in 2016. These two service categories combined represent about 45% of the total PMPM spending for 2016.
  - Increased unit costs (20%) of physician supplied drugs also contributed to PMPM growth, although this service category only represents 3% of total PMPM.
  
- **Some service categories saw PMPM decreases:** In 2016, the PMPM for inpatient hospital facilities decreased by 2%, and the PMPM for labs/imaging decreased by 3%. Both decreases are attributable to decreased unit costs, as utilization remained unchanged.
  
- **Population Health Risk scores (median expenditure risk scores) were virtually stable from 2015 - 2016** for the large employer and small employer markets but increased for the individual market. Median population health risk was highest in the large employer and individual markets. For On-Exchange members, the population health risk scores in the individual market were substantially higher when Kaiser HMO members are excluded. For Off-Exchange members, the population health risk scores in the individual market were slightly higher when Kaiser HMO members are excluded.
  
- **Individual market participants faced the highest out-of-pocket costs in 2016:** PMPM out-of-pocket costs for members in the individual market was \$120, compared to \$58 for members in the large employer market and \$84 for members in the small employer market.



## ***Commissioners***

---

***Robert E. Moffit, PhD, Chair***

***Senior Fellow, Health Policy Studies***

***Heritage Foundation***

Andrew N. Pollak, MD, Vice Chair  
Professor and Chair  
Department of Orthopaedics  
University of Maryland School of Medicine  
Chief of Orthopaedics  
University of Maryland Medical System

John E. Fleig, Jr.  
Chief Operating Officer  
UnitedHealthcare  
MidAtlantic Health Plan

Elizabeth A. Hafey, Esq.  
Associate  
Miles & Stockbridge P.C.

Jeffrey Metz, MBA, LNHA  
President and Administrator  
Egle Nursing and Rehab Center

Gerard S. O'Connor, MD  
General Surgeon in Private Practice

Michael J. O'Grady, PhD  
Principal, Health Policy LLC, and  
Senior Fellow, National Opinion Research Ctr  
(NORC) at the University of Chicago

Candice A. Peters, MD  
Physical Medicine and Rehabilitation in  
Private Practice

Randolph S. Sergent, Esq.  
Vice President and Deputy General Counsel  
CareFirst BlueCross BlueShield

Stephen B. Thomas, PhD  
Professor of Health Services Administration  
School of Public Health  
Director, Maryland Center for Health Equity  
University of Maryland, College Park

Cassandra Tomarchio  
Business Operations Manager  
Enterprise Information Systems Directorate  
US Army Communications Electronics Command

Marcus L. Wang, Esq.  
Co-Founder, President and General Manager  
ZytoGen Global Genetics Institute

## Table of Contents

Highlights .....	
Background .....	1
Part 1: The Privately-Insured Market in Maryland .....	2
Privately Insured Health Plan Enrollment, Spending, and Risk for all Markets, 2015 and 2016 .....	2
Unit Costs by Market and Service Category for Privately Insured Health Plans, 2015 and 2016.....	6
2015 and 2016 Utilization of Services by Market and Service Category for Privately Insured Health Plans .....	8
<b>Drivers of Spending Growth Across all Markets combined, 2015 - 2016</b> .....	9
PMPM Spending by Age and Market, 2016 .....	11
PMPM Spending by Region and Market, 2016 .....	12
Member and Carrier Shares of Health Spending across Markets, 2016.....	13
Part 2: The Individual Health Insurance Market in Maryland.....	15
Individual Market Health Plan Enrollment, Spending, Risk, and Utilization, 2014 - 2016.....	16
<b>Drivers of Spending Growth in the Individual Market, 2014 - 2016</b> .....	18
Prevalence of Select Conditions, Individual Market, 2014 - 2016 .....	21
ACA-Compliant Health Plan Enrollment, Spending, Risk, and Utilization, 2015 - 2016 (On-Exchange and Off-Exchange Plans) .....	22
ACA-Compliant Spending, Risk, and Utilization, 2015 – 2016 (On-Exchange and Off-Exchange Plans)	24
Prevalence of Select Conditions in ACA-Compliant Insurance, on and off the Exchange, 2015 - 2016 .	28
Member Share and Carrier Share of Spending in On-Exchange and Off-Exchange ACA-Compliant Insurance, 2015 - 2016.....	31
Appendix A: Additional Exhibits.....	33
Appendix B: Methods and Definitions .....	36

## Table of Exhibits

Exhibit 1: Enrollment, Spending, and Risk Scores for Privately Insured Markets in Maryland, 2016, 2015.....	4
Exhibit 2: Percentage Changes in Enrollment, Spending, and Risk Scores for Privately Insured Markets in Maryland, 2015-2016.....	5
Exhibit 3: Unit Cost and Annual Percent Change in Unit Cost by Market and Service Category, 2016 .....	7
Exhibit 4: Unit Cost and Annual Percent Change in Unit Cost by Market and Service Category, 2015 .....	7
Exhibit 5: Utilization of Inpatient and Outpatient Facilities by Market, 2016 .....	9
Exhibit 6: Utilization of Professional Services, Labs/Imaging, Physician Supplied Drugs, and Prescription Drug by Market, 2016.....	9
Exhibit 7: Annual Changes in PMPM Spending, Utilization per 1,000 Members, and Cost per Unit by Service Category All Markets Combined, 2015 to 2016.....	10
Exhibit 8: PMPM Spending by Age of Member and Market, 2016 .....	11
Exhibit 9: PMPM Spending by Region and Market, 2016 .....	12
Exhibit 10: Member Out-of-Pocket Share and Carrier Share of Total Spending by Market, 2016 .....	14
Exhibit 11: Medical and Prescription Drugs: Member OOP and Carrier Share of Total Spending by Market, 2016 .....	14
Exhibit 12: Enrollment, Spending, and Risk Scores for the Individual Market (ACA-Compliant and Non-Compliant Plans), 2014 to 2016.....	17
Exhibit 13: Annual Changes in PMPM Spending, Utilization per 1,000 Members, and Cost per Unit by Service Category in the Individual Market (ACA-Compliant and Non-Compliant Plans), 2014 to 2016 .....	19
Exhibit 14: Hospital Inpatient and Outpatient Utilization, Individual Market, 2014 to 2016 .....	20
Exhibit 15: Utilization of Professional Services, Labs/Imaging, and Prescription Drugs, Individual Market, 2014 to 2016.....	20
Exhibit 16: Prevalence of Select Chronic Conditions, Individual Market, 2014 to 2016.....	21
Exhibit 17: Enrollment in On-Exchange and Off-Exchange ACA-Compliant Insurance by Plan Metal Status as of December 31, 2016.....	23
Exhibit 18: On-Exchange vs. Off-Exchange Enrollment, Spending, and Risk Scores For ACA-Compliant Insurance in the Individual Market, 2015 - 2016.....	25
Exhibit 19: On-Exchange vs. Off Exchange (ACA-Compliant Plans Only) Hospital Inpatient and Outpatient Utilization and YOY % Changes, Individual Market, 2015 to 2016 .....	26
Exhibit 20: On-Exchange vs. Off Exchange (ACA-Compliant Plans Only) Utilization of Professional Services, Labs/Imaging, Physician Supplied Drugs, and Prescription Drugs, Individual Market, 2015.....	27
Exhibit 21: On v. Off Exchange (ACA-Compliant Plans Only): Prevalence of Select Chronic Conditions, Individual Market, 2015 to 2016 .....	28
Exhibit 22: PMPM Spending by the Age of Member, Individual Market, 2014 to 2016.....	30
Exhibit 23: PMPM Spending by Region of Members, Individual Market, 2014 to 2016.....	30
Exhibit 24: Member Out-of-Pocket Share and Carrier Share of Total Spending, On-Exchange vs. Off-Exchange ACA-Compliant Plans, 2015 to 2016 .....	32
Exhibit A1: Comparison of Risk Scores across Plan Types in the Individual Market, 2014 to 2016.....	33
Exhibit A2: Comparison of Risk Scores across Plan Types in the Individual Market, 2014 to 2016, Continued	33
Exhibit A3: Prescription Drug PMPM Changes by Drug Type, Individual Market, 2014 to 2016 .....	34
Exhibit A4: Prescription Drug Utilization Changes by Drug Type, Individual Market, 2014 to 2016 .....	34
Exhibit A5: Prescription Drug Unit Cost Changes by Drug Type, Individual Market, 2014 to 2016.....	35

## Background

This report examines health care spending and utilization patterns for Maryland residents insured through the privately-insured individual, small employer, and large employer markets.<sup>1</sup> The analysis relies on 2014, 2015, and 2016 data from Maryland's Medical Care Database (MCDB), which contains health insurance enrollment, health care claims, and encounter data for Maryland residents. These data are submitted quarterly to the Maryland Health Care Commission (MHCC) by private health insurance carriers. Most private health insurance carriers serving Maryland residents submit MCDB data, including CareFirst, United HealthCare, Kaiser Permanente of the Mid-Atlantic, Cigna, Aetna, and Evergreen Health.<sup>2</sup> This report is limited to data on Maryland residents who are enrolled in fully-insured health plans and under 65 years of age.

Part 1 of this report presents enrollment, spending, and utilization for all privately-insured health insurance markets. This section includes comparisons of the individual, small employer, and large employer markets. Data on variation by geography, age, and service category is also included.

Part 2 of this report focuses on the individual market. This market expanded as a result of reforms under the Affordable Care Act (ACA) but has faced instability in premiums, insurer participation, and federal policy. The MCDB data answers important questions about market performance in this time of great change, including questions that can be helpful to the implementation of the State Reinsurance Program in 2019.

Members of Kaiser plans are only included in the individual market data discussed in Part 2 of this report and, the only data that includes Kaiser members are the overall enrollment data at the end of a year and the median expenditure risk score results.

This report is one in a series of reports that fulfill the annual reporting requirement for certain types of information from the MCDB, as required by Maryland law.<sup>3</sup> Measures used in this analysis are defined in the Methods section in Appendix B at the end of this report.

---

<sup>1</sup> Data on self-insured plans and publicly funded insurance products are not included in this report.

<sup>2</sup> On July 31, 2017 Evergreen Health, Inc. ("Evergreen" or the "Company") was ordered into Rehabilitation and the Risk and Regulatory Consulting, LLC was appointed as Receiver for Evergreen. On September 1, 2017 the Circuit Court for Baltimore City, Maryland ordered the Company into Liquidation. All policies were terminated on September 30, 2017, unless otherwise expired or terminated prior to that date.

<sup>3</sup> Maryland Code, Health-General, 19-133.

## Part 1: The Privately-Insured Market in Maryland

This part of the report presents enrollment, spending, risk, and utilization for all privately-insured health insurance markets for 2015 and 2016. The individual, small employer, and large employer markets are compared throughout. Data on variation by service category is also included. As health care expenditures grow as a portion of our state and national economy, these data can provide important insight into drivers of that growth in the privately insured market, helping to support government, business, and consumer decision-making in the area of health care expenditures in the future.

### Privately Insured Health Plan Enrollment, Spending, and Risk for all Markets, 2015 and 2016

This section provides information on enrollment in privately-insured health insurance in Maryland, as well as spending and risk (as measured through member health status). This information is important in understanding trends over time in health care costs and insurance participation, as well as how the individual market, small employer market, and large employer market differ. This section also provides information on consumer out-of-pocket costs across markets and variation in spending across different types of services.

- Enrollment in privately insured health plans decreased in 2016. The largest percentage decrease was in the individual market (7% enrollment decrease) compared to the large employer (1% decrease) and small employer (3% decrease) markets.
- Spending increased in all privately-insured health insurance markets in Maryland in 2016, continuing a trend of increasing annual spending. (**Exhibit 1** and **Exhibit 2**).

The individual market PMPM spending (all services combined) is the largest of the three markets, exceeding the small employer and large employer markets by more than \$90. The individual market also saw the largest increase in spending in 2016 (12%), compared to the large and small employer markets.

In 2016, out-of-pocket spending (all services combined) for individual plan members increased in the large employer market (4%) and in the individual market (13%) but decreased in the small employer market (7%) in 2016.

Out-of-pocket spending was highest in the individual market in 2016, which was also true in 2015. Out-of-pocket PMPM spending for the individual market was \$120, compared to \$84 for the small employer market and \$58 for the large employer market for 2016.<sup>4</sup>

Population health risk, as represented by median expenditure risk scores, increased slightly in the large employer market, remained stable in the small employer market, and increased moderately in the individual market. The median expenditure risk score for the large employer market was about the same as for the individual market (large employers: 0.32 v. individual: 0.31) for 2016. The small employer market members had a slightly lower illness burden (risk score: 0.27).

---

<sup>4</sup> This spending difference could be due to the greater prevalence of high deductible plans in the individual market relative to the large employer market.

*Exhibit 1: Enrollment, Spending, and Risk Scores for Privately Insured Markets in Maryland, 2016 and 2015*

	2016				2015			
	Total	Large Employers	Small Employers	Individual	Total	Large Employers	Small Employers	Individual
<b>Members</b>								
Total members as of December 31	1,226,438	767,367	226,480	232,591	1,258,828	774,895	234,593	249,340
<b>Member Months</b>								
Total member months	14,743,260	9,075,225	2,754,459	2,913,576	15,236,413	9,387,013	2,804,992	3,044,408
<b>Spending</b>								
PMPM spending, all services combined	\$394	\$374	\$373	\$468	\$376	\$363	\$369	\$417
PMPM OOP, all services combined	\$76	\$58	\$84	\$120	\$73	\$56	\$90	\$106
PMPM OOP, Medical Only	\$60	\$45	\$65	\$103	\$57	\$43	\$70	\$88
PMPM OOP, Prescription Drugs	\$15	\$13	\$19	\$17	\$16	\$13	\$21	\$18
<b>PMPM Spending By Service Category</b>								
Inpatient Hospital Facility	\$62	\$59	\$58	\$77	\$63	\$62	\$58	\$70
Outpatient Hospital Facility	\$76	\$70	\$65	\$104	\$70	\$67	\$65	\$85
Outpatient Non-Hospital Facility	\$9	\$8	\$9	\$10	\$9	\$8	\$8	\$10
Professional Services	\$104	\$104	\$97	\$110	\$100	\$100	\$97	\$103
Labs/Imaging	\$30	\$28	\$31	\$37	\$31	\$29	\$33	\$39
Physician Supplied Drugs	\$11	\$9	\$12	\$14	\$9	\$7	\$11	\$11
<b>SubTotal (Medical Only)</b>	<b>\$292</b>	<b>\$278</b>	<b>\$272</b>	<b>\$352</b>	<b>\$282</b>	<b>\$273</b>	<b>\$272</b>	<b>\$318</b>
Prescription Drugs <sup>1</sup>	\$102	\$96	\$101	\$116	\$94	\$90	\$97	\$99
<b>Risk Score</b>								
90 <sup>th</sup> Percentile	n/a	3.08	2.81	3.22	n/a	2.93	2.65	2.94
Median expenditure risk score	n/a	0.32	0.27	0.31	n/a	0.30	0.27	0.27
10 <sup>th</sup> Percentile	n/a	0.05	0.05	0.05	n/a	0.05	0.05	0.05

Note: (1) Prescription drug spending is missing for some Federal Employee Health Benefits Program (FEHBP) members; therefore, drug spending for large employers is calculated using only members who have the prescription drug benefit.

(2) PMPM portion of spending for insurers is overall PMPM (all services combined) less PMPM OOP (all services combined).

(3) Excludes Kaiser HMO Plans.

Exhibit 2: Percentage Changes in Enrollment, Spending, and Risk Scores for Privately Insured Markets in Maryland, 2015 - 2016

	Market			
	Total	Large Employers	Small Employers	Individual
<b>Members</b>				
Total members as of December 31	-3%	-1%	-3%	-7%
<b>Member Months</b>				
Total member months	-3%	-3%	-2%	-4%
<b>Spending</b>				
PMPM spending, all services combined	5%	3%	1%	12%
PMPM OOP, all services combined	4%	4%	-7%	13%
PMPM OOP, Medical Only	5%	5%	-7%	17%
PMPM OOP, Prescription Drugs	-6%	0%	-10%	-6%
<b>PMPM Spending By Service Category</b>				
Inpatient Hospital Facility	-2%	-5%	0%	10%
Outpatient Hospital Facility	9%	4%	0%	22%
Outpatient Non-Hospital Facility	0%	0%	13%	0%
Professional Services	4%	4%	0%	7%
Labs/Imaging	-3%	-3%	-6%	-5%
Physician Supplied Drugs	22%	29%	9%	27%
<b>SubTotal (Medical Only)</b>	<b>4%</b>	<b>2%</b>	<b>0%</b>	<b>11%</b>
Prescription Drugs <sup>1</sup>	9%	7%	4%	17%
<b>Risk Score</b>				
	<b>Differences (2015 to 2016)</b>			
90 <sup>th</sup> Percentile	n/a	0.14	0.16	0.28
Median expenditure risk score	n/a	0.01	0.01	0.04
10 <sup>th</sup> Percentile	n/a	0.00	0.00	0.00

- Note: (1) Prescription drug spending is missing for some Federal Employee Health Benefits Program (FEHBP) members; therefore, drug spending for large employers is calculated using only members who have the prescription drug benefit.
- (2) Some calculations in the above exhibit might not be exact due to rounding.
- (3) Expenditure Risk Score differences are measured as absolute differences from 2015 to 2016.
- (4) Excludes Kaiser HMO plans.

## Unit Costs by Market and Service Category for Privately Insured Health Plans, 2015 and 2016

Unit Cost is one component of the PMPM spending calculation (along with utilization, which is addressed in the next section). Since the unit cost measure has two components (the price for a given service and the intensity of that service), a change in the unit cost measure allows us to observe if the change was driven by price or intensity (mix of services). In other words, a change in either price or intensity will cause a change in the unit cost and subsequently a change in the overall PMPM spending. Results for these two components of unit cost will be shown in the next report.

In general, unit costs are determined by dividing the amount that the insurer allows in payment for a claim (including the consumer's out-of-pocket share of the cost) by the units of measure appropriate for that claim. The units of measure differ by service category (for example, hospital discharge days for inpatient claims; visits for most outpatient claims; and 30-day scripts for prescription drugs).

Unit costs decreased for most service categories in 2016, except for professional services, physician supplied drugs, and prescription drugs, where the unit costs increased across all markets in 2016 (**Exhibit 3** and **Exhibit 4**).

- Unit costs for three service categories—outpatient hospital facility, non-hospital outpatient facility, and labs/imaging decreased across all markets (large employer, small employer, and individual) in 2016. The decrease in unit cost for outpatient non-hospital facilities was substantial, at 26%.
- Unit costs increased across all markets for physician supplied drugs and prescription drugs. The increase in physician supplied drugs is particularly large, with an annual increase of 20% across all markets.
- The unit cost changes for inpatient hospital and professional services varied by market.

**Exhibit 3: Unit Cost and Annual Percent Change in Unit Cost by Market and Service Category, 2016**

Service Category	Market				% Change (2016 over 2015)			
	Total	Large	Small	Individual	Total	Large	Small	Individual
		Employers	Employers			Employers		
Inpatient Hospital Facility (Cost per Inpatient Discharge Day)	\$3,261	\$2,933	\$3,726	\$3,981	-2%	-6%	1%	4%
Outpatient Hospital Facility (Cost per Visit)	\$1,231	\$1,161	\$1,282	\$1,373	-11%	-8%	-13%	-18%
Outpatient Non-Hospital Facility (Cost per Visit)	\$688	\$726	\$685	\$612	-26%	-25%	-22%	-29%
Professional Services (Cost per Visit)	\$185	\$183	\$183	\$192	2%	3%	-1%	3%
Labs/Imaging (Cost per Visit)	\$131	\$126	\$130	\$145	-3%	-1%	-6%	-4%
Physician Supplied Drugs (Cost per Service)	\$664	\$626	\$752	\$691	20%	25%	3%	27%
Prescription Drugs <sup>1</sup> (Cost per Script)	\$96	\$95	\$95	\$98	4%	2%	4%	7%

Note: (1) Prescription drug spending is missing for some Federal Employee Health Benefits Program (FEHBP) members; therefore, drug spending for large employers is calculated using only members who have the prescription drug benefit.

(2) Discharge days are the number of days spent in the hospital for each inpatient who was discharged during 2016, regardless of when the patient was admitted.

(3) Some calculations in the above exhibit might not be exact due to rounding.

**Exhibit 4: Unit Cost and Annual Percent Change in Unit Cost by Market and Service Category, 2015**

Service Category	Market			
	Total	Large Employers	Small Employers	Individual
Inpatient Hospital Facility (Cost per Discharge Day)	\$3,343	\$3,114	\$3,694	\$3,838
Outpatient Hospital Facility (Cost per Visit)	\$1,378	\$1,263	\$1,478	\$1,670
Outpatient Non-Hospital Facility (Cost per Visit)	\$927	\$969	\$880	\$865
Professional Services (Cost per Visit)	\$181	\$179	\$184	\$186
Labs/Imaging (Cost per Visit)	\$135	\$127	\$138	\$152
Physician Supplied Drugs (Cost per Service)	\$553	\$501	\$734	\$544
Prescription Drugs (Cost per Script)	\$92	\$93	\$91	\$92

## 2015 and 2016 Utilization of Services by Market and Service Category for Privately Insured Health Plans

Utilization is one component of the PMPM spending calculation (along with unit cost, discussed in the previous section). Information on utilization allows us to see the role of consumer demand for services in overall spending for the service. Utilization data can be helpful to providers to plan future service offerings, as well as to carriers who pay for health services and to policymakers who want to make sure that patients receive necessary care, but not unnecessary care. In this report, utilization is presented as the number of units per 1,000 covered members per year for claims that incurred during a given year, providing a standardized, comparable measure. Examples of units are the number of discharge days for inpatient hospital facility; number of visits for outpatient hospital facility and professional services; number of services for physician supplied drugs; and number of scripts for prescription drugs.

- Hospital inpatient service use is highest in the large employer market and lowest in the small employer market (**Exhibit 5**). These results are consistent with 2015.
- Outpatient hospital facility utilization far exceeds both inpatient hospital facility utilization and outpatient non-hospital facility utilization across markets (**Exhibit 5**).
- Outpatient hospital and non-hospital facility utilization are highest in the individual market but lowest in the small employer market for outpatient hospital and lowest in the large employer market for outpatient non-hospital (**Exhibit 5**).
- Prescription drugs are the highest utilized service across all markets, compared to all other service categories, followed by professional services and labs/imaging (**Exhibit 6**).
- Use of professional services is about the same for the individual and large employer markets and lower in the small employer market; i.e., about 7% lower than the individual and 6.3% lower than large employer market (**Exhibit 6**).
- Utilization of services for labs/imaging is similar across all markets (**Exhibit 6**).
- Prescription drug utilization is highest in the individual market and lowest in the large employer market (**Exhibit 6**).

Exhibit 5: Utilization of Inpatient and Outpatient Facilities by Market, 2016

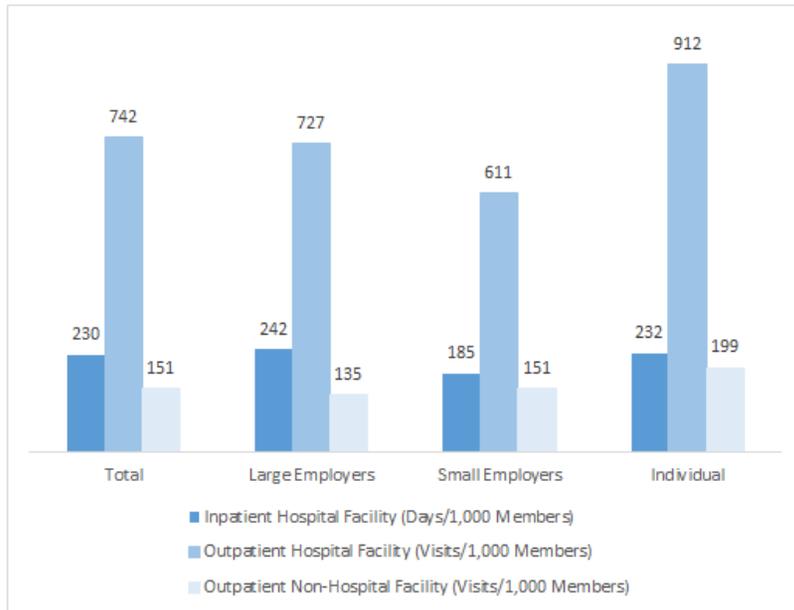
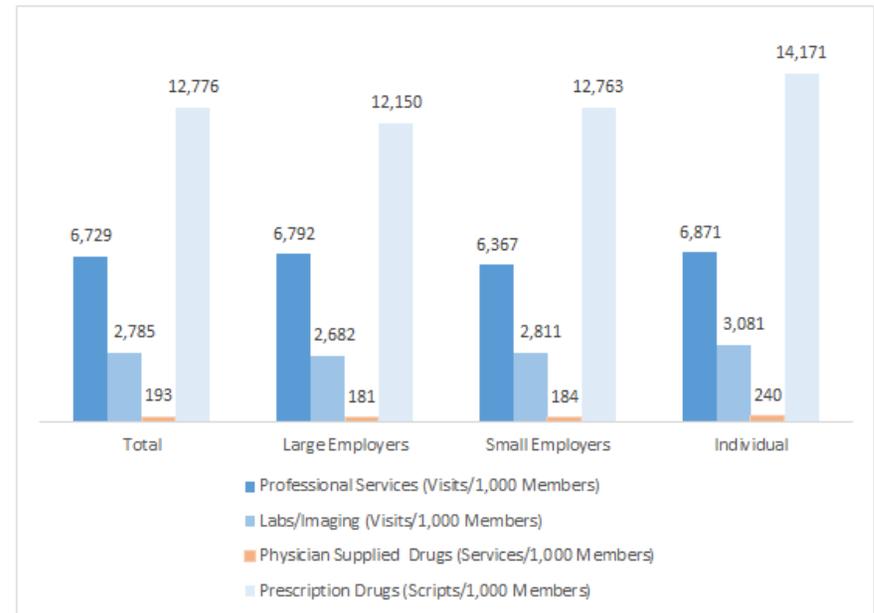


Exhibit 6: Utilization of Professional Services, Labs/Imaging, Physician Supplied Drugs, and Prescription Drugs by Market, 2016

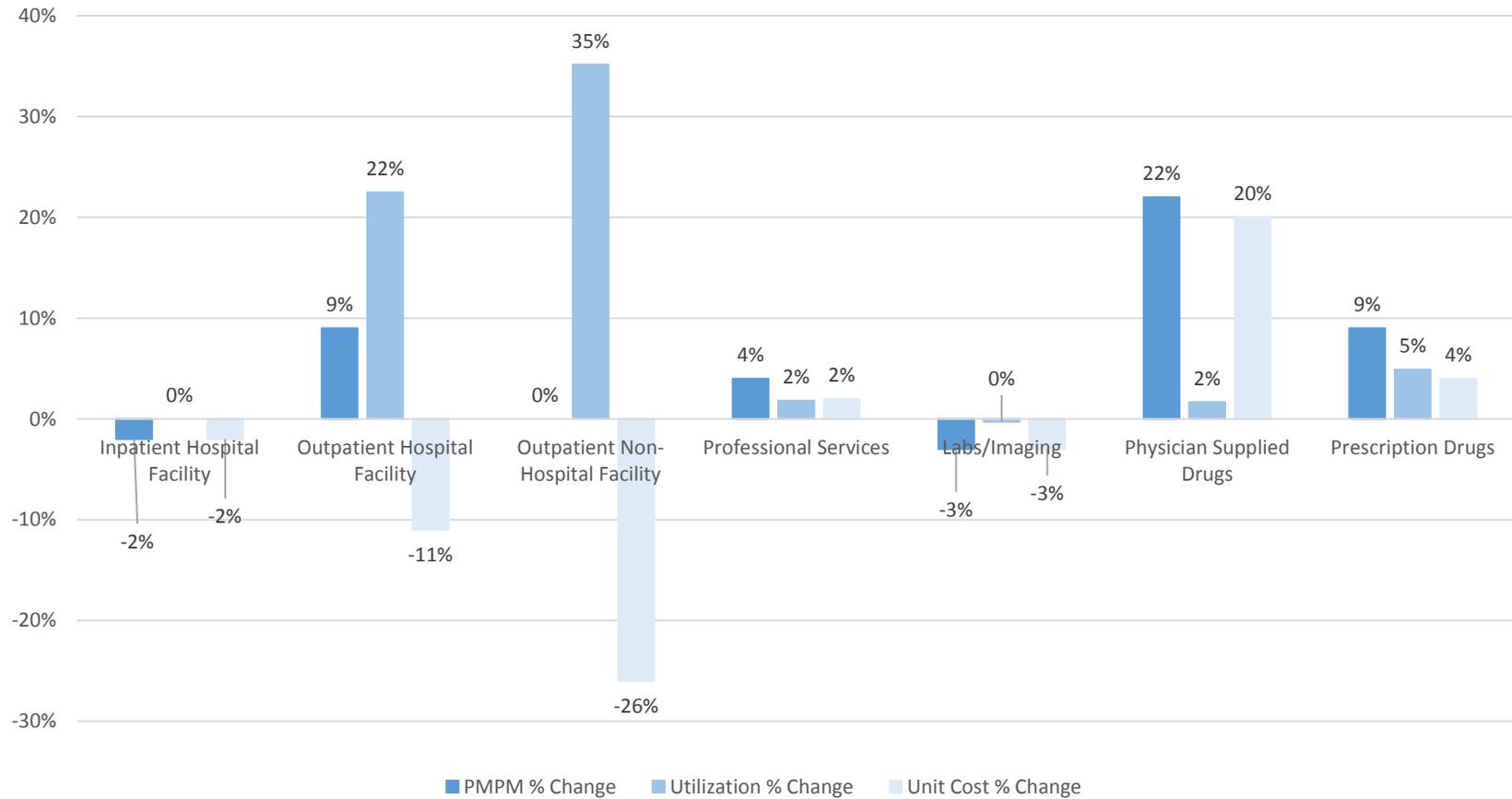


## Drivers of Spending Growth Across all Markets combined, 2015 - 2016

PMPM spending growth in 2016 was mostly driven by increases in utilization. (Exhibit 7)

- The 9% increase in PMPM spending for outpatient hospital facility was mostly a result of a large increase in utilization which was offset by a decline in unit cost.
- For outpatient non-hospital facility, there was no change in PMPM spending due to the offsetting increase and decrease in utilization and unit cost respectively. (Only about 2% of total PMPM spending)
- Prescription drugs increase in spending growth (9%) was driven by increases in both utilization (5%) and unit cost (4%).
- Physician supplied drugs significant increase in spending was mainly a result of unit cost. (Only 3% of total PMPM spending)
- The decrease in PMPM spending growth for labs/imaging was solely driven by unit cost.

Exhibit 7 Annual Percentage Changes in PMPM Spending, Utilization per 1,000 Members, and Cost per Unit by Service Category, All Markets Combined (2015 to 2016)

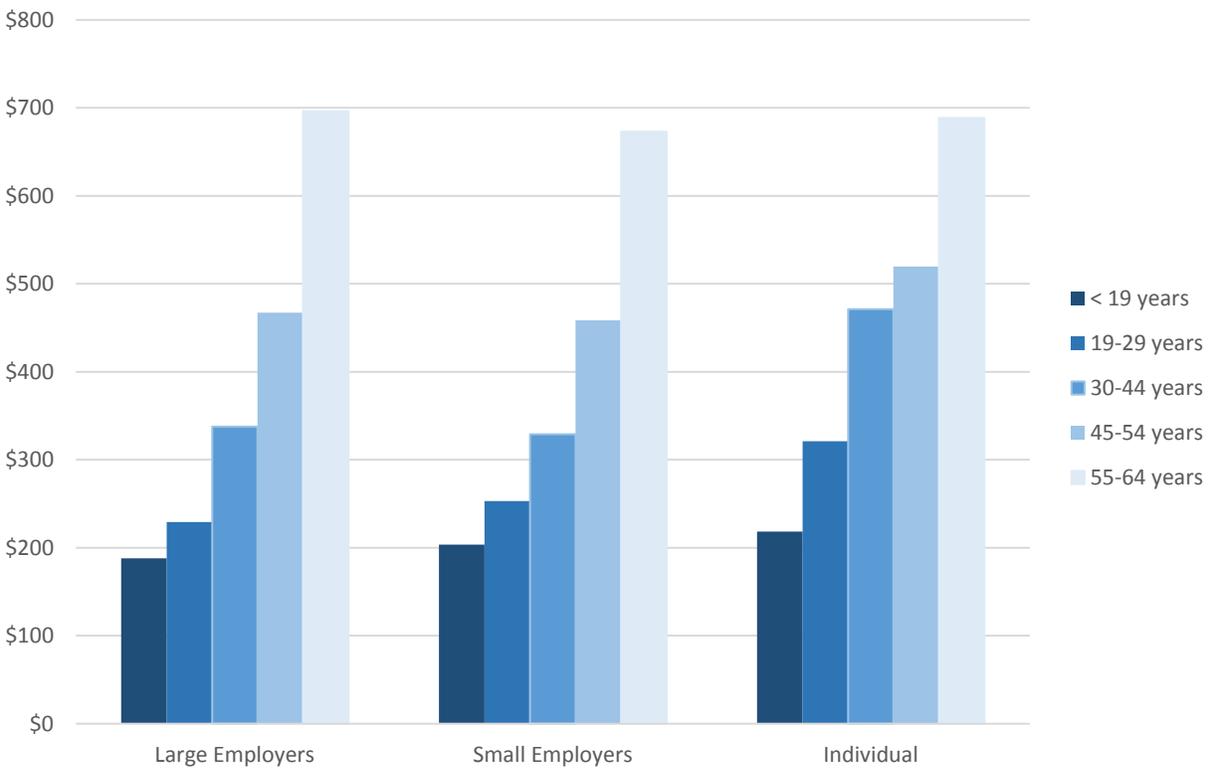


## PMPM Spending by Age and Market, 2016

The cost of health care varies by age and is related to the relative health needs of different age populations. This cost variation is an important factor in understanding health insurance risk pools and the influence of demographic mix by age on health insurance plan costs and sustainability, among other factors.

- Within each market, PMPM spending increases with age.
- The individual market has the highest PMPM spending for age groups <19, 19 – 29, 30 – 44, and 45 – 54 across all markets. The large employer market has the highest PMPM spending for age group 55 -64 across all markets (**Exhibit 8**).

Exhibit 8: PMPM Spending by Age of Member and Market, 2016

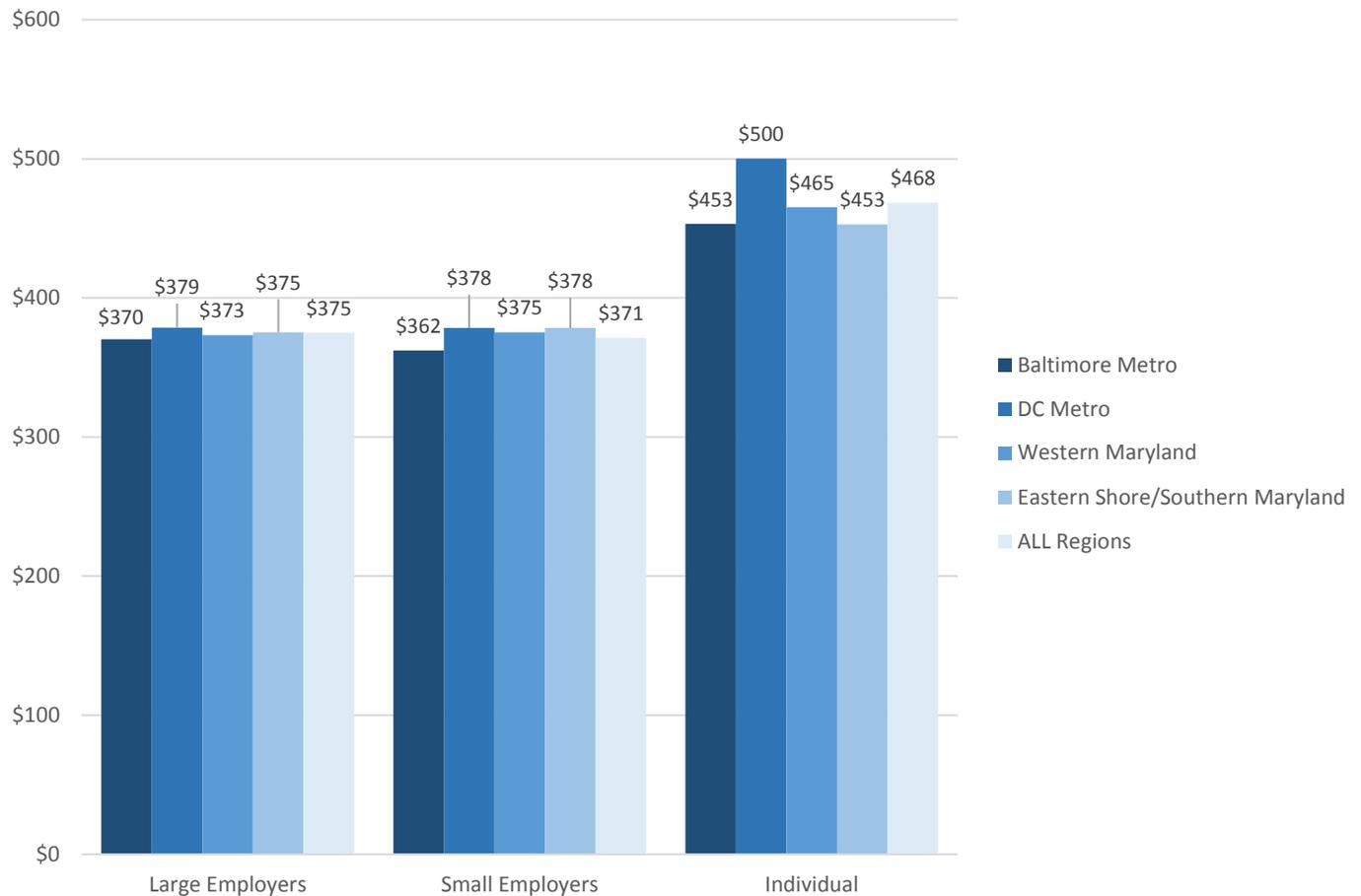


## PMPM Spending by Region and Market, 2016

Geographic variation in cost has been a long-standing issue nationally, related both to pricing and variation in utilization. The data in this report provide a comparison of PMPM spending across four (4) geographic regions in Maryland for each market type.

- The PMPM spending variation across regions was small to moderate, with maximum regional variation in PMPM spending at about 10% in the individual market, 4% in the small employer market, and 2% in the large employer market (**Exhibit 9**).
- The DC Metro region had the highest PMPM spending levels across all markets, while the Baltimore Metro region had the lowest PMPMs across all markets. The Eastern Shore/Southern Maryland region tied with DC Metro for highest PMPM in the small employer market but, conversely, tied with the Baltimore Metro region for the lowest PMPM spending in the individual market. Western Maryland PMPMs consistently ranked in the middle of the regions (**Exhibit 9**).

Exhibit 9: PMPM Spending by Region and Market, 2016



## Member and Carrier Shares of Health Spending across Markets, 2016

This section compares the share of health care spending that is paid out-of-pocket by health insurance members and the amount that is paid by carriers for the large employer, small employer, and individual markets. The burden of health care costs on individuals and payers is an important issue as health care spending continues to increase and consume larger portions of individual, employer, and government budgets. These data provide some insight into how that burden is shared between individual consumers and carriers in the privately insured markets in Maryland.

- Individuals bore a higher share of the cost of health care in the individual market (26% of total PMPM spending) and the small employer market (23% of total PMPM spending), compared to the large employer market (16% of total PMPM spending). (**Exhibit 10**).
- The member OOP share in the individual market continues to be the highest across all markets, at 26%. Member OOP share is slightly lower in the small employer market and lowest (16%) in the large employer market (**Exhibit 10**).
- For medical services only, the member OOP share is about the same in the individual (26%) and small employer (27%) markets, and lower in the large employer market (20%). (**Exhibit 11**). The higher OOP share in the individual and small employer markets is attributable to the greater prevalence of high deductible plans in these markets, relative to the large employer market.
- For prescription drugs, the individual market had the highest member OOP share (25%), and the large employer market had the lowest member OOP share (10%, same as 2015) (**Exhibit 11**).
- The member OOP share in the individual market was about the same for medical and prescription drugs, at approximately 25%. The member OOP share for prescription drugs was lower than the member OOP share for medical services in the small employer and large employer markets.

Exhibit 10: Member Out-of-Pocket Share and Carrier Share of Total Spending by Market, 2016

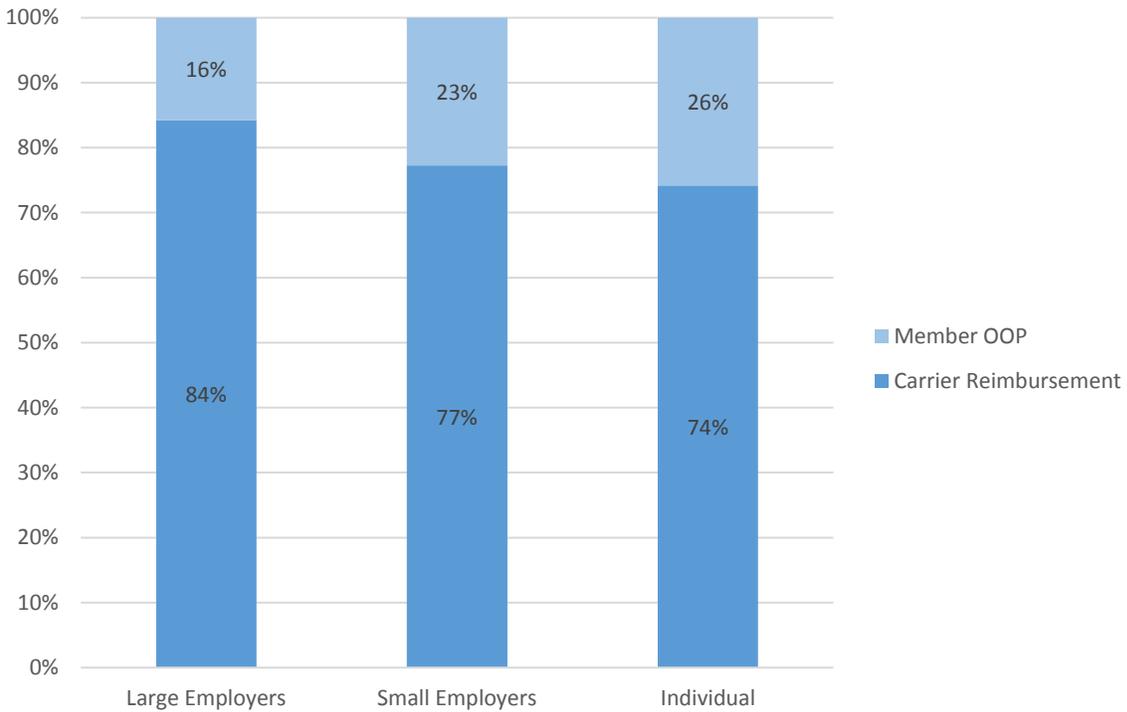
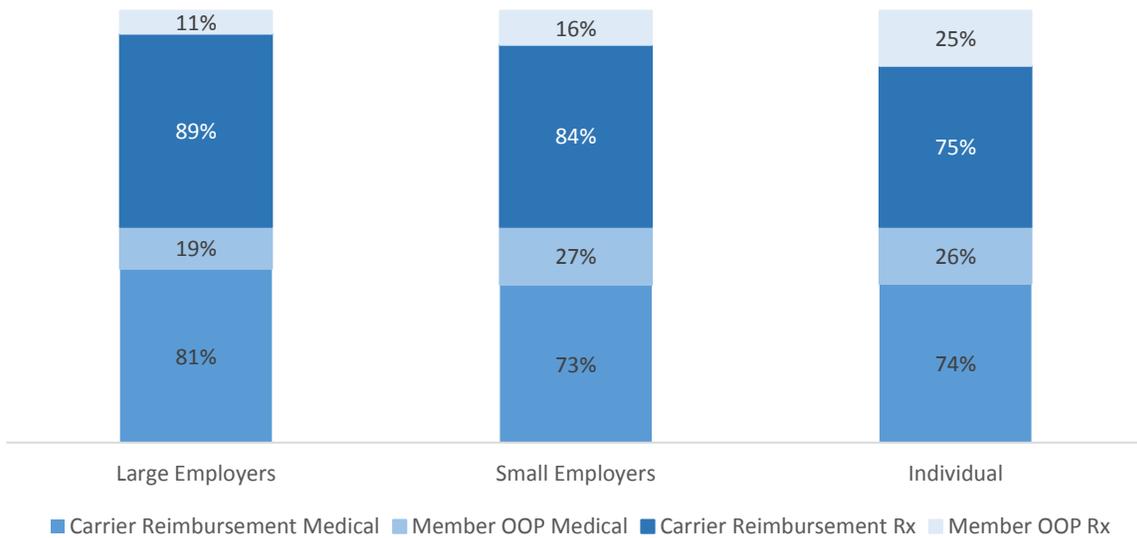


Exhibit 11: Medical and Prescription Drugs: Member OOP and Carrier Share of Total Spending by Market, 2016



## Part 2: The Individual Health Insurance Market in Maryland

Part 2 of this report focuses exclusively on the individual health insurance market. This market expanded as a result of reforms under the Affordable Care Act (ACA) but has faced instability due to rising premiums, declining insurer participation, and changing federal policy over the past few years. A special focus on this market is appropriate in this report because it was most adversely affected the health insurance reforms under the ACA.

Enrollment in the individual market in Maryland surged from 2014-16, but premiums also grew rapidly. In 2016 and 2017, payers exited this market either voluntarily or due to insolvency. In late 2017, actions of the federal government added new uncertainties and caused 2018 open season rates to spiral higher. First, the federal government decided not to fund cost-sharing reductions (CSR) incurred by On-Exchange health plans when insured members with family incomes below 250% of FPL used health care services in 2018. Second, the federal government also enacted the Tax Cuts and Jobs Act of 2017, which eliminated tax penalties for not maintaining health insurance coverage after 2019.<sup>5</sup>

By the 2018 enrollment year, only CareFirst and Kaiser Permanente participated in the individual market in Maryland (compared to eight carriers in 2014).<sup>6</sup> Even more worrisome, residents in three counties in Western Maryland, one county in Southern Maryland, and all nine counties on the Eastern Shore had only one carrier.<sup>7</sup> In 2016, all Maryland counties had three or more carriers selling in the individual market. The General Assembly and the Governor agreed, on a bipartisan basis, that state action was needed to prevent the failure of the individual market. Bipartisan legislation establishing a reinsurance program passed the Maryland General Assembly and was signed by Governor Hogan in early 2018.<sup>8</sup> This new state law is an important step, but the individual market will likely continue to experience significant volatility in coming years.

The MCDB data answers important questions about market performance in this time of great change, including questions that can be helpful in planning for implementation of a new State Reinsurance Program.<sup>9</sup>

The MCDB allows comparisons across the entire individual market including ACA-compliant plans sold on and off the Exchange and ACA non-compliant plans. ACA-compliant plans are plans that meet the requirements for minimum essential coverage under ACA. ACA non-compliant plans do not meet these requirements and, until 2019, individuals in non-compliant

---

<sup>5</sup> Public Law 115-97.

<sup>6</sup> Maryland Health Benefit Exchange 2014 Annual Report. <https://www.marylandhbe.com/wp-content/uploads/2014/12/MHBE-AnnualReport2014-Web.pdf>

<sup>7</sup> <https://www.kff.org/health-reform/issue-brief/insurer-participation-on-aca-marketplaces/> In 2018, Allegany, Garrett, Washington, Charles, Cecil, Kent, Caroline, Dorchester, Queen Anne's, Talbot, Wicomico, Worcester, and Somerset had only one carrier.

<sup>8</sup> See Chapter 7 and Chapter 38 of the Laws of Maryland.

<sup>9</sup> More information about this program and the related section 1332 waiver request to CMS is available here: <https://www.marylandhbe.com/policy-legislation/public-comment/1332-waiver/>

plans may be subject to the ACA tax penalties for not maintaining mandatory health insurance coverage. The level of benefits provided to consumers varies between ACA-compliant and non-compliant plans. Also, premium subsidies are available to lower-income consumers in On-Exchange ACA compliant plans but are not available in other plan types. In this time of relative market instability in the individual market, it is helpful to be able to track relative changes between these different plan types.

Individual market data in this report are limited to fully-insured Maryland residents who are under age 65. Data for individuals covered by Kaiser Permanente are included in enrollment at the end of the year and in risk score analyses but is not included in other tables.

## Individual Market Health Plan Enrollment, Spending, Risk, and Utilization, 2014 - 2016

This section provides information on enrollment in the individual health insurance market in Maryland, as well as data on spending, utilization, and risk (as measured through member health status). This information is important in understanding trends over time in health care spending, consumer out-of-pocket costs, and insurance participation. This section also provides information on variation in spending across different service types. Finally, this section includes data for both ACA-complaint and non-complaint plans.<sup>10</sup>

- Total Members (including Kaiser HMO members) in the individual market decreased by about 2% as of December 31, 2016. However, Kaiser's enrollment continues to increase rapidly (up by about 36% through the end of 2016). (**Exhibit 12**).
- PMPM spending for all services combined increased by about 12% in 2016, well below the 35% increase from 2014 to 2015 (**Exhibit 12**).
- Main contributors to this slowdown in spending growth include:
  - Inpatient hospital facility services spending growth down by 36 percentage points (i.e., 10% growth in 2016 vs. 46% in 2015)
  - Professional services spending growth down by 10 percentage points (7% growth in 2016 vs. 17% in 2015)
  - Labs/imaging services spending growth down by 23 percentage points (-5% growth in 2016 vs. 18% in 2015)
  - Physician supplied drugs spending growth down by 30 percentage points (27% growth in 2016 vs. 57% in 2015)
  - Prescription drug spending growth down by 60 percentage points (17% growth in 2016 vs. 77% in 2015)
- The median expenditure risk scores (excluding Kaiser) increased at a slower rate in 2016 than in 2015. Risk scores increased from 0.27 to 0.31 between 2015 and 2016,

---

<sup>10</sup> See Appendix B for a description of ACA-complaint and non-complaint plans.

compared with increases from 0.16 to 0.27 between 2014 and 2015 (**Exhibit 12**). Please see **Exhibit A1** in Appendix A for more results on risk scores.

Exhibit 12: Enrollment, Spending, and Risk Scores for the Individual Market (ACA-Compliant and Non-Compliant Plans), 2014 to 2016

	2014	2015	2016	% Change 2014/2015	% Change 2015/2016	% Point Diff from "2014-2015" to "2015-2016"
<b>Members as of 12/31</b>						
Total members (w/o Kaiser)	225,361	249,340	232,591	11%	-7%	
Total members (w/ Kaiser)	234,385	276,851	270,050	18%	-2%	
<b>Member Months</b>						
Total member months	2,601,335	3,044,408	2,913,576	17%	-4%	
<b>Spending</b>						
PMPM spending, all services combined	\$310	\$417	\$468	35%	12%	-23
PMPM OOP, all services combined	\$92	\$106	\$120	15%	13%	-2
PMPM OOP, Medical Only	\$78	\$88	\$103	13%	17%	4
PMPM OOP, Prescription Drugs	\$15	\$18	\$17	20%	-6%	-26
<b>PMPM Spending By Service Category</b>						
Inpatient Hospital Facility	\$48	\$70	\$77	46%	10%	-36
Outpatient Hospital Facility	\$68	\$85	\$104	25%	22%	-3
Outpatient Non-Hospital Facility	\$10	\$10	\$10	0%	0%	0
Professional Services	\$88	\$103	\$110	17%	7%	-10
Labs/Imaging	\$33	\$39	\$37	18%	-5%	-23
Physician Supplied Drugs	\$7	\$11	\$14	57%	27%	-30
<b>SubTotal (Medical Only)</b>	<b>\$254</b>	<b>\$318</b>	<b>\$352</b>	<b>25%</b>	<b>11%</b>	<b>-14</b>
Prescription Drugs	\$56	\$99	\$116	77%	17%	-60
<b>Risk Score</b>						
				<b>Difference</b>	<b>Difference</b>	
Median expenditure risk score (w/o Kaiser)	0.16	0.27	0.31	0.11	0.04	
Median expenditure risk score (w/ Kaiser)	0.16	0.23	0.23	0.07	0.00	

- Notes: (1) Individuals can have multiple types of coverage during the year but are counted only once in the total enrollment.  
 (2) PMPM portion of spending for insurers is overall PMPM (all services combined) less PMPM OOP (*all services combined*).  
 (3) Please see **Exhibit A1** and **Exhibit A2** in Appendix A for more risk score results.  
 (4) Percent (%) point difference is the difference in % changes in PMPM spending from "2014 - 2015 YOY % changes" to "2015-2016 YOY % changes" all times 100. For example, % point change for prescription drugs = (17% - 77%) x 100 = -60 percentage points. YOY means year over year.  
 (5) Some calculations in the above exhibit might not be exact due to rounding.

This analysis documents a slowdown in the rate of spending growth in the individual market from 2015 to 2016.

## Drivers of Spending Growth in the Individual Market, 2014 - 2016

PMPM spending growth in 2016 was primarily driven by increases in utilization—as opposed to unit cost increases—for all service categories except physician supplied drugs, for which spending growth was due to unit cost increases.

- Outpatient hospital facility and outpatient non-hospital facility utilization increased in the individual market by about 49% and 41%, respectively, for 2016. However, both increases were dampened by decreases in unit costs in 2016: 18% for outpatient hospital facility and 29% for non-hospital facility (**Exhibit 13**).
- The growth in hospital inpatient utilization in 2016 slowed to 6%, compared to a 20% growth in 2015.
- The utilization of professional services increased modestly, by about 4%, in 2016 compared to a 14% increase in 2015.
- The use of labs/imaging was flat in 2016 (1% increase) compared to an 11% growth in 2015.
- The 17% growth in prescription drug spending was driven by a 10% increase in utilization (all due to an increase in generic drug utilization), supplemented by a 6% increase in unit costs (concentrated in branded medications). (**Exhibits A3 and A4** of Appendix A).
- Physician supplied drug growth of 27% was mainly driven by unit costs (up by 26%) in 2016 (**Exhibit 14**). Utilization of physician supplied drugs increased by only 2% in 2016, compared to the dramatic 40% increase in 2015 (**Exhibit 15**). Please note that physician supplied drugs are only about 3% of total PMPM spending for 2016.

Exhibit 13: Annual Changes in PMPM Spending, Utilization per 1,000 Members, and Cost per Unit, by Service Category in the Individual Market (ACA-Compliant and Non-Compliant Plans), 2015 to 2016

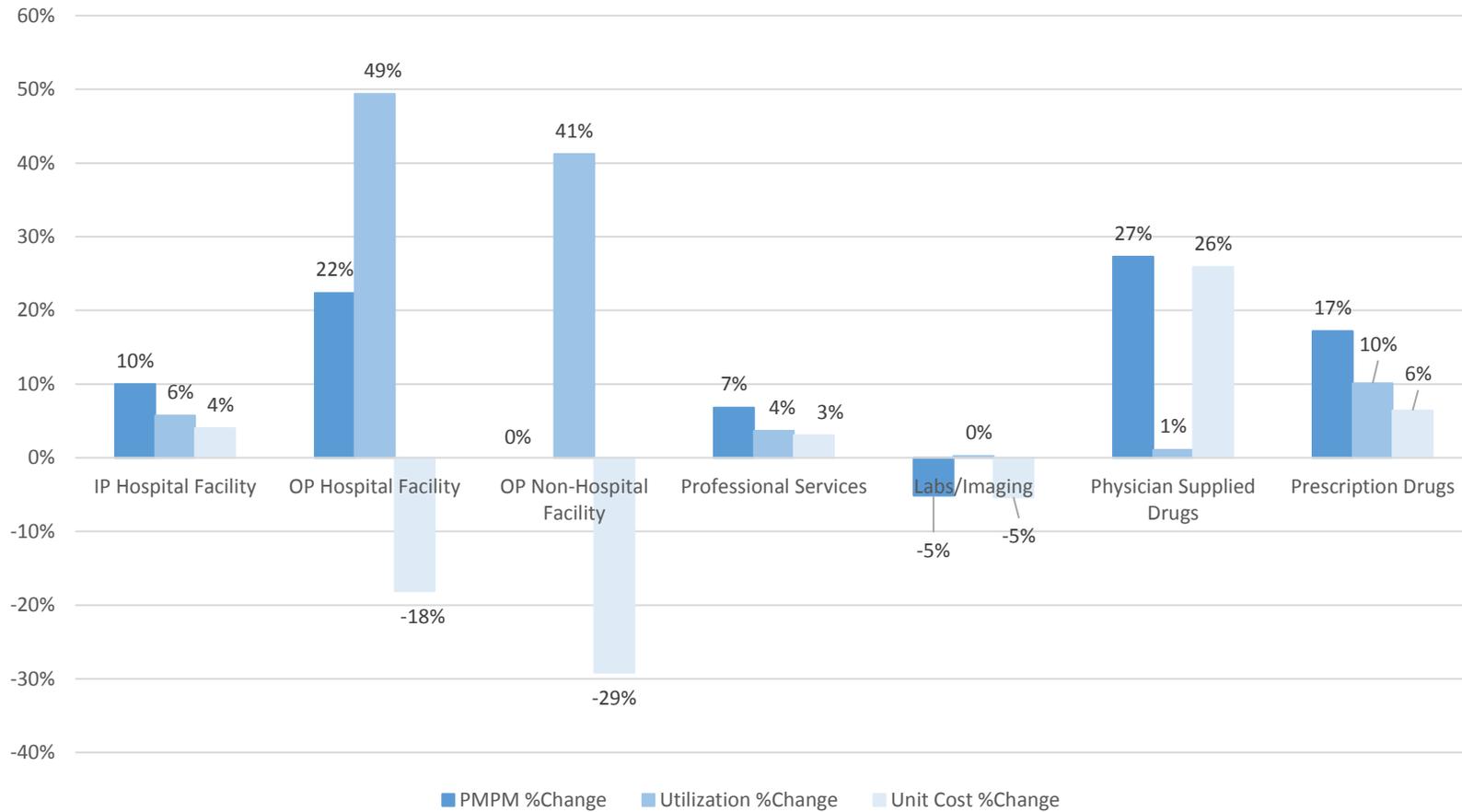


Exhibit 14: Hospital Inpatient and Outpatient Utilization, Individual Market, 2014 - 2016

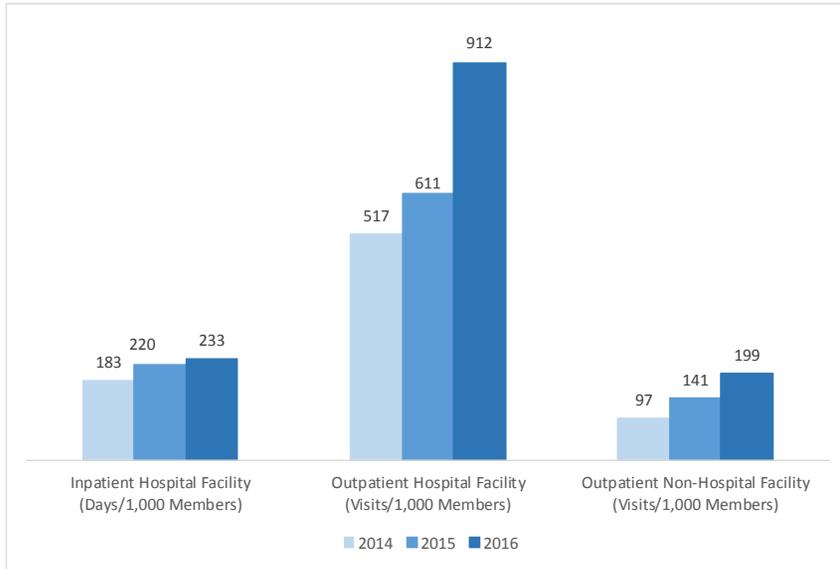
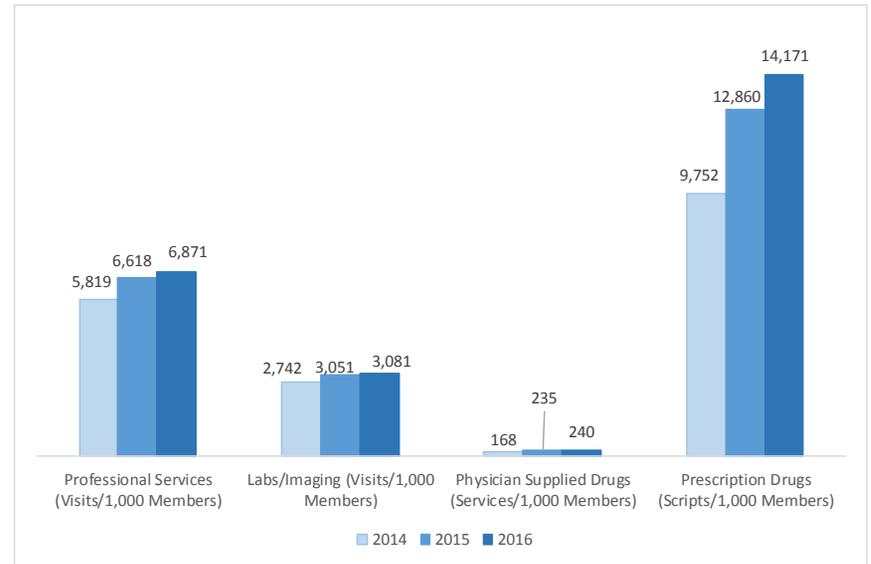


Exhibit 15: Utilization of Professional Services, Labs/Imaging, Physician Supplied Drugs, and Prescription Drugs, Individual Market, 2014 - 2016

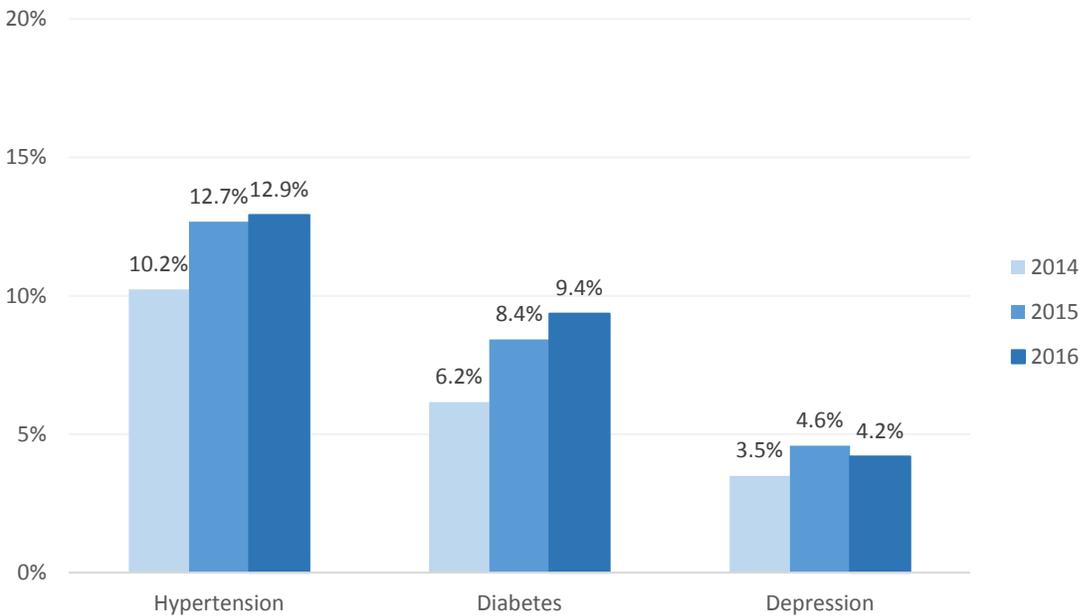


## Prevalence of Select Conditions, Individual Market, 2014 - 2016

Chronic health conditions such as diabetes, hypertension, and depression are both costly and common.<sup>11</sup> As such, the prevalence of these conditions contributes to health care spending. Many of these conditions can be controlled through treatment and behavior change, allowing for potential cost savings and improved quality of life for patients. Understanding the impact of chronic conditions can help healthcare providers, payers, and government entities make appropriate decisions about resources and policies that address chronic condition treatment and prevention.

- The prevalence of hypertension and depression was stable from 2015 to 2016, but diabetes prevalence rose from 8.4% to 9.4%, continuing an upward trend from 6.2% in 2014 (**Exhibit 16**).
- These chronic disease prevalence results support a slowdown in the rate of increased expenditure risk scores and, in turn, a slowdown in overall PMPM spending growth in 2016. Although other conditions contribute to higher risk, the increased in the prevalence of hypertension and diabetes in particular track with the increases in median expenditure risk scores for all non-Kaiser plans in the individual market from 2014 through 2015 (**Exhibit 12**). Please see **Exhibit A1** and **Exhibit A2** in Appendix A for more results on risk scores.

Exhibit 16: Prevalence of Select Chronic Conditions, Individual Market, 2014 - 2016



<sup>11</sup> <https://www.cdc.gov/chronicdisease/overview/index.htm>

## **ACA-Compliant Health Plan Enrollment, Spending, Risk, and Utilization, 2015 - 2016 (On-Exchange and Off-Exchange Plans)**

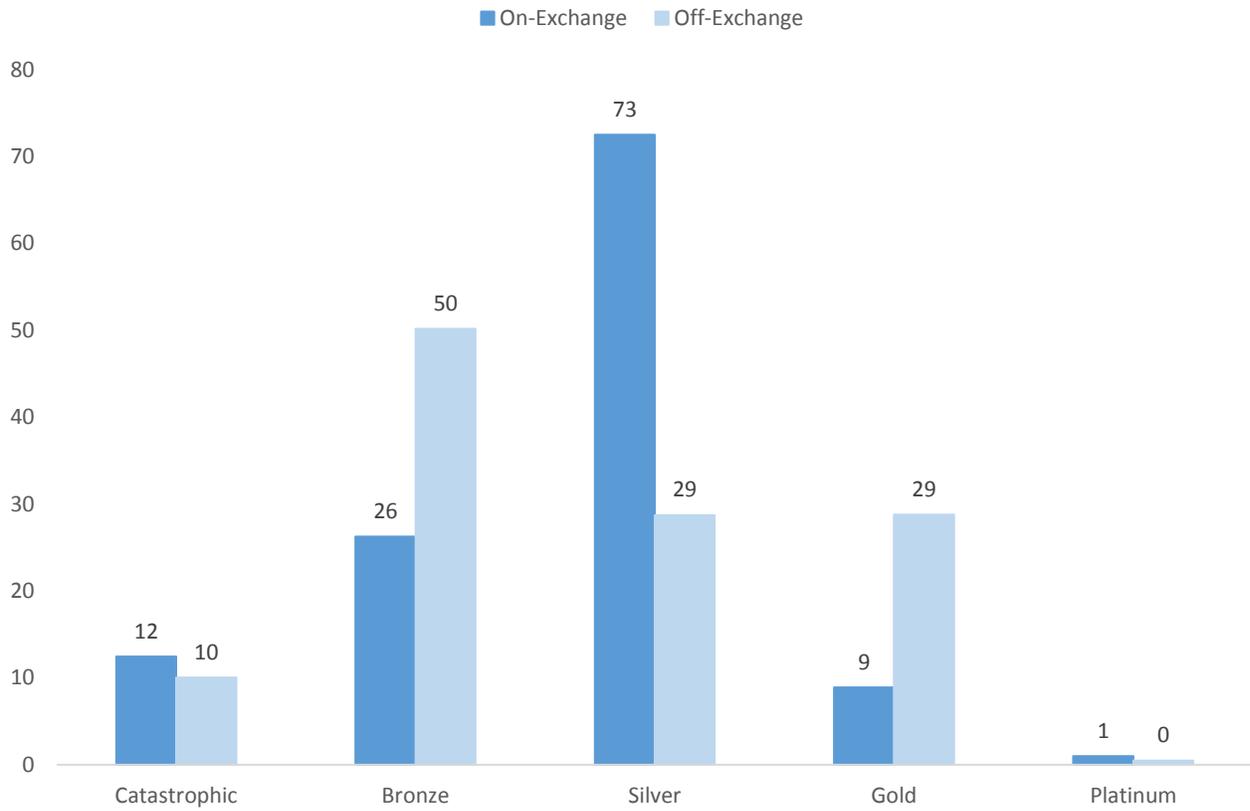
This section provides information on enrollment in ACA-complaint plans in the individual health insurance market in Maryland, as well as data on spending, utilization, and risk (as measured through member health status). This information is important in understanding trends over time in health care spending, consumer out-of-pocket costs, and insurance participation within the ACA-regulated market, which has undergone tremendous change since it was established in January 2014. This section also provides information on variation in spending across different service types. This section includes data for ACA-compliant plans offered in the Maryland Health Benefit Exchange, which provides access to federal premium subsidies for low-income members, as well as data on ACA-compliant plans offered off the exchange.<sup>12</sup>

For members enrolled in ACA-compliant plans, 73,000 (about 60%) of all On-Exchange members were enrolled in the Silver metal level plan, compared to 29,000 (about 24%) of Off-Exchange members enrolled in the same plan. The Bronze metal level plan was the most popular plan for Off-Exchange members (50,000 or 42% of all Off-Exchange members were enrolled compared to 26,000 or 22% of On-Exchange members). (**Exhibit 17**).

---

<sup>12</sup> See Appendix B for a description of ACA-complaint and non-complaint plans.

**Exhibit 17: Enrollment in On-Exchange and Off-Exchange ACA-Compliant Insurance by Plan Metal Status as of December 31, 2016 (000 Omitted)**



Notes: (1) Kaiser HMO plans are included in this exhibit.

(2) On-Exchange enrollment by plan type is Catastrophic: 12K; Bronze: 26K; Silver: 73K; Gold: 9K; and Platinum: 1K

(3) Off-Exchange enrollment by plan type is Catastrophic: 10K; Bronze: 50K; Silver: 29K; Gold: 29K; and Platinum: <1K

(4) Metal level actuarial values (how much the plan expects to pay on average for a standard population) are: Bronze: 60%; Silver: 70%; Gold: 80%; and Platinum: 90%

## ACA-Compliant Spending, Risk, and Utilization, 2015 – 2016 (On-Exchange and Off-Exchange Plans)

- Total members (insureds including Kaiser HMO plans) as of December 31, 2016, enrolled on the Exchange was about 8% higher than at the end of 2015 (**Exhibit 18**). However, membership in Off-Exchange plans declined by about 5%, resulting in an overall decline in individual market membership (**Exhibit 18**). Please note that Kaiser HMO plans are excluded from this report except for membership at the end of the year and median expenditure risk scores.
- The median expenditure risk score (excluding Kaiser) for On-Exchange members increased by 0.03 (0.36 in 2015 to 0.39 in 2016). However, the risk score for Off-Exchange members remained about the same (0.29 for both 2015 and 2016). These results indicate that members enrolled in health plans on the exchange have a higher illness burden than those enrolled in Off-Exchange plans (**Exhibit 18**), which is reflected in the higher prevalence of select chronic conditions (hypertension and diabetes) for On-Exchange versus Off-Exchange members (**Exhibit 21**). The 10<sup>th</sup> and 90<sup>th</sup> percentile risk scores (excluding Kaiser) for On-Exchange and Off-Exchange members are 0.05 to 3.63 and 0.05 to 3.06, respectively, for 2016. (Please see **Exhibits A1** and **A2** in Appendix A for more risk score results.)
- PMPM spending for all services combined for On-Exchange members grew by about 7%, while PMPM spending for Off-Exchange members increased by about 10% in 2016 (**Exhibit 18**).
- Out-of-pocket PMPM spending for On-Exchange members decreased by about 3% in 2016, while OOP spending for Off-Exchange members increased by about 20%. This result was expected since On-Exchange members have access to federal cost-sharing subsidies, while Off-Exchange members do not have access to such subsidies (**Exhibit 18**).
- PMPM spending growth for outpatient hospital facility services was significantly higher for off-exchange members (33%) than on-exchange members (6%) (**Exhibit 18**). The off-exchange spending increase was driven by utilization (60%), compared to unit cost which decreased by about 20% in 2016 (**Exhibit 19**). Prescription drug spending growth was higher among on-exchange members (15%) than off-exchange members (10%). Both on-exchange and off-exchange spending growth were equally driven by utilization and unit cost (On Exchange: 7% utilization, 8% unit cost; Off Exchange: 7% utilization, 7% unit cost) (**Exhibit 20**).

Exhibit 18: On-Exchange vs. Off-Exchange Enrollment, Spending, and Risk Scores For ACA-Compliant Insurance in the Individual Market, 2015 - 2016

	2015		2016		% Change (2015/2016)	
	On-Exchange	Off-Exchange	On-Exchange	Off-Exchange	On-Exchange	Off-Exchange
<b>Members as of 12/31</b>						
Total members (w/o Kaiser)	95,603	114,646	95,388	107,502	0%	-6%
Total members (w/ Kaiser)	111,739	124,837	121,105	118,214	8%	-5%
Distribution (w/o Kaiser)	45%	55%	47%	53%		
Distribution (w/ Kaiser)	47%	53%	51%	49%		
<b>Member Months</b>						
Total member months	1,137,678	1,400,012	1,185,127	1,357,993	4%	-3%
Distribution	45%	55%	47%	53%		
<b>Spending</b>						
PMPM spending, all services combined	\$447	\$432	\$478	\$476	7%	10%
PMPM OOP, all services combined	\$92	\$121	\$89	\$145	-3%	20%
PMPM OOP, Medical Only	\$75	\$103	\$74	\$128	-1%	24%
PMPM OOP, Prescription Drugs	\$17	\$19	\$15	\$17	-12%	-11%
<b>PMPM Spending By Service Category</b>						
Inpatient Hospital Facility	\$79	\$73	\$83	\$73	5%	0%
Outpatient Hospital Facility	\$83	\$95	\$88	\$126	6%	33%
Outpatient Non-Hospital Facility	\$11	\$11	\$10	\$10	-9%	-9%
Professional Services	\$105	\$107	\$110	\$112	5%	5%
Labs/Imaging	\$41	\$40	\$39	\$36	-5%	-10%
Physician Supplied Drugs	\$12	\$10	\$15	\$13	25%	30%
<b>SubTotal (Medical Only)</b>	<b>\$331</b>	<b>\$336</b>	<b>\$345</b>	<b>\$370</b>	<b>4%</b>	<b>10%</b>
Prescription Drugs	\$116	\$96	\$133	\$106	15%	10%
<b>Risk Score <sup>(3)</sup></b>						
Median expenditure risk score (w/o Kaiser)	0.36	0.29	0.39	0.29	0.03	0.00
Median expenditure risk score (w/ Kaiser)	0.27	0.28	0.23	0.28	-0.04	0.00

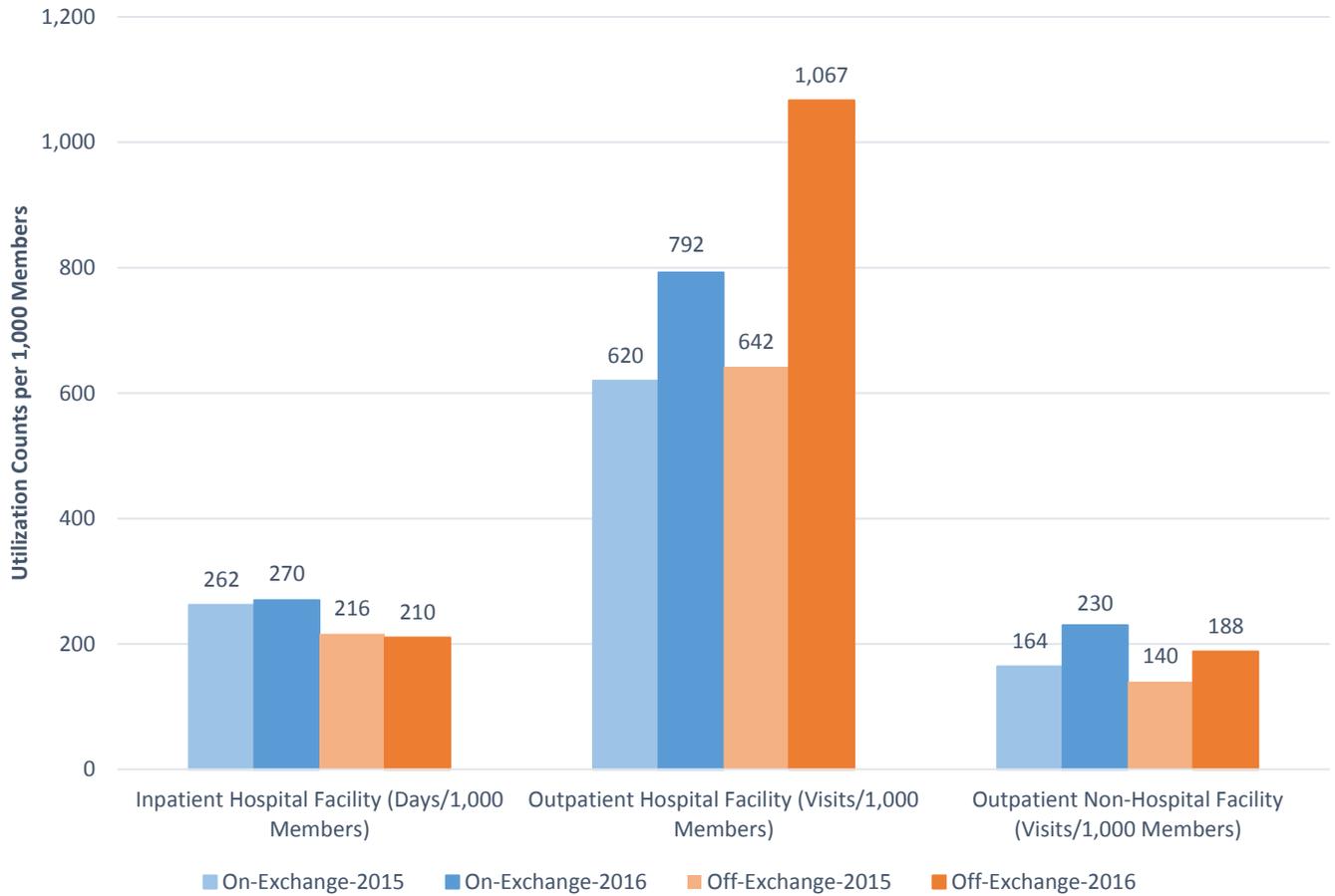
Notes: (1) Kaiser HMO plans are excluded from this report except for membership at the end of the year and median expenditure risk scores.

(2) See Exhibits A1 and A2 in Appendix A for more risk score results, including Kaiser.

(3) MPM spending portion for insurers is calculated as PMPM spending for all services combined less PMPM OOP for all services combined.

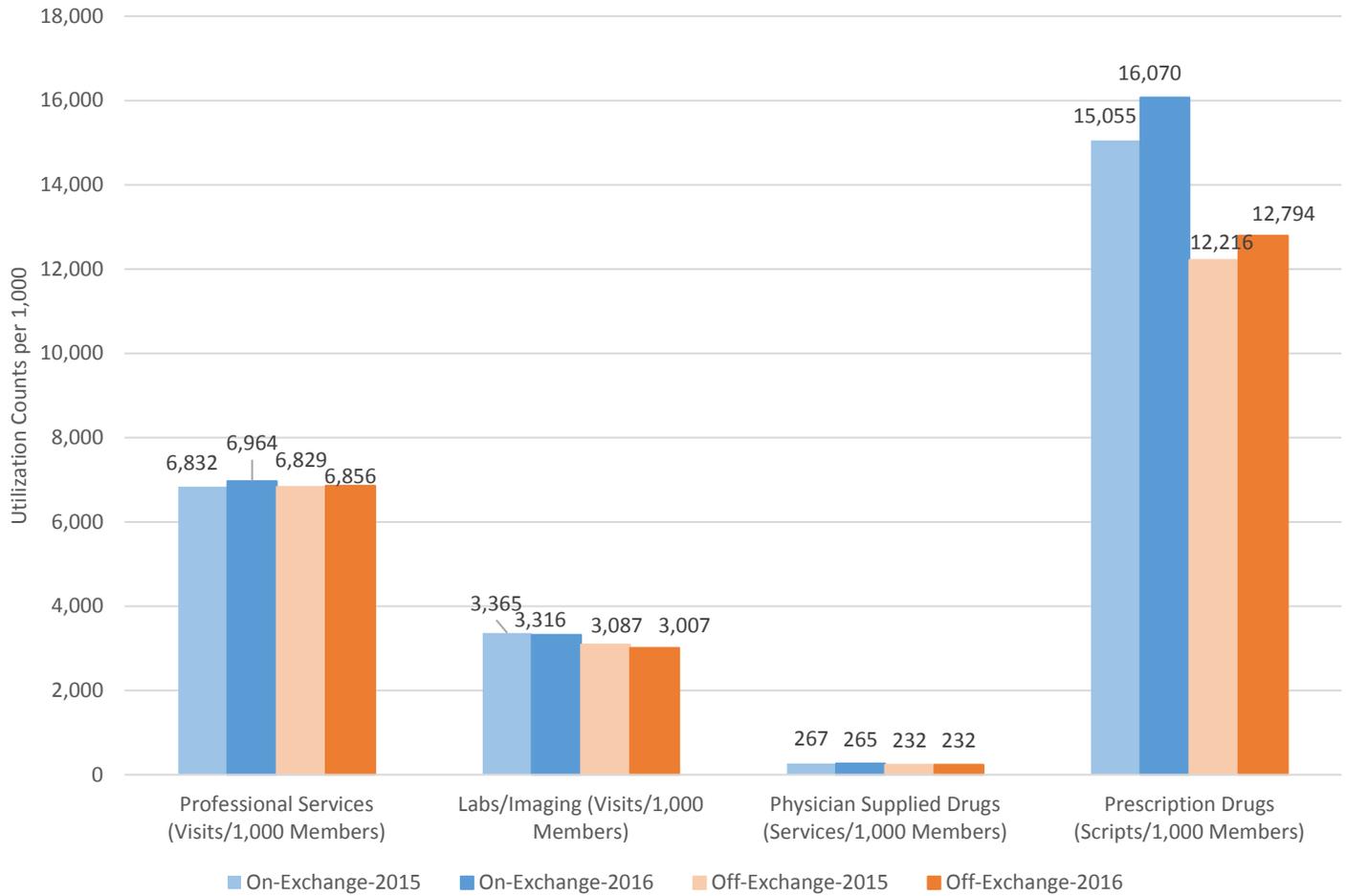
(4) Some calculations in the above exhibit might not be exact due to rounding.

Exhibit 19: On-Exchange vs. Off Exchange (ACA-Compliant Plans Only), Hospital Inpatient and Outpatient Utilization, and YOY % Changes, Individual Market, 2015 - 2016



Note: (1) Days/1,000 members are discharge days/1,000 members.  
 (2) Some calculations in the above exhibit might not be exact due to rounding.

Exhibit 20: On-Exchange vs. Off Exchange (ACA-Compliant Plans Only), Utilization of Professional Services, Labs/Imaging, and Prescription Drugs, Individual Market, 2016 - 2015



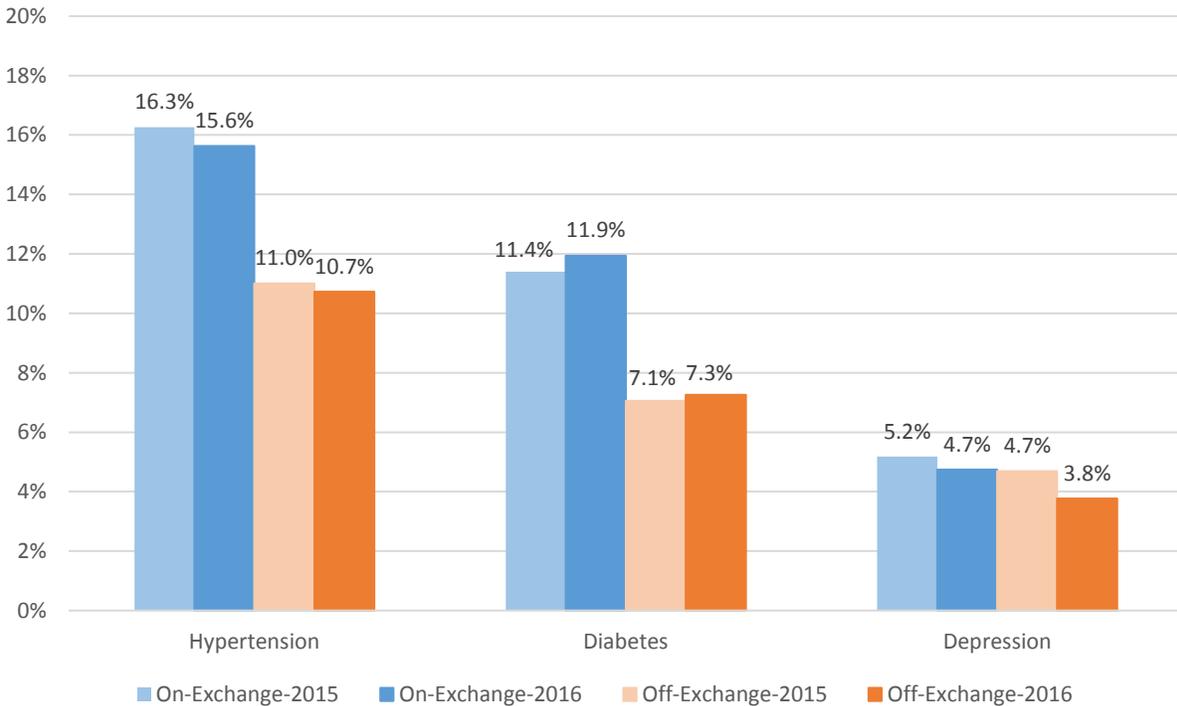
Note: (1) Some calculations in the above exhibit might not be exact due to rounding.

## Prevalence of Select Conditions in ACA-Compliant Insurance, on and off the Exchange, 2015 - 2016

Chronic health conditions such as diabetes, hypertension, and depression, are both costly and common.<sup>13</sup> As such, the prevalence of these conditions contributes to health care spending. Many of these conditions can be controlled through treatment and behavior change, allowing for potential cost savings and improved quality of life for patients. Understanding changes in prevalence over time and differences between On-Exchange and Off-Exchange populations can help healthcare providers, payers, and government entities make appropriate decisions about resources and policies that address chronic condition treatment and prevention.

- The prevalence of hypertension and diabetes was higher among On-Exchange members than among Off-Exchange members for 2016 (**Exhibit 21**).
- The prevalence of depression and hypertension appeared to decrease slightly among On-Exchange and Off-Exchange members from 2015 to 2016.

Exhibit 21: On v. Off Exchange (ACA-Compliant Plans Only): Prevalence of Select Chronic Conditions, Individual Market, 2015 to 2016



Notes: (1) On v. Off-Exchange data splits were not available in the MCDB until 2015.

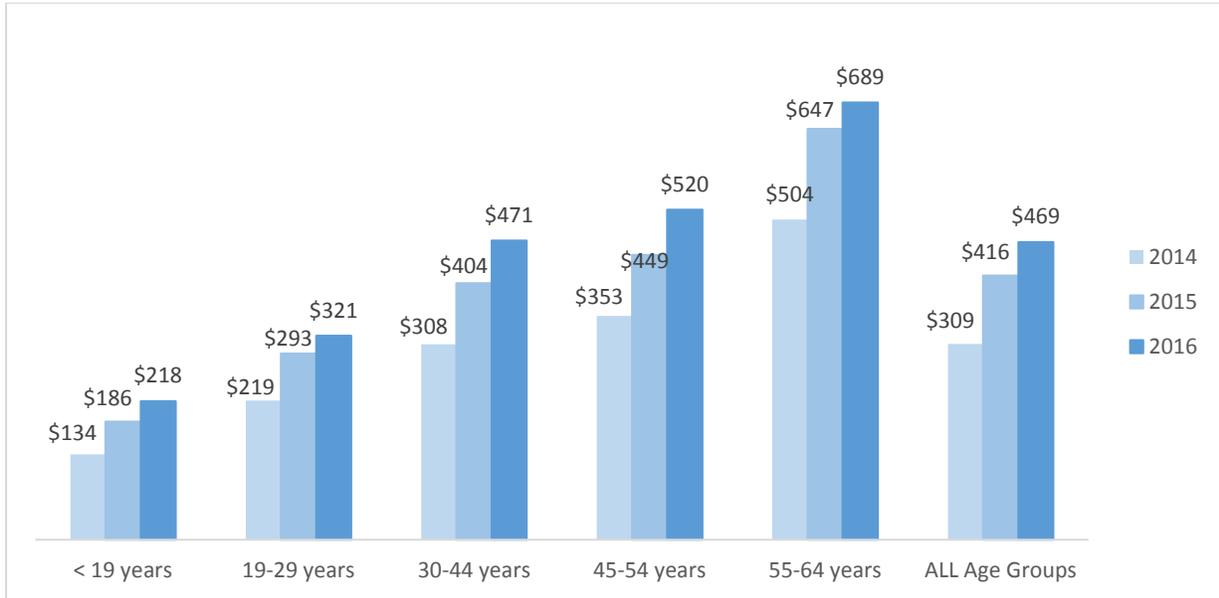
<sup>13</sup> <https://www.cdc.gov/chronicdisease/overview/index.htm>

## **PMPM Spending by Age and Region, Individual Market, 2014 - 2016 (ACA-Compliant and Non-Compliant Plans)**

Along with illness burden, age and geography are important influences on health plan costs and therefore on market sustainability. Health insurance risk pools with higher illness burdens and older populations located in higher cost regions generate greater health care costs. Higher costs are a barrier to access in the individual market.

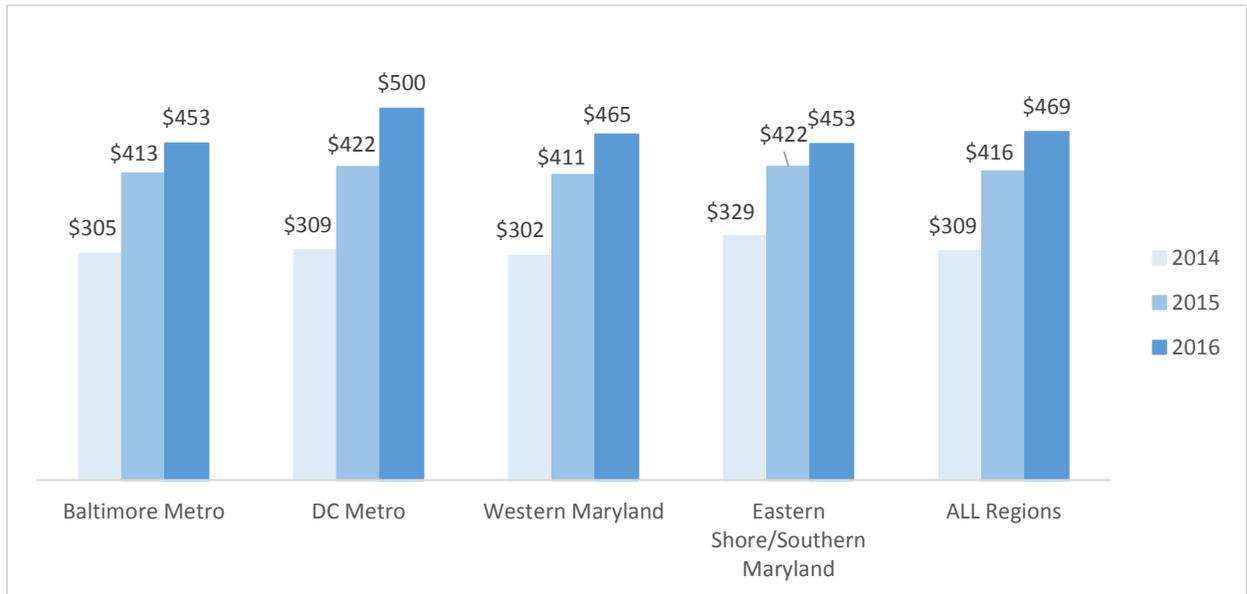
- PMPM spending increased between 2015 and 2016 across all age bands but far below PMPM spending increases observed from 2014 to 2015 (**Exhibit 22**). This slowdown in PMPM growth across age bands is consistent with the slowdown in PMPM spending growth (all services combined) observed in the individual market overall (**Exhibit 12**). The largest slowdown in PMPM spending growth (-24 percentage points) was observed for age band 19 - 29 years, while the smallest slowdown (-11 points) was in the 45 - 54 age band.
- PMPM spending increased with age, as expected, with members under 19 years of age having the lowest PMPM spending for 2016, and members between 55 and 64 years of age having the highest PMPM spending.
- PMPM spending increased between 2015 and 2016 across all Maryland regions, but far below PMPM spending increases observed from 2014 to 2015 (**Exhibit 23**). The Baltimore Metro region had the largest slowdown in PMPM spending growth (-25 percentage points), while the DC Metro region had the smallest decrease in spending growth (-11 percentage points). Despite the slowdown in PMPM spending growth, the DC Metro region had the largest PMPM increases in 2016 (19%) and 2015 (36%), tying with Western Maryland (**Exhibit 23**).

Exhibit 22: PMPM Spending by Age of Member, Individual Market, 2014 - 2016



Note: (1) Some calculations in the above exhibit might not be exact due to rounding.

Exhibit 23: PMPM Spending by Region of Members, Individual Market, 2014 - 2016



Note: (1) Some calculations in the above exhibit might not be exact due to rounding.

## Member Share and Carrier Share of Spending in On-Exchange and Off-Exchange ACA-Compliant Insurance, 2015 - 2016

This section compares the share of health care spending that is paid out-of-pocket by members and the amount paid by carriers for ACA-compliant plans in 2015 and 2016. The MCDB is one of the few data sources that support comparisons between On-Exchange and Off-Exchange plans.

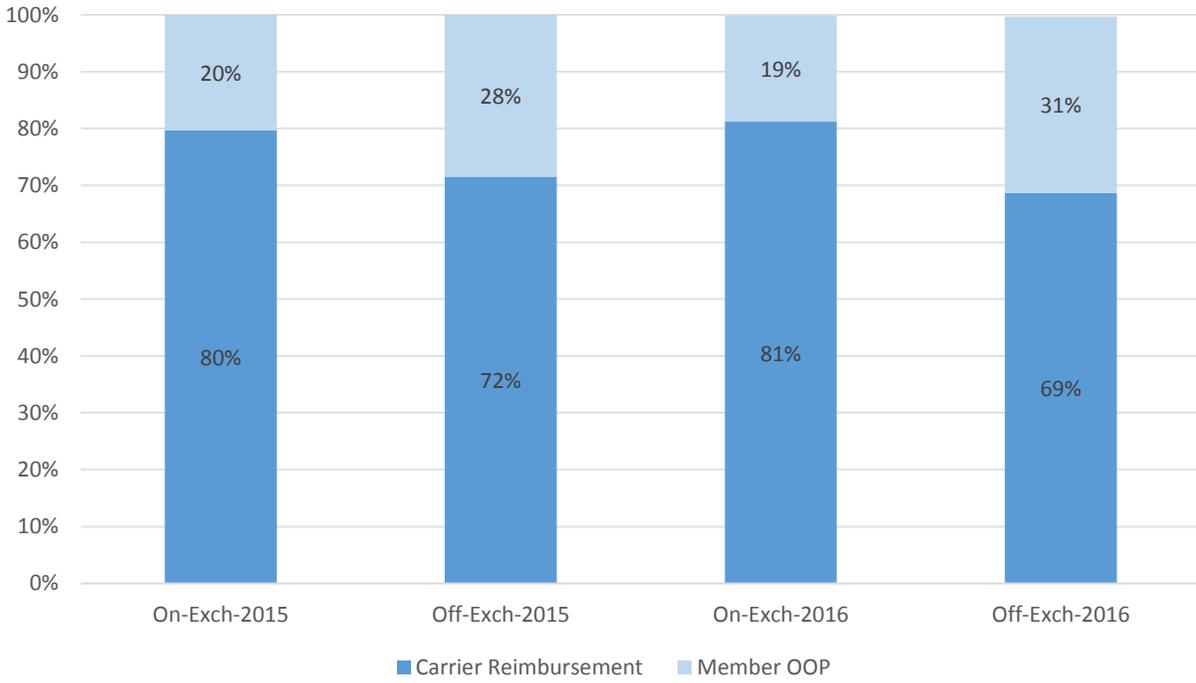
The share of total spending paid out of pocket can vary due to differential uptake of plans in the four metal level plans (bronze, silver, gold, and platinum) with the actuarial value varying from 60% for bronze plans to 90% for platinum plans. Members whose family incomes fell below 250% of the federal poverty line (FPL) received cost-sharing reductions (CSR), which is a further adjustment that lowers the amount a member pays for deductibles, copayments, and coinsurance. These adjustments mean the share that a member pays out-of-pocket could be substantially different, depending on that individual's family income. In 2016, about 43% of On-Exchange members received CSRs.<sup>14</sup>

- The OOP portion of PMPM spending (all services combined) for members on the exchange decreased by about 3%, while the OOP PMPM increased by about 20% for Off-Exchange members for 2016 (**Exhibit 24**).
- Members' OOP share of total spending was lower for On-Exchange plans (19%) than for Off-Exchange plans (31%) in 2016, similar to 2015. Because carriers are required to provide On-Exchange members with cost-sharing subsidies for their out-of-pocket payments, the portion of PMPM spending paid by insurers (overall spending PMPM less OOP PMPM) was higher for On-Exchange plans than for Off-Exchange plans (81% versus 69%) in 2016, which is consistent with 2015 results (**Exhibit 24**).

---

<sup>14</sup> CSRs are implemented by lowering the deductible, copayment, and out-of-pocket maximum that the member pays, which is the total amount a member would pay for covered medical services per year. On a Silver Level plan, a person with an income at 150% FPL would have no deductible instead of a \$2,000 deductible, would pay a \$10 copayment instead of \$30, and would have a \$1,000 maximum out-of-pocket instead of \$5,500. When this member reaches the out-of-pocket maximum, the health plan covers 100% of all covered services. A CSR would raise the actuarial value of the hypothetical Silver Level plan from 70% to 93% for a member with an income at 150% of the FPL.

Exhibit 24: Member Out-of-Pocket Share and Carrier Share of Total Spending, On-Exchange vs. Off-Exchange ACA-Compliant Plans, 2015 - 2016



## Appendix A: Additional Exhibits

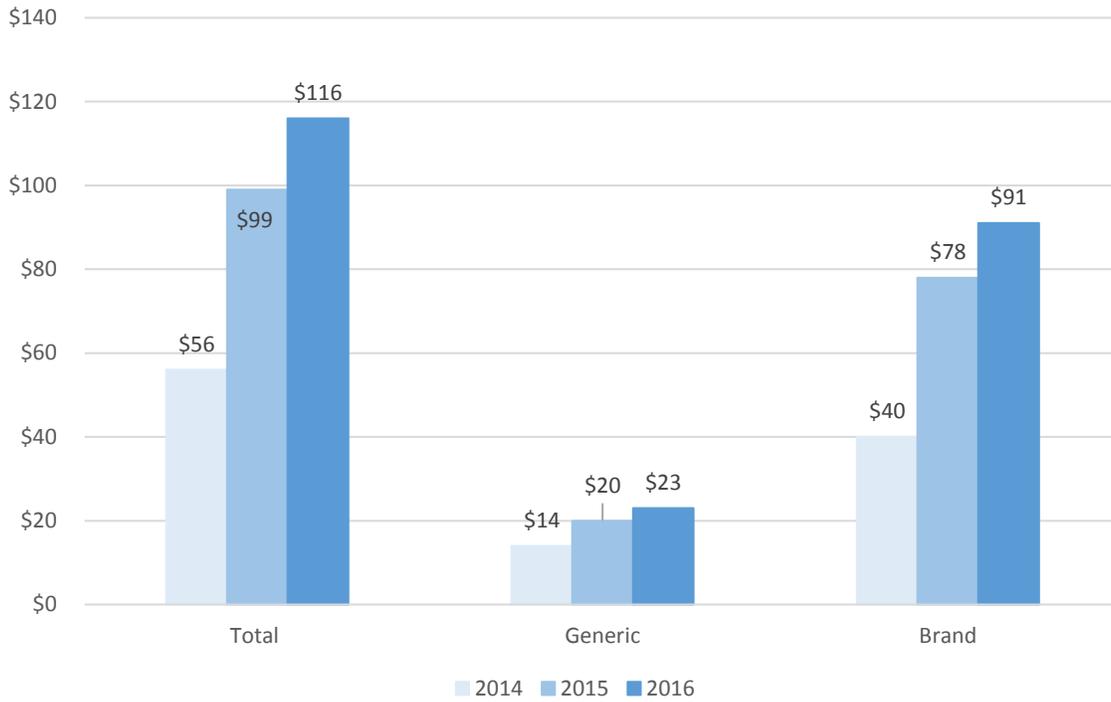
*Exhibit A1: Comparison of Risk Scores across Plan Types in the Individual Market, 2014 - 2016*

Percentile	Individual Market (ACA & NonACA Compliant)					Individual Market (ACA-Compliant On-Exch)		
	2014	2015	2016	Diff 2014 to 2015	Diff 2015 to 2016	2015	2016	Diff 2015 to 2016
w/o Kaiser 90%	2.09	2.94	3.22	0.85	0.28	3.36	3.63	0.27
50% Median	0.16	0.27	0.31	0.11	0.04	0.36	0.39	0.03
10%	0.03	0.05	0.05	0.02	0.00	0.05	0.05	0.00
w/ Kaiser 90%	2.10	2.80	2.99	0.69	0.20	3.08	3.17	0.09
50% Median	0.16	0.23	0.23	0.07	0.00	0.27	0.23	-0.04
10%	0.03	0.05	0.05	0.02	0.00	0.05	0.05	0.00

*Exhibit A2: Comparison of Risk Scores across Plan Types in the Individual Market, 2014 - 2016, Continued*

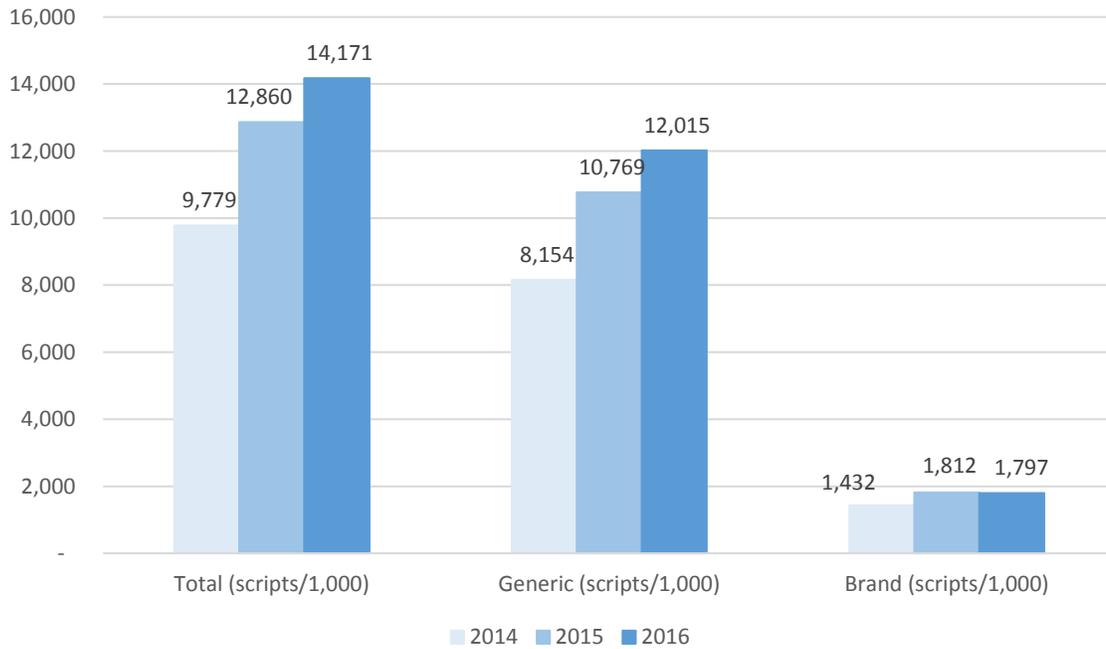
Percentile	Individual Market (ACA-Compliant Off-Exch)			Individual Market (ACA-Compliant On & Off-Exch)		
	2015	2016	Diff 2015 to 2016	2015	2016	Diff 2015 to 2016
w/o Kaiser 90%	2.90	3.06	0.16	3.08	3.32	0.24
50% Median	0.29	0.29	0.00	0.32	0.33	0.02
10%	0.05	0.05	0.00	0.05	0.05	0.00
w/ Kaiser 90%	2.85	3.02	0.17	2.93	3.09	0.16
50% Median	0.28	0.28	0.00	0.26	0.26	0.00
10%	0.05	0.05	0.00	0.05	0.05	0.00

**Exhibit A3: Prescription Drug PMPM Changes by Drug Type, Individual Market, 2014 - 2016**



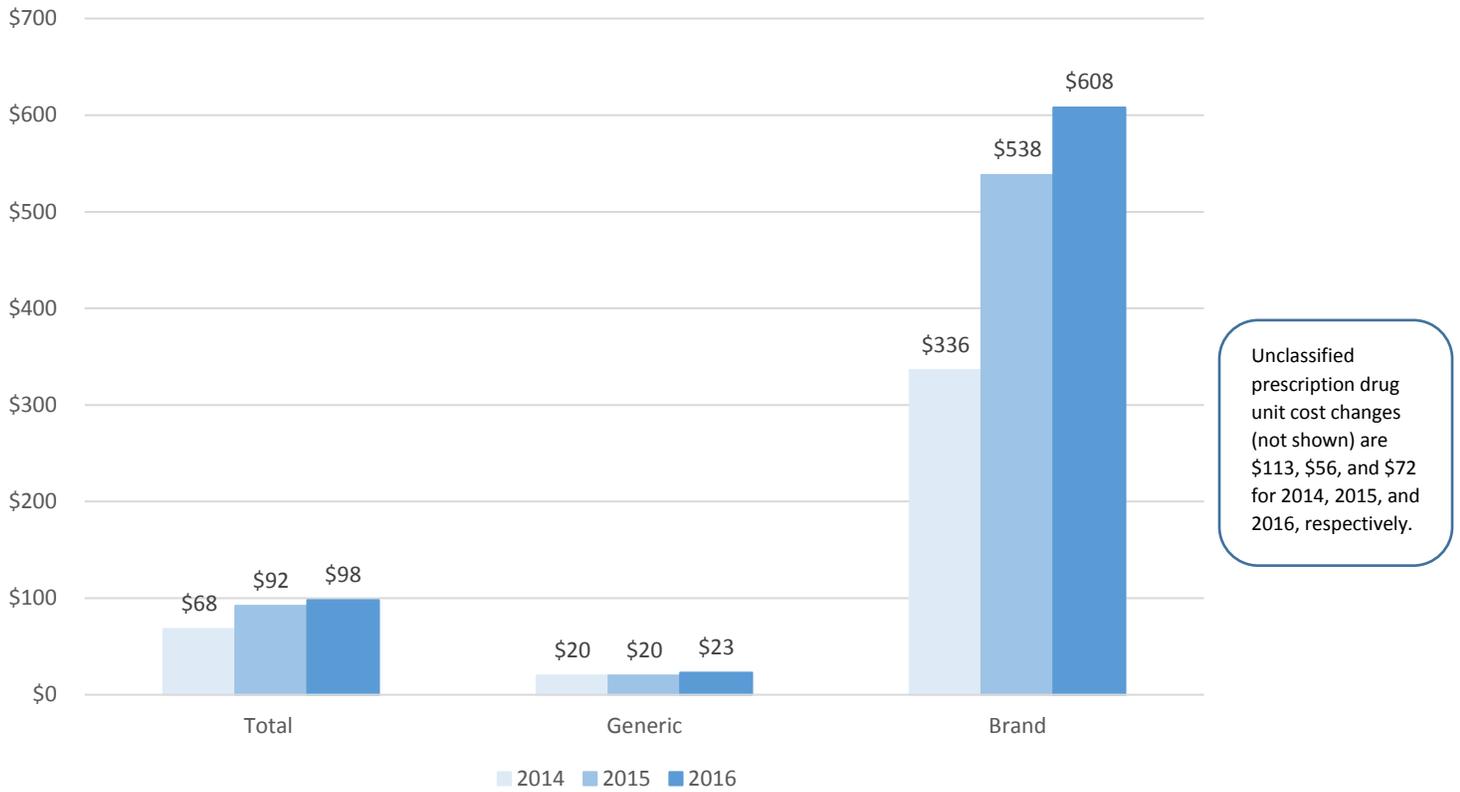
Unclassified prescription drug PMPM changes (not shown) are \$2, \$1, and \$2 for 2014, 2015, and 2016, respectively.

**Exhibit A4: Prescription Drug Utilization Changes by Drug Type, Individual Market, 2014 - 2016**



Unclassified prescription drug utilization changes (not shown) are 218, 280, and 359 scripts/1,000 for 2014, 2015, and 2016, respectively.

Exhibit A5: Prescription Drug Unit Cost Changes by Drug Type, Individual Market, 2014 - 2016



## Appendix B: Methods and Definitions

### DATA SOURCES

The figures and tables in this report are based on 2014, 2015, and 2016 data analyses from Maryland's Medical Care Data Base (MCDB). It includes all members, regardless of whether an individual used any health care services. The data are for privately fully-insured Maryland residents (i.e., only those individuals who live in Maryland).

### MARKETS

**Large Employer (fully insured):** The large employer market refers to businesses with more than 50 full-time employees. All Federal Employee Health Benefits Program (FEHBP) medical data are included in the report. However, for prescription drugs, some FEHBP spending may not be captured due to a limitation in linking patient encrypted identifiers.

**Small Employer:** The small employer market refers to businesses with between 2 and 50 full-time employees.

**Individual:** The individual market refers to members who purchased a health benefit plan directly from an insurer, not through an employer.

### INDIVIDUAL PLAN TYPES

**ACA-compliant:** This includes non-grandfathered plans only.

**ACA-non-compliant:** This includes grandfathered plans only.

**On-Exchange:** Includes ACA-compliant products sold on the Maryland Health Benefit Exchange.

**Off-Exchange:** Includes ACA non-compliant products sold off the Maryland Health Benefit Exchange.

### SERVICE CATEGORY DESCRIPTIONS

**Inpatient Hospital Facility:** Includes non-capitated facility services for medical, surgical, maternity, mental health and substance abuse, skilled nursing, and any other services provided in an inpatient facility setting and billed by the facility.

**Outpatient Hospital Facility:** Includes non-capitated facility services for surgical, emergency room, lab, radiology, therapy, observation, and other services provided in an outpatient facility setting and billed by the facility.

**Outpatient Non-Hospital Facility:** Primarily includes services provided at ambulatory surgery centers, critical access hospitals, clinics, and home health outpatient centers.

**Professional Services:** Includes non-capitated primary care, specialist, therapy, the professional component of laboratory and radiology, and other professional services other than hospital-based professionals whose payments are included in facility fees. Also includes Other Medical which includes non-capitated ambulance, home health care, durable medical equipment (DME), prosthetics, supplies, and other services (excluding vision exams and dental services not collected in the MCDB). Please note that this service category does not include **physician supplied drugs** or **labs/imaging** for this report, as they are reported separately.

## MEASURES

**Expenditure Risk Score:** The expenditure risk score is based on the Johns Hopkins Adjusted Clinical Groups (ACG) System, a risk stratification system that assesses risk of current utilization based on diagnoses reported in current claims. In very simple terms, a patient file (identifying an eligible individual) is merged with diagnoses and pharmacy codes to produce a series of risk factors and risk scores.

**Per Member Per Month (PMPM) spending is calculated as** the total aggregate spending during the calendar year [with three (3) months of claims run-out] divided by the total months of coverage for all members during the calendar year. PMPM spending for medical and prescription drugs was calculated separately because not all members had drug coverage. Please note that all claims incurred in 2016 and paid through March of 2017 excluded adjustments for outstanding claims.

**Out-of-Pocket (OOP) spending** is the member's cost-sharing responsibility.

**Inpatient Facility (hospital and non-hospital) (Number of Discharge Days per 1,000 Members) is calculated as** the Total Number of Discharge Days/Total Medical Member Months \*1000\*12. MHCC introduced the concept of PMPM spending in 2014 and started with admissions per 1,000 members as a measure of inpatient utilization to be consistent with what was used by insurance companies in actuarial memoranda sent to the Maryland Insurance Administration (MIA) via rate filings. However, this year, MHCC decided to use discharge days per 1,000 which is more widely used in the health policy community.

**Total Discharge Days** are the sum of the number of days spent in the hospital for each inpatient who was discharged during the time examined (2014, 2015, 2016, respectively), regardless of when the patient was admitted (*discharge basis*).

**Total Discharges** are the number of inpatients released from the hospital during 2014, 2015, and 2016, respectively.

**Outpatient Facility (Number of visits per 1,000 Members) is calculated as** Total Number of Outpatient Visits/Total Medical Member Months \*1000\*12.

**Professional Services (Number of visits per 1,000 Members) is calculated as** Total Number of Visits for Professional Services/Total Medical Member Months \*1000\*12.

**Labs/Imaging (Number of visits per 1,000 Members) is calculated as** Total Visits for Labs and Imaging Services/Total Medical Members Months \*1000\*12.

**Prescription Drugs (Number of Scripts per 1,000 Members) is calculated as** Total Number of Prescription Drugs Filled/Total Prescription Drug Member Months \*1000\*12.

**Unit Cost:** The unit cost is the insurers allowed amount for the claim divided by the utilization count (e.g., number of visits) for that type of service category or drug.<sup>15</sup> Price trend (part of unit cost) represents the change in price per service paid to providers. It is driven by billed charge trend, provider

---

<sup>15</sup> Some discounts and rebates, (for example, drug rebates), are not captured in these data.

contractual changes, technology, and cost shifting. **Intensity (mix of services)** of services trend, the other part of unit cost, measures the changes in types of services rendered. In other words, **intensity** is when a treatment or procedure is replaced by a more expensive treatment. For example, today, MRIs are frequently used instead of less expensive X-rays, thereby increasing unit costs. In some cases, MRIs are being used in addition to X-rays, increasing unit costs even more.

*Notes:*

Prescriptions have been “normalized” or adjusted so that they are counted based on a 30-day supply of medication. Therefore, each 90-day prescription is counted as three 30-day prescriptions.

Prescription drug member months are for those pharmacy members who also have medical benefits throughout the experience period (2014, 2015, and 2016, respectively).

For outpatient, professional, and labs/imaging services, all visits in each service category that occur on the same day are counted as one visit.

## **County definitions for Regions as per the Maryland Insurance**

### **Administration (MIA):**

**Baltimore Metro** means Baltimore City, Baltimore County, Harford County, Howard County, and Anne Arundel County.

**DC Metro** means Montgomery County and Prince George's County.

**Western Maryland** means Garrett County, Allegany County, Washington County, Carroll County, and Frederick County.

**Eastern Shore/Southern Maryland** means St. Mary's County, Charles County, Calvert County, Cecil County, Kent County, Queen Anne's County, Talbot County, Caroline County, Dorchester County, Wicomico County, Somerset County, and Worcester County.

## **Acknowledgements**

This report on health care spending and use was conducted by the Center for Analysis and Information Systems staff of the Maryland Health Care Commission. Staff who created this report are Linda Bartnyska, Janet Ennis, Megan Renfrew, and Kenneth Yeates-Trotman.

Questions about the report should be directed to Kenneth Yeates-Trotman.

The Maryland Health Care Commission is an independent regulatory commission administratively located within the Maryland Department of Health.

**Robert Emmet Moffit, PhD., Chairman**

**Ben Steffen, Executive Director**

Maryland Health Care Commission, 4160 Patterson Avenue, Baltimore, MD 21215  
Telephone: 410-764-3570, Fax: 410-358-1236, Web: mhcc.maryland.gov