SPENDING AND USE AMONG MARYLAND'S PRIVATELY FULLY-INSURED, 2015

AUGUST 2017

Highlights: Spending and Use in Maryland

Individual Market (ACA-compliant and noncompliant plans)

- Total Members (insureds) as of December 31, 2015, increased by about 8% over a year ago.
- Per member per month (PMPM) spending for all services increased by about 33% from 2014 to 2015, mainly due to increased use of services. Utilization increased for all service categories, ranging from 11% for labs/imaging services to 30% of prescription drugs which also had a high unit cost increase of about 34%.
- Overall (all services combined) PMPM spending at $411 in 2015 is the highest across all markets. The PMPM portion for insurers increased by about 41%, while out-of-pocket (OOP) PMPM for members increased by 14%. This difference resulted in a four percentage point decrease (30% to 26%) in the members' OOP share of total spending in 2015. However, OOP spending remained the highest in the individual market compared with the other markets (small employer and large employer groups).
- The median expenditure risk score increased from 0.19 to 0.37 between 2014 and 2015, indicating that members in the 2015 individual market population were sicker and needed more care than in 2014, which increased PMPM spending. The 10th and 90th percentile risk scores for 2014 and 2015 are 0.05 to 2.58 and 0.05 to 3.50, respectively.

Individual Market (On v. Off Exchanges, ACA-compliant plans only), 2015

- As of December 31, 2015, 45% of total (on and off) exchange members (insureds) were enrolled in On-Exchange ACA-compliant plans, while 55% were enrolled in Off-Exchange ACA-compliant plans.
- Overall (all services combined) PMPM spending is about 5% higher for on-exchange ($445) vs. off-exchange ($423) plans. The higher spending is mainly due to higher inpatient hospital facility spending (21% higher spending and 22% higher utilization), and higher prescription drug spending (20% higher spending and 20% higher utilization) for on-exchange vs. off-exchange plans.
- Members' out-of-pocket (OOP) share of total PMPM spending is eight percentage points higher for off-exchange plans (28%) compared to on-exchange (20%) plans due to the cost-sharing subsidies from insurers for lower income insureds that are available on the exchange but not off the exchange.
- The median expenditure risk score for on-exchange members is higher than that for off-exchange members (0.45 vs. 0.39, respectively), which implies that on-exchange members are sicker and require more care, resulting in higher overall PMPM spending for on-exchange members. The 10th and 90th percentile risk scores for on-exchange and off-exchange members are 0.05 to 4.07 and 0.05 to 3.41, respectively.

Small Employer and Large Employer Markets

- PMPM spending for all services combined increased by about the same amount (7%) for large employers and small employers from 2014 to 2015.
- PMPM spending for outpatient non-hospital facility services (a new service category) decreased in both small employer and large employer markets but increased in the individual market.
- PMPM spending for medical services only (i.e., excluding prescription drugs) between 2014 and 2015 increased by about the same amount for large (7%) and small (5%) employer markets. However, PMPM spending in the individual market increased (23%) by over three times the increase for large and small employer markets.
- Federal Employees Health Benefits Program data is now included for the first time in the large employer market for both 2014 and 2015.

Across Markets

- Unit costs for all service categories increased in 2015, except for inpatient and outpatient non-hospital facility services, in which unit costs declined across all markets in 2015. Inpatient non-hospital primarily includes home health inpatient, while outpatient non-hospital primarily includes ambulatory surgery centers, critical access hospitals, clinics, and home health outpatient.

BACKGROUND

This report examines health care spending and utilization patterns for Maryland residents insured through the individual, small employer, and large employer markets. The analysis relies on 2014 and 2015 data from Maryland's Medical Care Database (MCDB), which contains health care claims and encounter data submitted quarterly to the Maryland Health Care Commission (MHCC) by most private health insurance carriers serving Maryland residents.

In 2014, major changes swept the Maryland health care system. After several years of planning, Maryland implemented major insurance provisions of the Affordable Care Act (ACA) affecting the small group market and the individual market. In February 2014, the Centers for Medicare & Medicaid Services (CMS) and the State of Maryland agreed to partner in modernizing Maryland's unique all-payer rate-setting system for hospital services by allowing the State to adopt new policies aimed to reduce per capita hospital expenditures and improve health outcomes. These changes were all significant, but the most important insurance changes occurred in the individual market.

Given the continued impact of the ACA, the focus again of this year's report is the individual market. Before 2014, the individual market in Maryland, as in most other states, was medically underwritten. Starting in 2014 and continuing in 2015, the State-based insurance exchange, Maryland Health Connection, was established for individuals to shop, compare, and enroll in health benefit plans offered by CareFirst, Evergreen, Kaiser Permanente, and All Savers, a subsidiary of United HealthCare. Premium tax credits (subsidies funded by the federal government) became available for households with incomes of up to 400 percent of the federal poverty level (FPL). Additional cost-sharing subsidies that reduce out-of-pocket costs, including deductibles, coinsurance, copayments, and annual maximums, are available for individuals with incomes up to 250 percent of the FPL. Community rating applied to new products sold in the individual market, both on and off the exchange. All carriers were required to offer a minimum level of benefits, referred to as essential health benefits (EHBs), for new products offered in this market. To encourage the purchase of health insurance, including by the young and healthy who were less likely to buy coverage in the past, the ACA introduced tax penalties for individuals who could afford coverage but did not purchase. At the same time, the Maryland Health Insurance Plan (MHIP), the State's high-risk pool, was phased out (ended year-end 2014). MHIP enrollees were encouraged to enroll in Medicaid, eligibility in which was extended to individuals up to 138 percent of the FPL or to enroll in plans in the individual market through the insurance exchange.

To encourage carriers to participate in the expanded individual market, the ACA provided risk mitigation through reinsurance and risk adjustment provisions that reduced the uncertainty of newly insured populations. Like much of the rest of the country, the rollout of the health coverage provisions, especially the launch of the new insurance exchange in Maryland, was uneven in 2014. However, the consolidation of MHIP, the medically underwritten individual market, and the previously uninsured population increased the size of the individual market and shifted utilization levels in this market.

In 2015, the increased size of the individual market was not as dramatic as in 2014, the first year the ACA law was enacted. However, 2015 posed new challenges as the individual market became more concentrated under CareFirst, and as Evergreen, a Coop plan established under the ACA struggled

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to gain traction in the individual and small group markets. More generally, insurers complained about the inadequacy of the risk mitigation methodologies established to stabilize the individual market. Insurers also pointed to various unintended consequences of the insurance expansion such as ACA customers *gaming* the system by using special enrollment periods to purchasing coverage only after they found out that they were sick and needed expensive care. Insurers warned that such gaming trend was destabilizing the ACA exchanges and spiking premiums for all members. Health plans also complained that some customers were exploiting the 3-month "grace period" when they could keep receiving subsidized coverage even if they had stopped paying their share of premiums.[1] Although it is not possible to untangle the effect of each action, the overall impact increased enrollment and average spending per member—driven mainly by increased utilization of services—as detailed in this report.

Measures used in this analysis are defined in the Methods section in Appendix B at the end of this report.

[1] http://www.politico.com/story/2016/01/gaming-obamacare-insurance-health-care-217598

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Changes in PMPM Spending, Utilization, and Unit Cost, Individual Market, 2014 to 2015 (ACA-Compliant and Non-Compliant Plans)

- Total Members (insureds) as of December 31, 2015, in the individual market increased by about 8%. (See **Exhibit 1**.)
- The median expenditure risk score increased from *0.19 to 0.37* between 2014 and 2015 (**Exhibit 1**.), along with the prevalence of selected chronic conditions (**Exhibit 6)**.
- PMPM spending for all services combined increased between 2014 and 2015 by about 33%. (See **Exhibit 1**.)
  - PMPM spending increased for all service categories, albeit by varying degrees (**Exhibits 1,2**):
    - Inpatient hospital facility spending: 29%
    - Inpatient non-hospital facility spending: 69%
    - Outpatient hospital facility spending: 26%
    - Outpatient non-hospital facility spending: 11%
    - Spending for professional services: 21%
    - Spending for labs/imaging services: 18%
    - Spending for all medical services combined: 23%
    - Spending for prescription drugs: 75%
- PMPM spending increases were driven mainly by utilization growth except for prescription drugs where although utilization was high, unit cost increases were even higher. (See **Exhibit 3**.)
  - The 75% increase in prescription drug spending was driven by increases in both utilization (30%) and unit cost (34%).
    - PMPM spending for brand name drugs increased by about 93% between 2014 and 2015 while PMPM spending for generic drugs increased by about 43%. (See **Exhibit A2**, in Appendix A).
    - The 30% increase in utilization was due to a 31% and 25% increase in generic drug and brand name drug utilization, respectively. (See **Exhibit A3** in Appendix A).
    - The 34% increase in unit cost was mainly due to a 54% increase in brand-name drug unit cost compared to a lesser increase of 7% for generic drug unit costs from 2014 to 2015. (See **Exhibit A4** in Appendix A).
  - Growth in drug utilization resulted, in part, from an increase in the illness burden of those enrolled in the individual market, as reflected in the higher expenditure risk score for 2015 (noted above).
- As seen in **Exhibits 3 and 4**, inpatient and outpatient hospital facility utilization increased in the individual market by about 22% and 16%, respectively between 2014 and 2015.
- **Exhibits 3 and 5** show that utilization of professional services increased by about 15%; use of labs/imaging increased by 11%, and prescription drug use increased by 30% (noted earlier).

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Exhibit 1. Spending Among Maryland's Younger-Than-65 Population, Privately Insured, Individual Market, 2014 and 2015

	2014	2015	% Change
Members			
Total members as of December 31	225,361	243,727	8%
Member Months			
Total member months	2,601,335	2,997,695	15%
Spending			
PMPM spending, all services combined	$309	$411	33%
PMPM OOP, all services combined	$92	$105	14%
PMPM OOP, Medical Only	$78	$87	12%
PMPM OOP, Prescription Drugs	$15	$18	20%
PMPM Spending By Service Category			
Inpatient Hospital Facility	$48	$62	29%
Inpatient Non-Hospital Facility [(iii)]	$0.5	$0.8	69%
Outpatient Hospital Facility	$68	$86	26%
Outpatient Non-Hospital Facility	$9	$10	11%
Professional Services	$95	$115	21%
Labs/Imaging	$33	$39	18%
SubTotal (Medical Only)	**$253**	**$313**	**23%**
Prescription Drugs	$56	$98	75%
Risk Score			**Difference**
Median expenditure risk score (FY & PY)	0.19	0.37	0.17

Notes: (i) Individuals can have multiple types of coverage during the year but are counted only once in the total.
(ii) Inpatient non-hospital facility primarily includes home health inpatient while outpatient non-hospital facility primarily includes ambulatory surgery centers, critical access hospitals, clinics, and home health outpatient.
(iii) Actual PMPMs are $0.48 and $0.81 for 2014 and 2015, respectively
(iv) Median expenditure risk scores are for ACA-compliant and noncompliant plans. The 10th and 90th percentile risk scores for 2014 and 2015 are 0.05 to 2.58 and 0.05 to 3.50, respectively.
(v) PMPM portion of spending for insurers is overall PMPM (all services combined) less PMPM OOP (all services combined).
(vi) Some calculations in the above exhibit might not be exact due to rounding.

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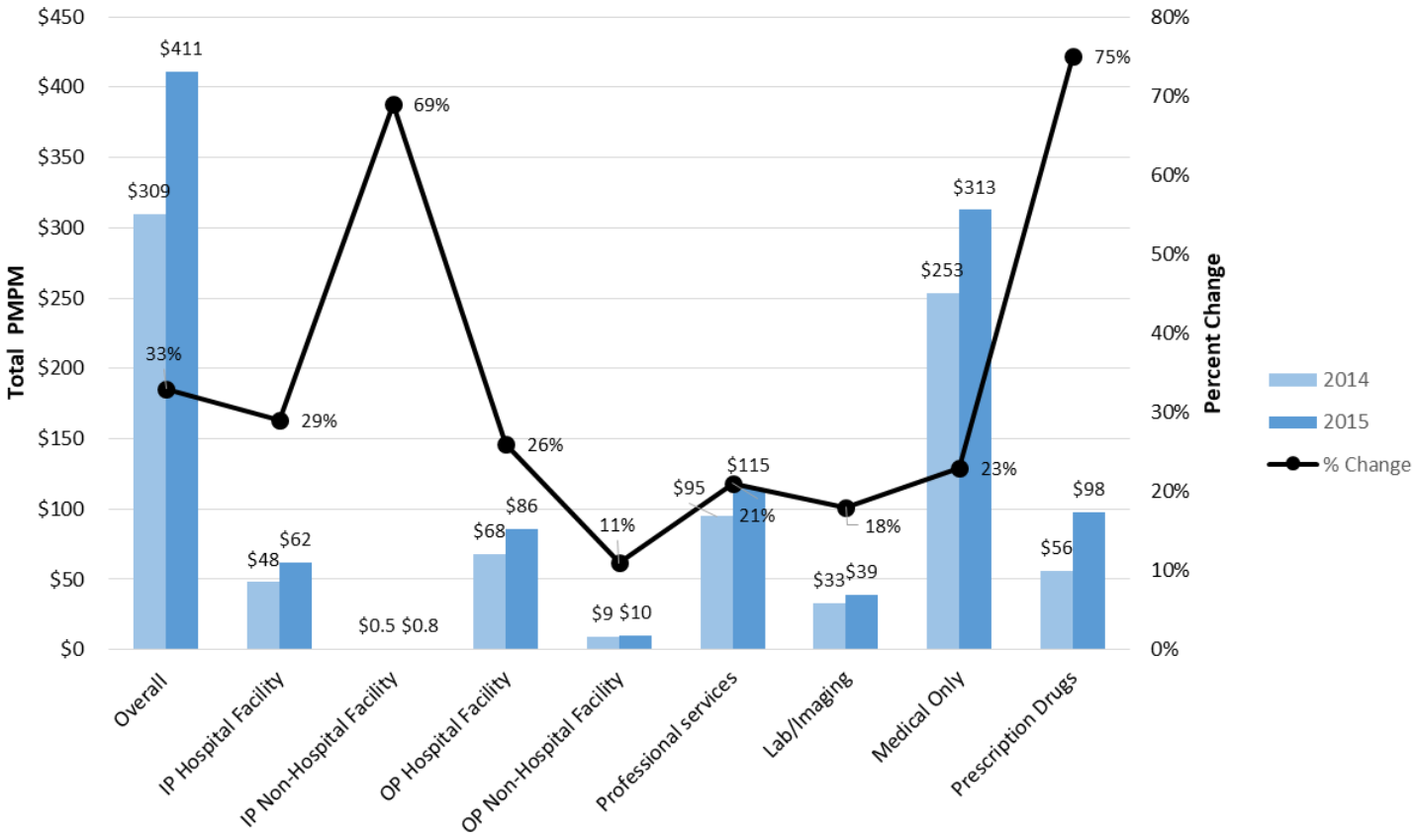
Exhibit 2. Total PMPM Changes by Service Category, Individual Market, 2014 to 2015



Notes: (i) Inpatient non-hospital facility primarily includes home health inpatient while outpatient non-hospital facility primarily includes ambulatory surgery centers, critical access hospitals, clinics, and home health outpatient.
(ii) Inpatient non-hospital and outpatient non-hospital made up about 0.2% and 2.4%, respectively of total PMPM spending for 2015. See Exhibit A1
(iii) The 75% increase in prescription drug PMPM spending is driven by both the high increase in usage (30%) and the high increase in unit cost (34%). See Exhibit 3.
(iv) Individual market includes both ACA-compliant and noncompliant plans.
(v) Some calculations in the above exhibit might not be exact due to rounding.

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Exhibit 3. Annual Changes in PMPM Spending, Utilization per 1,000 Members, and Cost per Unit by Service Category, Individual Market, 2014 to 2015

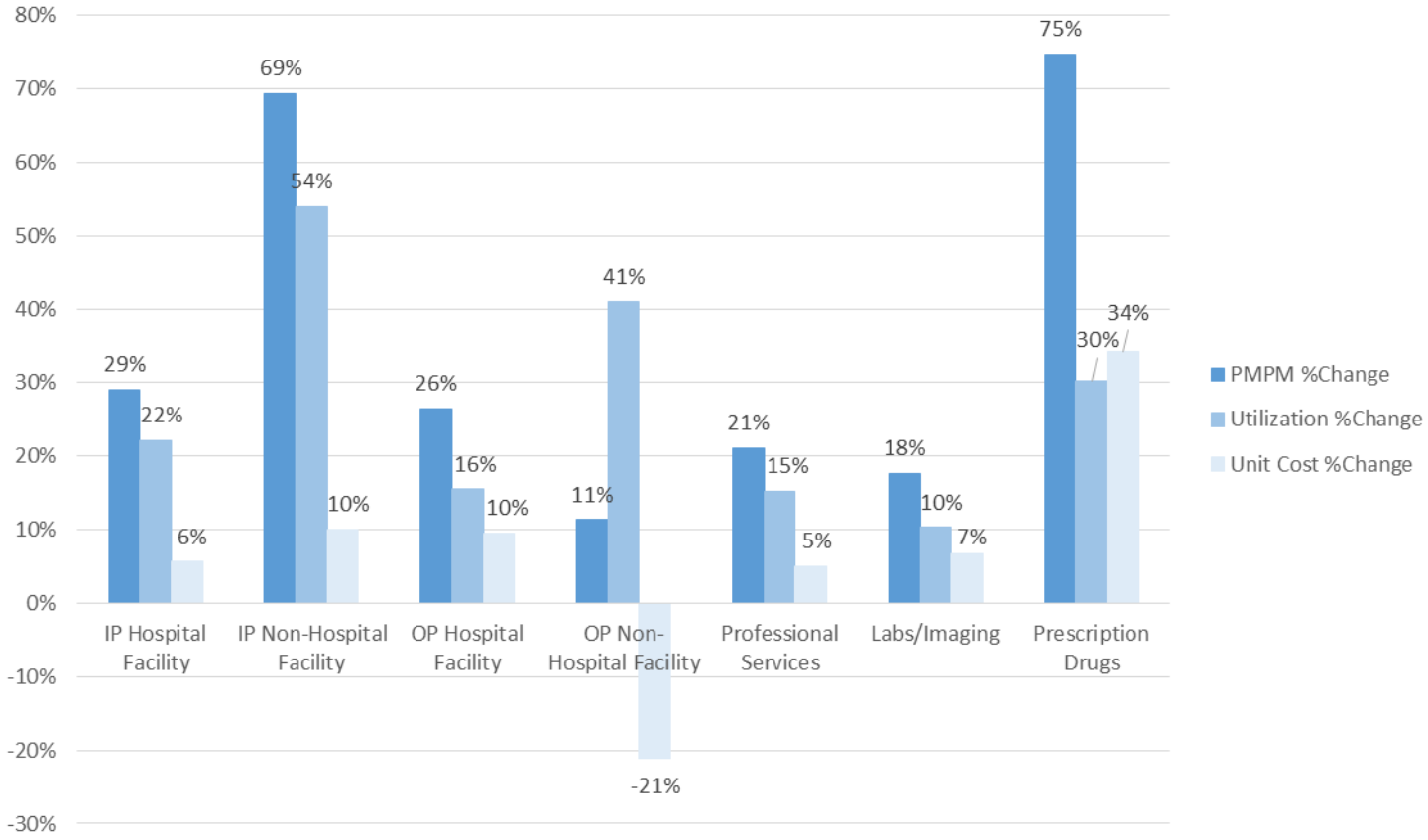

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Exhibit 4. Hospital Inpatient and Outpatient Utilization, Individual Market, 2014 to 2015

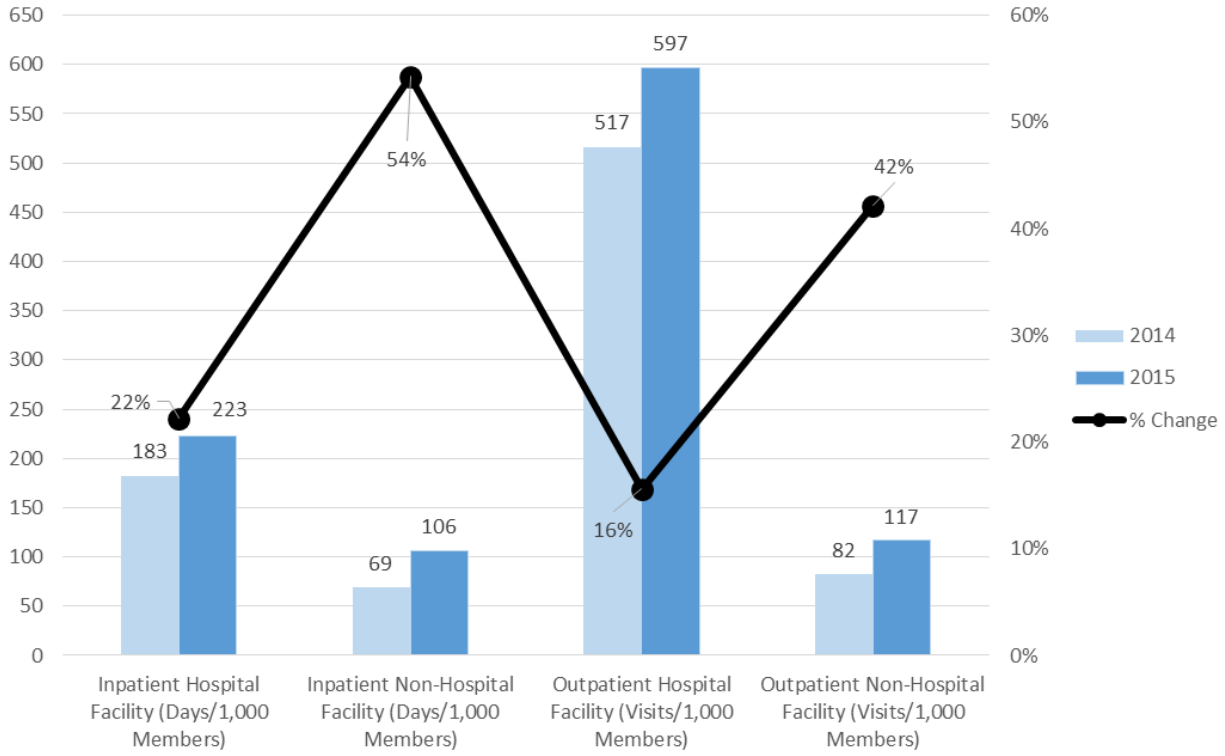
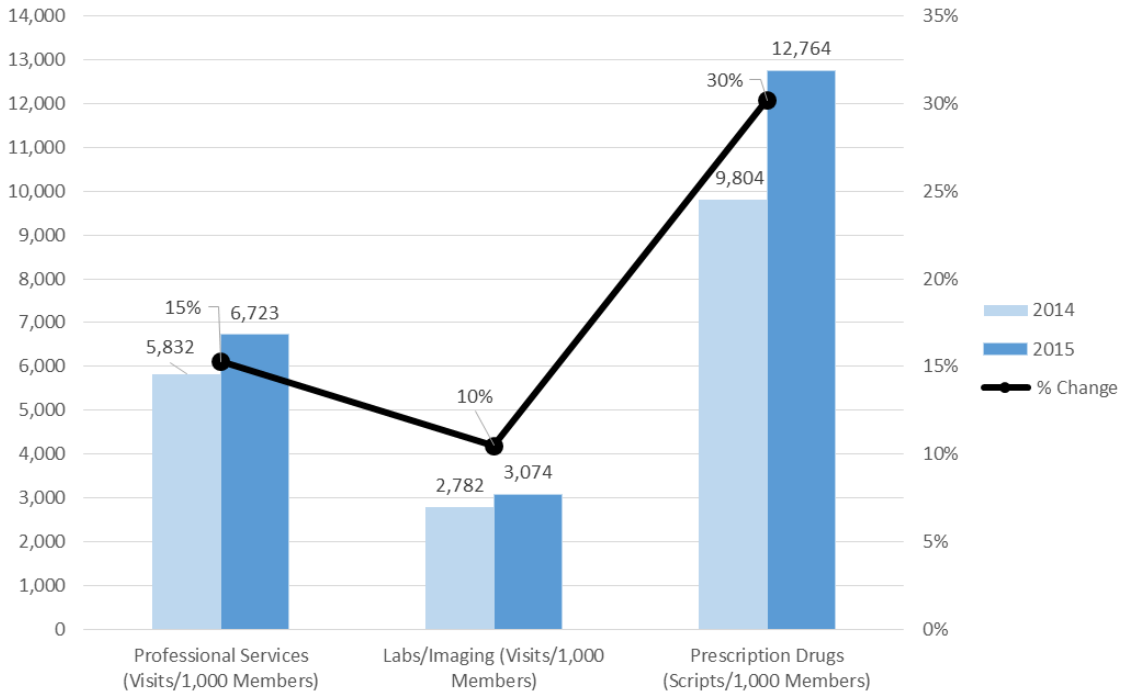


Exhibit 5. Utilization of Professional Services, Labs/Imaging, and Prescription Drugs, Individual Market, 2014 to 2015



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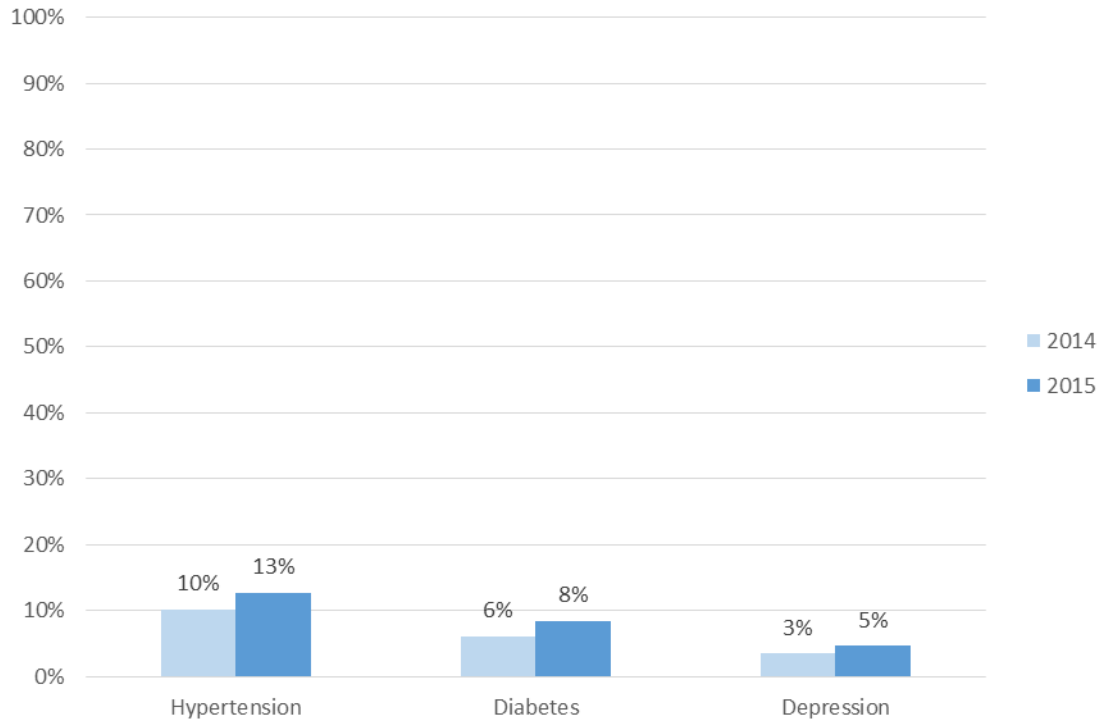
Prevalence of Select Conditions, Individual Market, 2014 and 2015

- From 2014 to 2015, increases occurred in the prevalence of select conditions, including hypertension, diabetes, and depression. (See **Exhibit 6.**)

Exhibit 6. Prevalence of Select Chronic Conditions, Individual Market, **2014 to 2015**



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On-Exchange vs. Off-Exchange (*ACA-Compliant Plans Only*) PMPM Spending, and Utilization, Individual Market, 2015

- Total Members (insureds) as of December 31, 2015, enrolled on the exchange was about 92,000 (45%), compared to about 113,000 (55%) enrolled in off-exchange plans. (See **Exhibit 7.**)
  - The median expenditure risk scores were 0.45 and 0.39 for on-exchange and off-exchange members, respectively, indicating that members enrolled in health plans on the exchange were sicker than those enrolled in off-exchange plans (**Exhibit 7**.), which is reflected in the higher prevalence of select chronic conditions for on-exchange versus off-exchange members. (See **Exhibit 11.)** The 10^{th} and 90^{th} percentile risk scores for on-exchange and off-exchange members are 0.05 to 4.07 and 0.05 to 3.41, respectively**.**
- PMPM spending for all services combined was higher on-exchange than off-exchange, by about 5% in 2015. (See **Exhibit 7.**)
- Out-of-pocket PMPM spending was lower for on-exchange plans than for off-exchange plans, by about 26%. This was expected because health insurance sold on the exchange provides cost-sharing subsidies to those with lower incomes, unlike insurance sold through traditional channels off of the exchange. (See **Exhibit 7**.)
- PMPM spending for most service categories was higher on-exchange than off-exchange, except for outpatient hospital facility services where on-exchange spending was lower than off-exchange spending by about 12%. (See **Exhibit 8.**)
- For all service categories except outpatient hospital facility services, higher PMPM spending for members on the exchange versus those off of the exchange reflects higher on-exchange utilization compared to off-exchange utilization. (See **Exhibits 9. and 10**.)
  - Utilization for all service categories except outpatient hospital facility services is higher for on-exchange members than for off-exchange members, by varying degrees:
    - Inpatient hospital facility utilization: 22%
    - Inpatient non-hospital facility utilization: 39%
    - Outpatient hospital facility utilization: - 3%
    - Outpatient non-hospital facility utilization: 13%
    - Utilization of professional services: 1%
    - Utilization of labs/imaging services: 10%
    - Utilization of prescription drugs: 20%

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Exhibit 7. On-Exchange vs. Off-Exchange (*ACA-Compliant Plans Only*) Spending Among Maryland's Younger-Than-65 Population, Privately Insured, Individual Market, 2015

	On-Exchange	Off-Exchange	Difference On v. Off	% Difference On v. Off	Total [1]
Members					
Total members as of December 31	91,951	112,683	-20,732	-18%	204,634
Distribution	45%	55%			100%
Member Months					
Total member months	1,100,312	1,390,651	-290,339	-21%	2,490,963
Distribution	44%	56%			100%
Spending					
PMPM spending, all services combined	$445	$423	$22	5%	$433
PMPM OOP, all services combined	$90	$121	-$31	-26%	$107
PMPM OOP, Medical Only	$74	$102	-$28	-27%	$90
PMPM OOP, Prescription Drugs	$17	$19	-$2	-11%	$18
PMPM Spending By Service Category					
Inpatient Hospital Facility	$75	$62	$13	21%	$68
Inpatient Non-Hospital Facility	$1.0	$1.0	$0	0%	$1.0
Outpatient Hospital Facility	$85	$97	-$12	-12%	$92
Outpatient Non-Hospital Facility	$10	$10	$0	0%	$10
Professional Services	$119	$118	$1	1%	$118
Labs/Imaging	$41	$40	$1	2%	$40
SubTotal (Medical Only)	**$331**	**$328**	**$3**	**1%**	**$329**
Prescription Drugs	$114	$95	$19	20%	$103
Risk Score [2]					**Difference**
Median expenditure risk score (FY & PY)	0.45	0.39	0.06	n/a	0.42

Notes: (1) This exhibit includes Individual market **ACA-compliant plans only**. On the other hand, Exhibit 1 includes both ACA-compliant and noncompliant plans. As such, some figures in the exhibits differ.

(2) Median expenditure risk score (on and off exchange combined) is higher than the risk score for ACA-compliant and noncompliant plans combined (Exhibit 1) because ACA-compliant plans attract sicker members who need more care while healthier members are enrolled in the noncompliant plans. The 10th and 90th percentile risk scores for on-exchange and off-exchange combined are 0.05 and 3.69, respectively.

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

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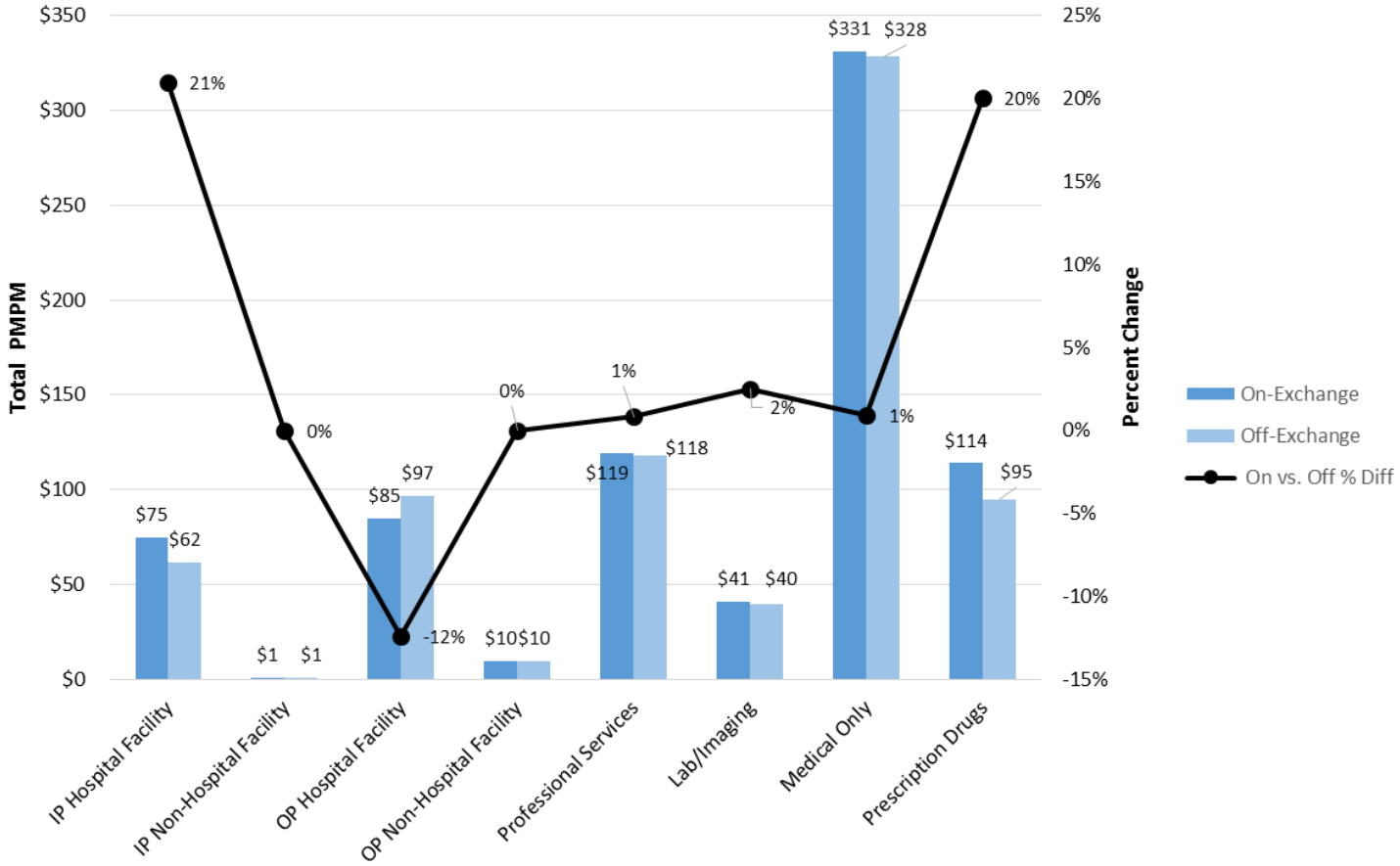
Exhibit 8. On-Exchange vs. Off-Exchange (***ACA-Compliant Only***) Total PMPM and Differences in PMPM by Service Category, Individual Market, **2015**



Note: Some calculations in the above exhibit might not be exact due to rounding

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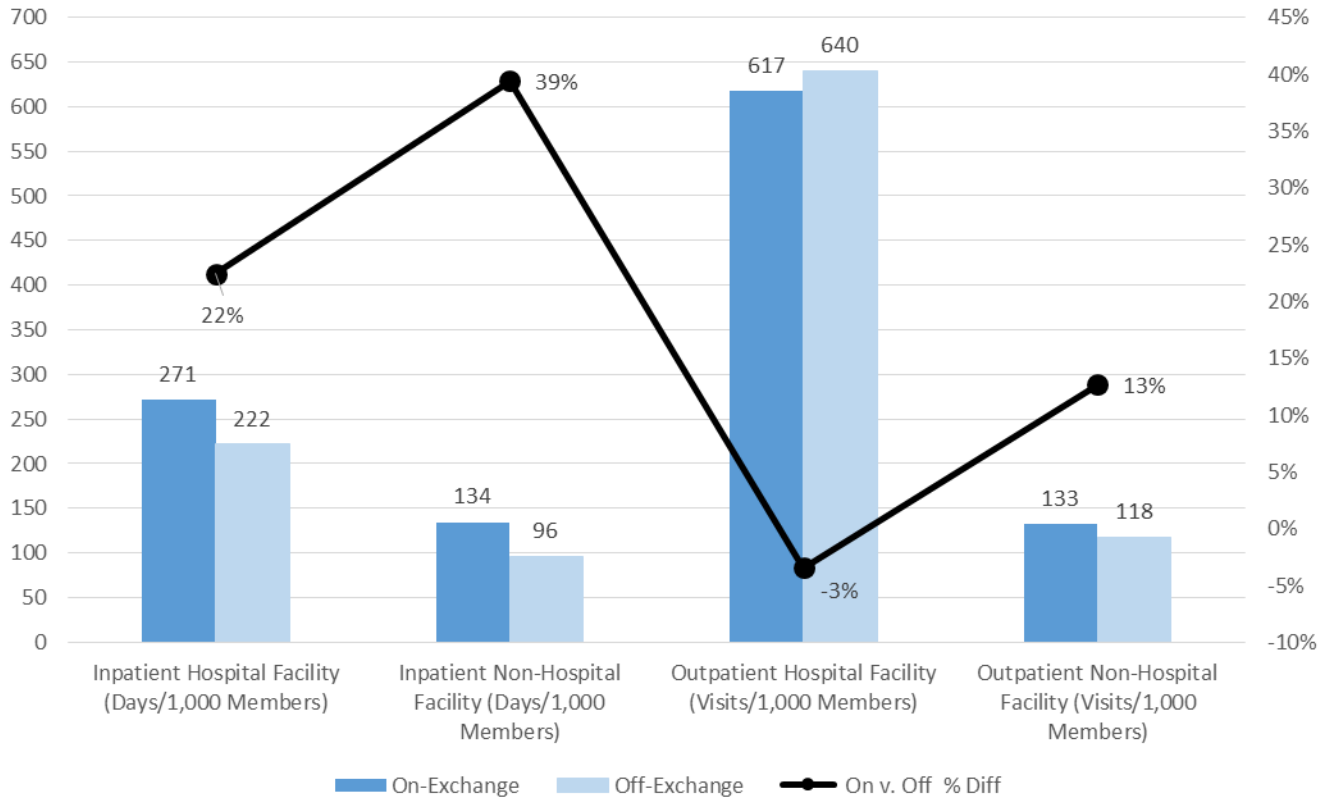
Exhibit 9. On-Exchange vs. Off Exchange (*ACA-Compliant Pans Only*) Hospital Inpatient and Outpatient Utilization, Individual Market, 2015



Note: Some calculations in the above exhibit might not be exact due to rounding

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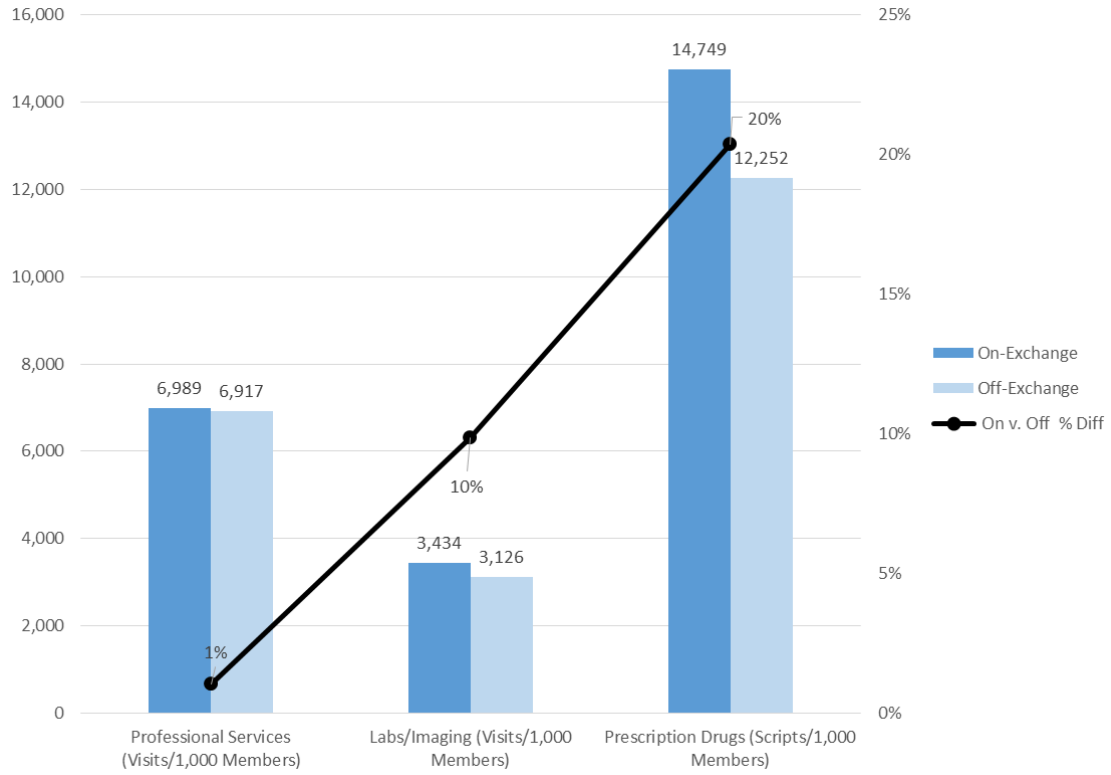
Exhibit 10. On-Exchange vs. Off Exchange (*ACA-Compliant Plans Only*) Utilization of Professional Services, Labs/Imaging, and Prescription Drugs, Individual Market, 2015



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

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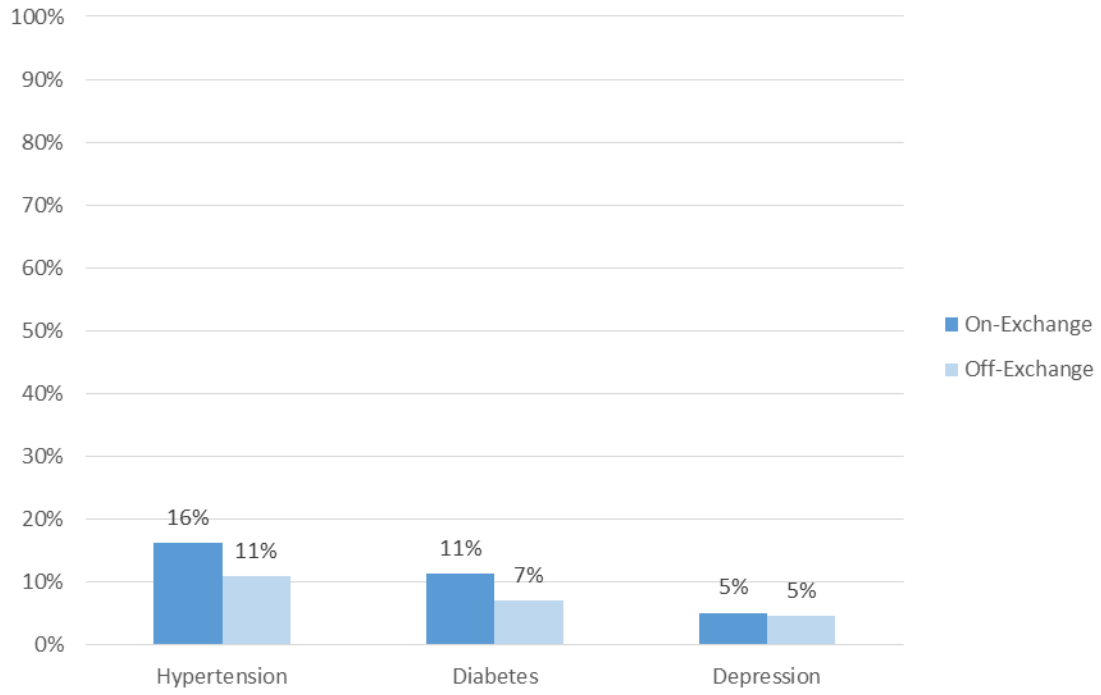
On-Exchange vs. Off-Exchange (*ACA-Compliant Plans Only*): Prevalence of Select Conditions, Individual Market, 2015

- The prevalence of select conditions, including hypertension, diabetes, and depression are higher for on-exchange members than for off-exchange members. (See **Exhibit 11.**)

Exhibit 11. On v. Off Exchange (***ACA-Compliant Plans Only***): Prevalence of Select Chronic Conditions, Individual Market, **2015**



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PMPM Spending by Age and Region, Individual Market, 2014 and 2015

- PMPM spending increased between 2014 and 2015 across all age bands, as shown in **Exhibit 12**.
- PMPM spending increased with age, as expected, with members under 19 years of age having the lowest PMPM spending between 2014 and 2015, and members between 55 and 64 years of age having the highest PMPM spending.
- PMPM spending in the individual market increased between 2014 and 2015 across all Maryland regions. The DC Metro region had the largest increase (35%) in PMPM spending, while the Eastern Shore/Southern Maryland region had the smallest increase (27%), as shown in **Exhibit 13.** As a result, the DC Metro region had the highest PMPM in 2015, supplanting the Eastern Shore/Southern Maryland region, which ranked highest in 2014.

Exhibit 12. PMPM Spending by the Age of Member, Individual Market**, 2014 to 2015**

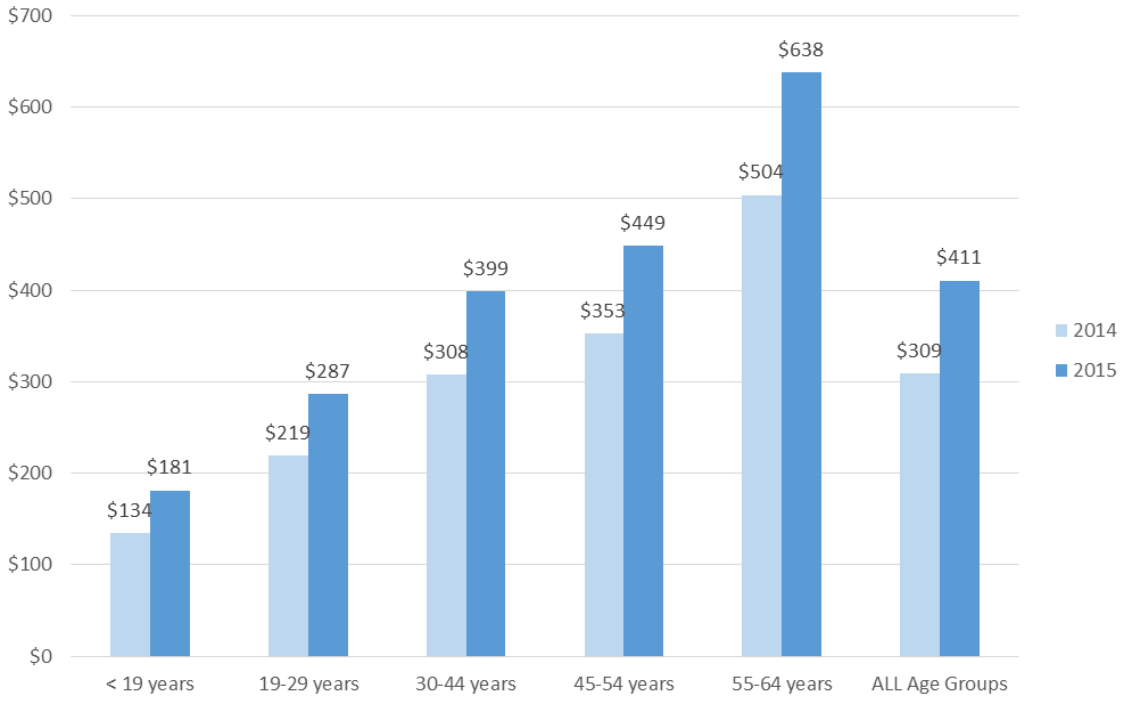

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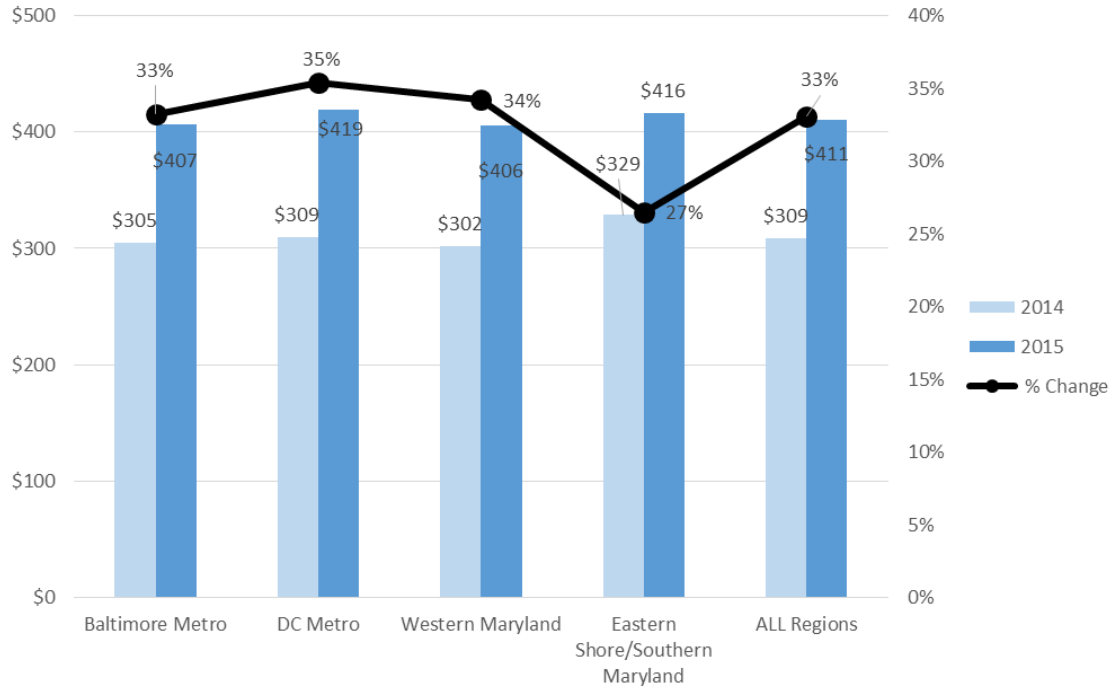
Exhibit 13. PMPM Spending by Region of Members, Individual Market, **2014 to 2015**



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

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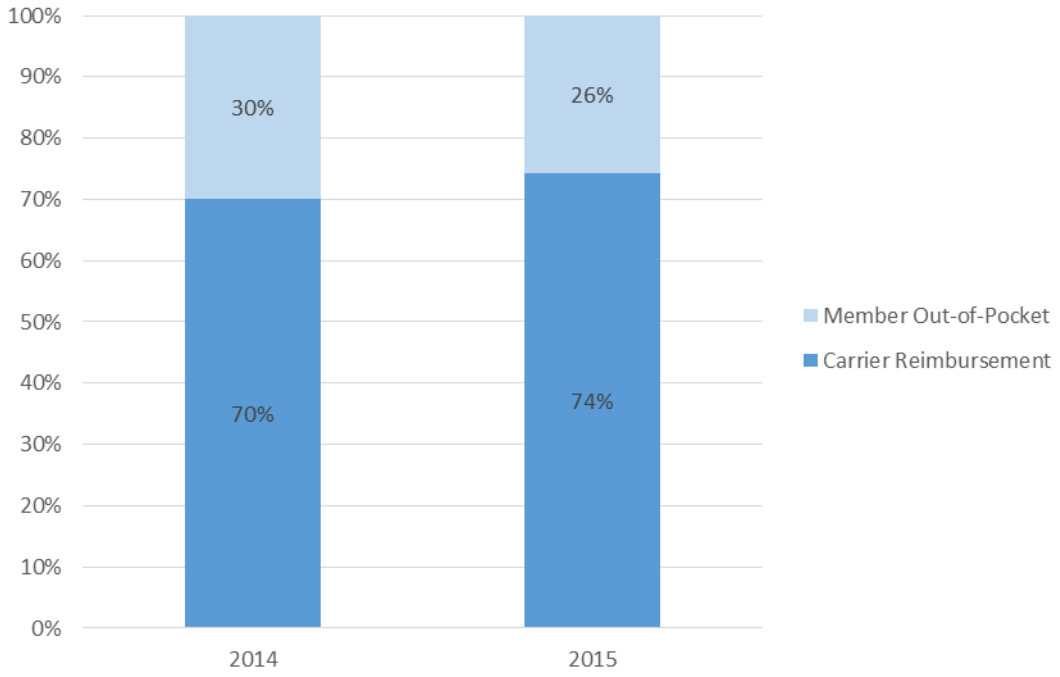
Member Out-of-Pocket (OOP) Share vs. Carrier Share of Total Spending, Individual Market, 2014 and 2015

- The PMPM portion paid by health insurance carriers (overall spending PMPM less OOP PMPM) increased by about 41% between 2014 and 2015; however, the OOP PMPM (all services combined) for members increased by about 14%. (See **Exhibit 1.**) This difference resulted in a decrease (from 30% to 26%) in the members' OOP share of total spending in 2015. (See **Exhibit 14**.) However, the OOP share of spending remains the highest in the individual market compared with other markets. (See **Exhibit 25**.)

Exhibit 14. Member Out-of-Pocket Share vs. Carrier Share of Total Spending, Individual Market, **2014 to 2015**



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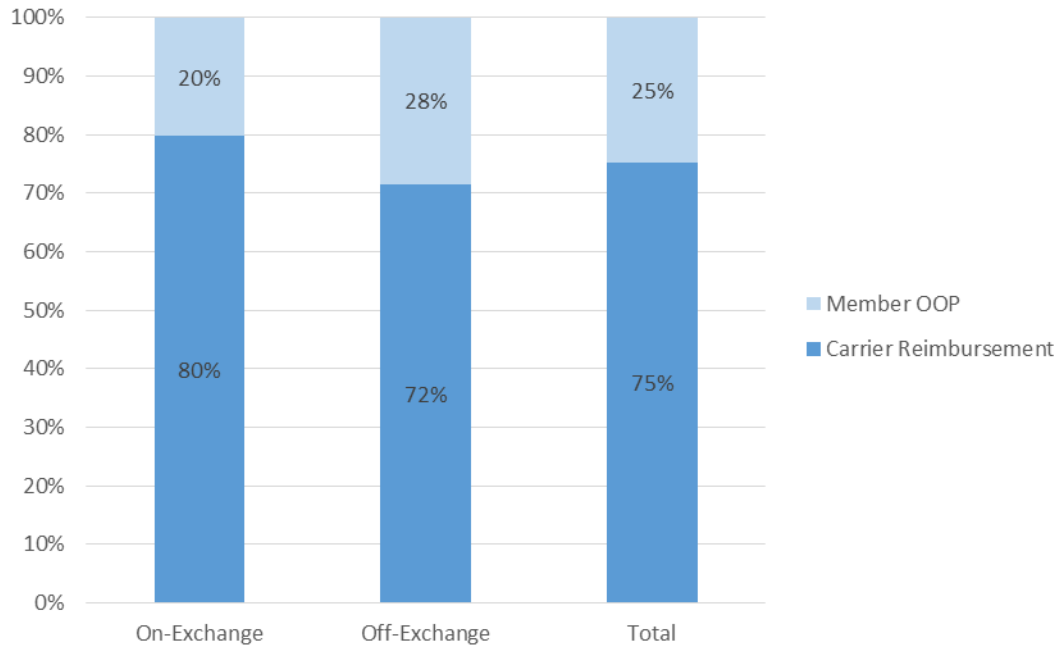
On-Exchange vs. Off-Exchange (*ACA Compliant Plan Only*): Member Out-of-Pocket (OOP) Share vs. Carrier Share of Total Spending, Individual Market, 2015

- The OOP portion of PMPM spending (all services combined) for members on the exchange is lower compared to off-exchange members, by about 26% (**Exhibit 7.**), due to cost-sharing subsidies available on the exchange for lower income members.
- Consequently, members' OOP share of total spending is lower for on-exchange plans (20%) than for off-exchange plans (28%) in 2015. Because insurers provide the cost-sharing subsidies available on the exchange, the portion of PMPM spending paid by these insurers (overall spending PMPM less OOP PMPM) is higher for on-exchange plans than for off-exchange plans (80% versus 72%) in 2015. (See **Exhibit 15**.)

Exhibit 15. On-Exchange vs. Off-Exchange (***ACA-Compliant Plans Only***): Member OOP Share vs. Carrier Share of Total Spending, Individual Market, **2015**



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PMPM Spending and Unit Costs in 2015: Market Comparisons

- PMPM spending (all services combined) for the small and large employer markets increased by 7% between 2014 and 2015, compared to a 33% increase in the individual market. (See **Exhibits 16, 17, and 18.**)
- Consequently, the individual market, which historically had the lowest PMPM spending across all markets, has the highest PMPM spending in 2015. (See **Exhibits 16, 17, and 18.**)
- Although members' out-of-pocket (OOP) PMPM spending (all services combined) increased in 2015 across all markets, the growth in OOP spending in the large employer market (5%) was less than half of the increases in the individual (14%) and small employer (13%) markets. Higher OOP PMPM spending increases in the individual and small employer markets were expected due to the greater prevalence of high deductible plans—typical for ACA-compliant plans purchased both on and off the exchange in these markets, relative to the large employer market. (See **Exhibit 18**.)
- For all markets combined, members' total OOP PMPM spending for prescription drugs was stable from 2014 to 2015, increasing by only $1 (from $15 in 2014 to $16 in 2015). (See **Exhibits 16 and 17.)** The stability in member OOP PMPM spending for prescription drugs might be partly because brand manufacturer "*buy-downs*" have increased steadily from 2011 through 2015 to offset increasing member cost exposure. As member drug costs have grown from year to year, manufacturers have increased their "*buy-downs,*" through coupons and other member cost savings programs, offsetting drug costs such that final member OOP PMPM spending remains fairly stable. (See **Exhibit A5** in Appendix A.)[2]
- Unit costs increased for most service categories in 2015, except for inpatient non-hospital and outpatient non-hospital facility services, where the unit cost declined across all markets in 2015. (See **Exhibits 19 and 20**.)

[2] http://www.imshealth.com/en/thought-leadership/quintilesims-institute/reports/medicines-use-and-spending-in-the-us-a-review-of-2015-and-outlook-to-2020.

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Exhibit 16. Spending Among Maryland's Younger-Than-65 Population, **2015**

	Market			
	Total	Large Employers	Small Employers	Individual
Members				
Total members as of December 31	1,229,516	772,714	213,075	243,727
Member Months				
Total member months	14,993,456	9,361,152	2,634,609	2,997,695
Spending				
PMPM spending, all services combined	$376	$365	$368	$411
PMPM OOP, all services combined	$71	$55	$87	$105
PMPM OOP, Medical Only	$55	$42	$66	$87
PMPM OOP, Prescription Drugs	$16	$13	$22	$18
PMPM Spending By Service Category				
Inpatient Hospital Facility	$61	$63	$55	$62
Inpatient Non-Hospital Facility	$0.5	$0.5	$0.4	$0.8
Outpatient Hospital Facility	$71	$68	$67	$86
Outpatient Non-Hospital Facility	$8	$8	$8	$10
Professional Services	$109	$107	$108	$115
Labs/Imaging	$32	$29	$32	$39
SubTotal (Medical Only)	$282	$276	$270	$313
Prescription Drugs[1]	$94	$90	$98	$98

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

(2) FEHBP members are included in the large employer market.

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

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Exhibit 17. Spending Among Maryland's Younger-Than-65 Population, **2014**

	Market			
	Total	Large Employers	Small Employers	Individual
Members				
Total members as of December 31	1,253,341	788,597	239,383	225,361
Member Months				
Total member months	15,284,675	9,327,629	3,355,711	2,601,335
Spending				
PMPM spending, all services combined	$335	$340	$344	$309
PMPM OOP, all services combined	$65	$52	$77	$92
PMPM OOP, Medical Only	$50	$40	$58	$78
PMPM OOP, Prescription Drugs	$15	$12	$19	$15
PMPM Spending By Service Category				
Inpatient Hospital Facility	$53	$55	$53	$48
Inpatient Non-Hospital Facility	$0.4	$0.4	$0.4	$0.5
Outpatient Hospital Facility	$64	$63	$63	$68
Outpatient Non-Hospital Facility	$9	$9	$8	$9
Professional Services	$101	$101	$103	$95
Labs/Imaging	$29	$28	$30	$33
SubTotal (Medical Only)	$256	$257	$257	$253
Prescription Drugs[1]	$79	$83	$87	$56

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

(2) FEHBP members are included in the large employer market.

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

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Exhibit 18. Percentage Changes in Spending Among Maryland's Younger-Than-65 Population, **2015 over 2014**

	Market			
	Total	Large Employers	Small Employers	Individual
Members				
Total members as of December 31	-2%	-2%	-11%	8%
Member Months				
Total member months	-2%	0%	-21%	15%
Spending				
PMPM spending, all services combined	12%	7%	7%	33%
PMPM OOP, all services combined	10%	5%	13%	14%
PMPM OOP, Medical Only	10%	5%	13%	12%
PMPM OOP, Prescription Drugs	10%	5%	15%	20%
PMPM Spending By Service Category				
Inpatient Hospital Facility	16%	15%	5%	29%
Inpatient Non-Hospital Facility	24%	12%	5%	69%
Outpatient Hospital Facility	11%	7%	7%	26%
Outpatient Non-Hospital Facility	-7%	-13%	-7%	11%
Professional Services	8%	6%	4%	21%
Labs/Imaging	9%	6%	5%	18%
SubTotal (Medical Only)	10%	7%	5%	23%
Prescription Drugs[1]	18%	8%	13%	75%

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

(2) FEHBP members are included in the large employer market.

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

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Exhibit 19. Unit Cost by Market and Service Category, **2015**

Service Category	Market				% Change (2015 over 2014)			
	Total	Large Employers	Small Employers	Individual	Total	Large Employers	Small Employers	Individual
Inpatient Hospital Facility (Cost per Inpatient Discharge Day)	$3,154	$3,053	$3,376	$3,333	3%	4%	1%	6%
Inpatient Non-Hospital Facility (Cost per Inpatient Discharge Day)	$75	$66	$83	$92	-8%	-15%	-9%	10%
Outpatient Hospital Facility (Cost per Visit)	$1,406	$1,283	$1,513	$1,733	6%	3%	6%	10%
Outpatient Non-Hospital Facility (Cost per Visit)	$1,045	$1,095	$951	$996	-18%	-19%	-15%	-21%
Professional Services (Cost per Visit)	$195	$191	$199	$205	3%	2%	3%	5%
Labs/Imaging (Cost per Visit)	$133	$127	$132	$151	3%	1%	3%	8%
Prescription Drugs[1] (Cost per Script)	$95	$99	$93	$92	15%	12%	13%	34%

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

(2) FEHBP members are included in the large employer market.

(3) Discharge days are the number of days spent in the hospital for each inpatient who was discharged during 2015, regardless of when the patient was admitted.

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

Exhibit 20. Unit Cost by Market and Service Category, **2014**

Service Category	Market			
	Total	Large Employers	Small Employers	Individual
Inpatient Hospital Facility (Cost per Discharge Day)	$3,054	$2,942	$3,346	$3,155
Inpatient Non-Hospital Facility (Cost per Discharge Day)	$82	$78	$91	$84
Outpatient Hospital Facility (Cost per Visit)	$1,330	$1,242	$1,424	$1,578
Outpatient Non-Hospital Facility (Cost per Visit)	$1,278	$1,344	$1,120	$1,261
Professional Services (Cost per Visit)	$189	$186	$194	$195
Labs/Imaging (Cost per Visit)	$129	$126	$128	$140
Prescription Drugs (Cost per Script)[1]	$83	$88	$82	$69

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

(2) FEHBP members are included in the large employer market.

(3) Discharge days are the number of days spent in the hospital for each inpatient who was discharged during 2014, regardless of when the patient was admitted.

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Utilization of Services in 2015: Market Comparisons

- Hospital inpatient and outpatient service use are highest in the large employer market and lowest in the small employer market. (See **Exhibit 21.**)
- Use of professional services is about the same in the individual and large employer markets and slightly lower in the small employer market. (See **Exhibit 22.**)
- Utilization of services for labs/imaging is highest in the individual market. The utilization is about 11% higher than the large employer market and about 7% higher than in the small employer market. (See **Exhibit 22.**)
- Prescription drug utilization is about the same in the individual and small employer markets but lower in the large employer market, by about 14%. (See **Exhibit 22.**)

Exhibit 21. Inpatient and Outpatient Utilization by Coverage Type, **2015**

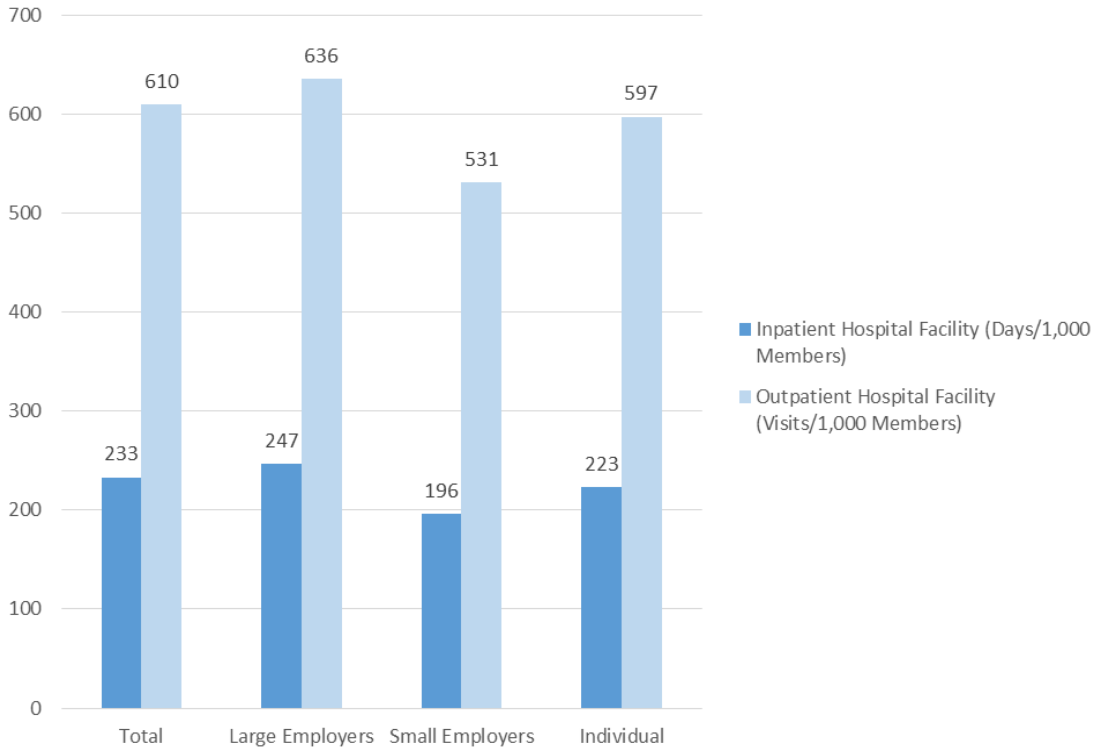

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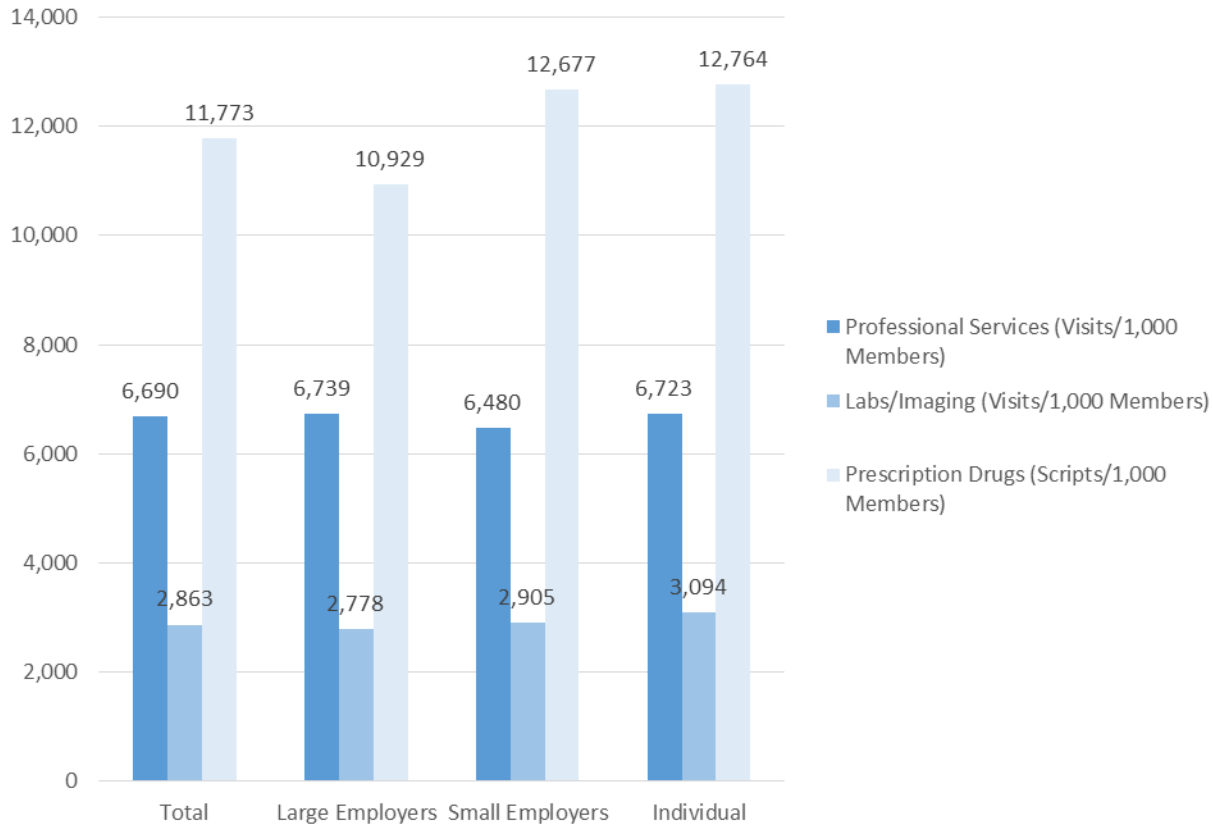
Exhibit 22. Utilization of Professional Services, Labs/Imaging, Prescription Drugs: Market Comparisons, **2015**



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PMPM Spending by Age and Region in 2015: Market Comparisons

- The individual market has the highest PMPM spending for age groups 19 - 29 and 30 - 44 across all markets. On the other hand, the individual market also has the lowest PMPM spending for each of the remaining age groups: < 19, 45 - 54, and 55 -64 across all markets. (See **Exhibit 23.**)
- Within each market, PMPM spending increased with age, as expected.
- The PMPM spending variation across regions was relatively small, with maximum regional variation in PMPM spending being about 2% in the large employer market, 3% in the individual market, and 4% in the small employer market. (See **Exhibit 24.**)
- In the individual market, the DC Metro region had the highest PMPM spending while Western Maryland had the lowest PMPM spending. In the small employer market, the DC Metro region had the highest PMPM spending while the Eastern Shore/Southern Maryland region had the lowest. In the large employer market, where there is less spending variation, the Eastern Shore/Southern Maryland region had the highest PMPM spending and the Baltimore Metro region had the lowest. (See **Exhibit 24.**)

Exhibit 23. PMPM Spending by Age and Market, **2015**

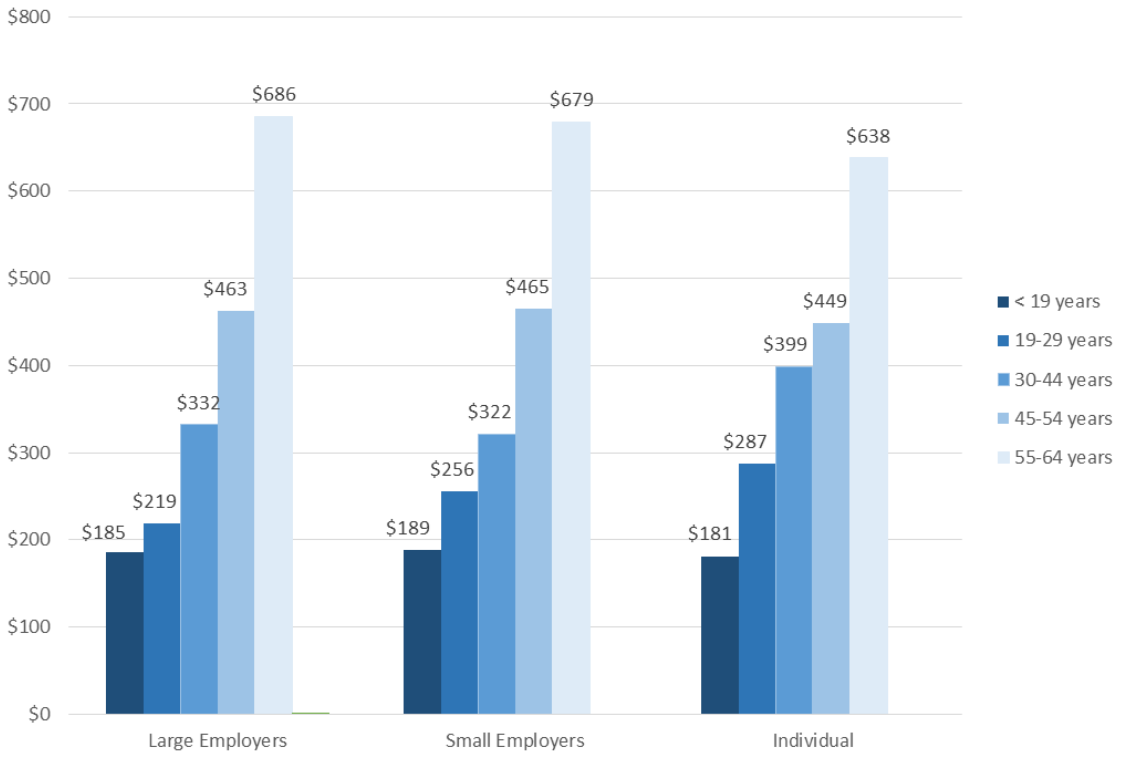

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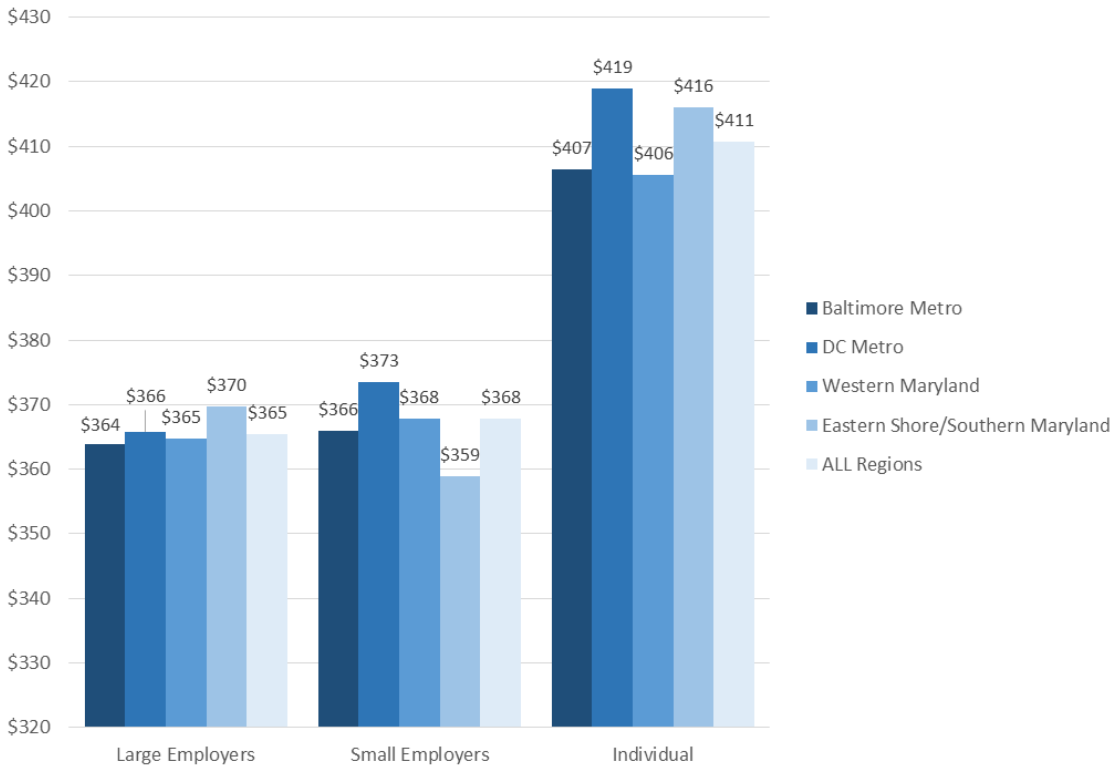
Exhibit 24. PMPM Spending by Region and Market, **2015**



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Member Out-of-Pocket (OOP) Share and Carrier Share of Total Spending in 2015: Market Comparisons

- Despite the reduction in the member total out-of-pocket (OOP) share that occurred in the individual market (**Exhibit 14**), the member OOP share in the individual market continues to be the highest across all markets, at 26%. (See **Exhibit 25**). Member OOP share is slightly lower in the small employer market and lowest (16%) in the large employer market. (See **Exhibit 25.**)
- For medical services only, the member OOP share is about the same (29%) for the individual and small employer markets and lower in the large employer market. The higher OOP share in the individual and small employer markets was expected due to the greater prevalence of high deductible plans in these markets, relative to the large employer market. (See **Exhibit 26.**)
- Across all markets, the individual market had the highest member OOP share for prescription drugs (21%), and the large employer market had the lowest member OOP share (10%). (See **Exhibit 26.**)

Exhibit 25. Member OOP and Carrier Share of Total Spending by Market, **2015**

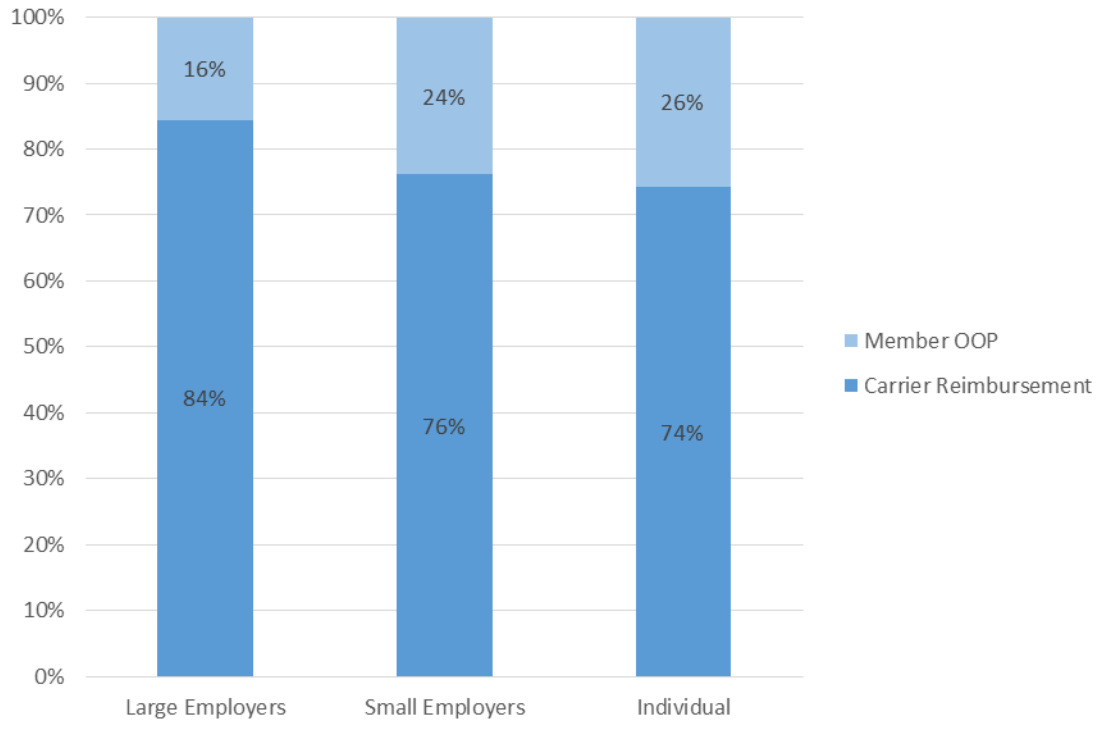

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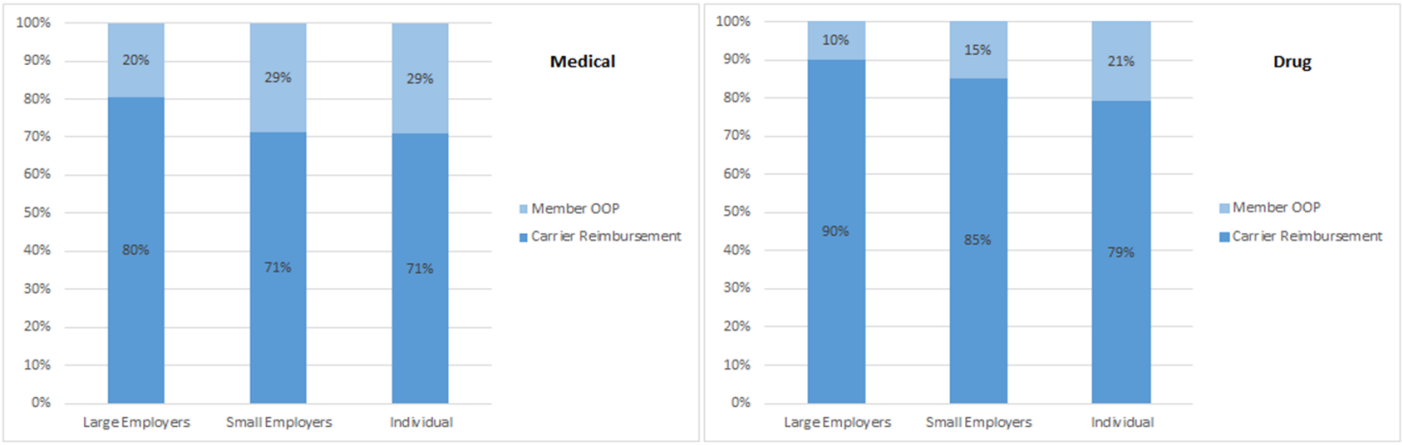
Exhibit 26. Medical and Prescription Drugs: Member OOP and Carrier Share of Total Spending by Market, **2015**



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Appendix A

Exhibit A1: PMPM Distribution by Service Category, Individual Market, **2015**

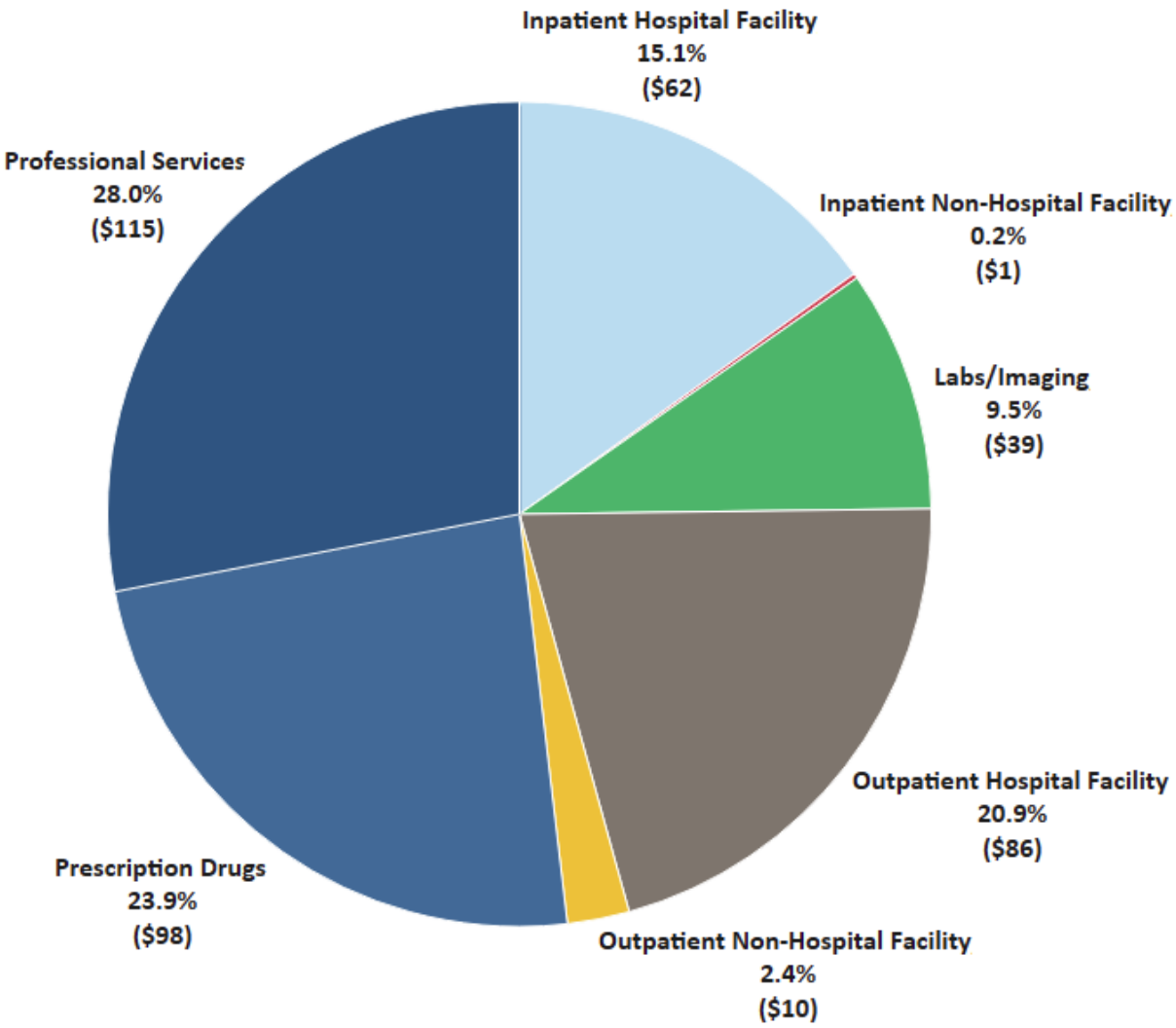

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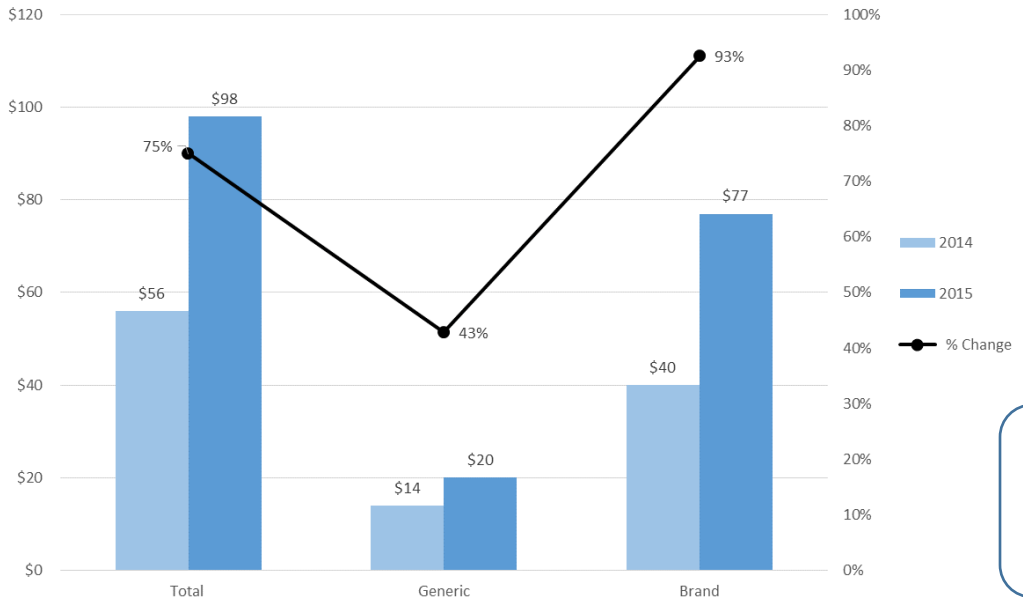
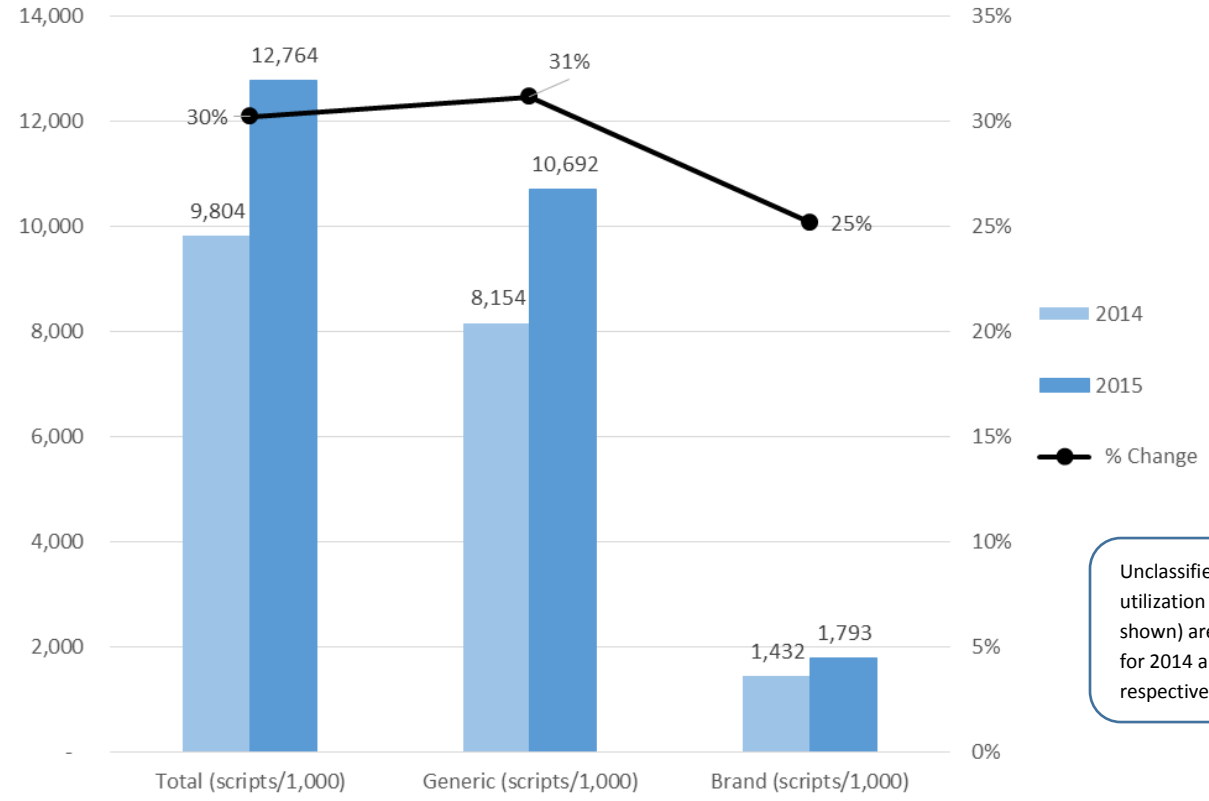
Exhibit A2: Prescription Drug PMPM Changes by Drug Type, Individual Market, **2014 to 2015**



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

Exhibit A3: Prescription Drug Utilization Changes by Drug Type, Individual Market, **2014 to 2015**



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

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Exhibit A4: Prescription Drug Unit Cost Changes by Drug Type, Individual Market, **2014 to 2015**

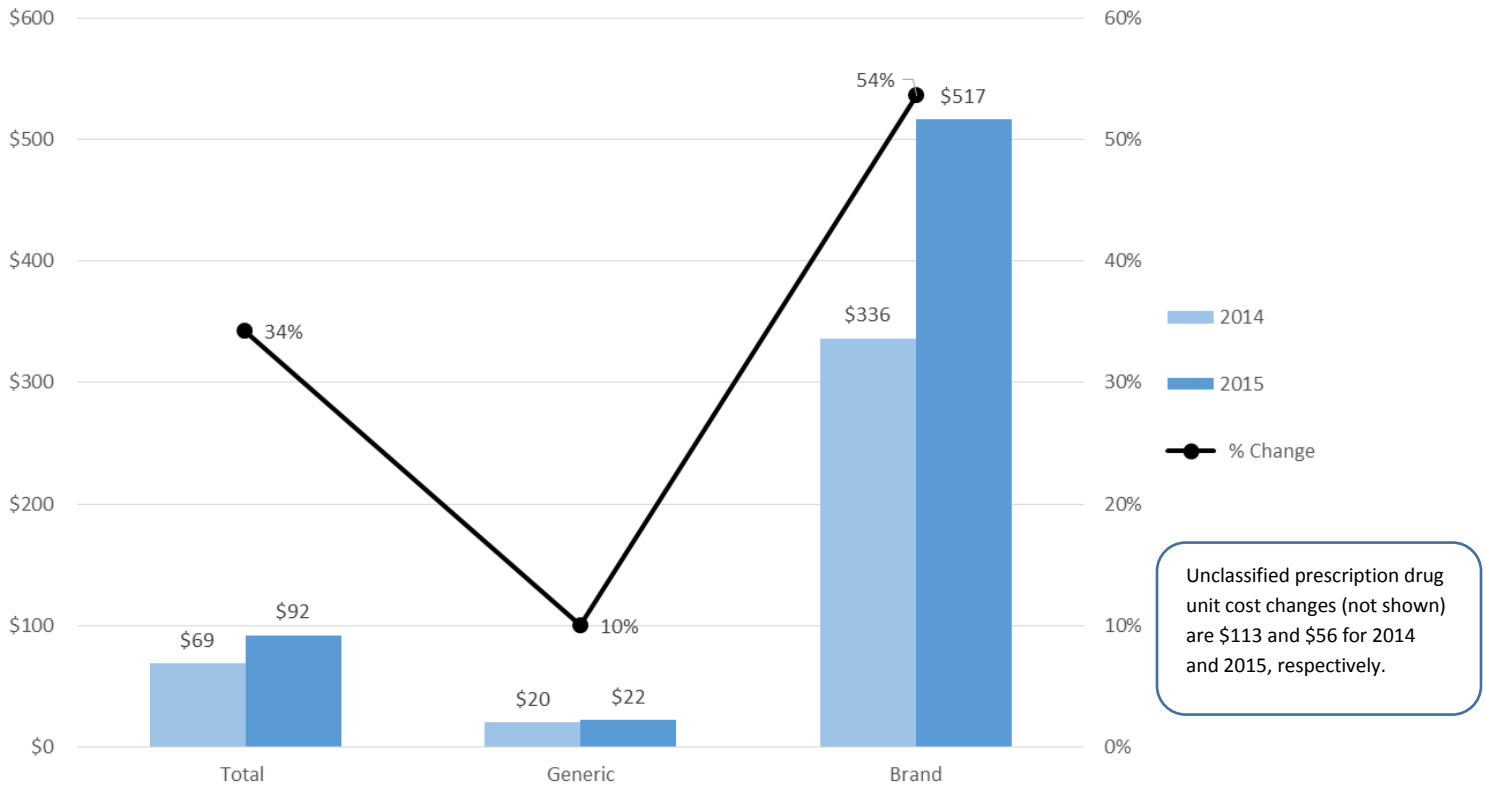

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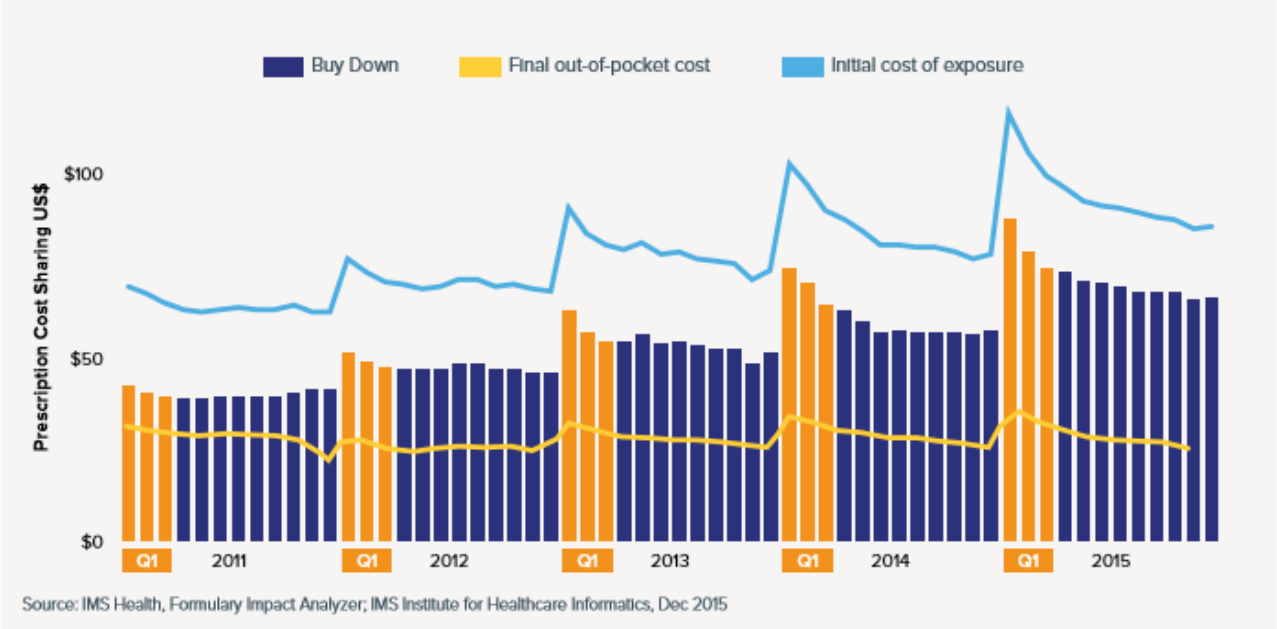
Exhibit A5: Patient Prescription Drug Cost-Sharing and Manufacturer "*Buy-Down*" (Commercial, Brands)[3]



- As patient cost exposure has grown year over year, manufacturers have increased their "*buy-downs.*" through coupons and other patient savings programs, offsetting costs such that final patient out-of-pocket share remains fairly stable. [4]
- Manufacturers' *buy-downs* are especially high in the first quarter of a calendar year, when some patients are in the deductible phase of coverage.[5]
- Manufacturer *buy-downs*, often in the form of coupons or vouchers, offload a significant amount of patient cost in certain therapy areas such as diabetes, respiratory, dermatology, autoimmune, and multiple sclerosis.[6]

4 5 6 7 http://www.imshealth.com/en/thought-leadership/quintilesims-institute/reports/medicines-use-and-spending-in-the-us-a-review-of-2015-and-outlook-to-2020

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Appendix B

METHODS

DATA SOURCES

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

MARKETS

Large Employer (fully insured): The large employer market refers to businesses with more than 50 full-time employees. For the first time, this report and this market now include the Federal Employees Health Benefits Program (FEHBP) data. All FEHBP medical data are included in the report. However, for prescription drugs, these data are included to the extent available.

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.

MEASURES

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 2015 and paid through March of 2016 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. We introduced the concept of PMPM for the first time last year 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, it was decided this year to use discharge days per 1,000 which is more widely used by researchers.

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 respectively), regardless of when the patient was admitted (*discharge basis*).

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Total Discharges are the number of inpatients released from the hospital during 2014 and 2015, respectively.[7]
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.

Notes:
Prescriptions have been "normalized" or adjusted so that they are counted regarding a 30-day supply of medication. Therefore, each 90-day prescription is counted as three 30-day prescriptions.
Prescription drugs member months are for those pharmacy members who also have medical benefits throughout the experience period (2014 and 2015, respectively).
For outpatient visits, professional services visits, and labs/imaging visits, all visits in each service category that occur on the same day are counted as one visit.
Expenditure Risk Score: The expenditure risk score is based on the Johns Hopkins Adjusted Clinical Groups (ACG) System. This is the new software used to calculate the expenditure risk score for 2015. In very simple terms, a patient file (identifying eligible individuals) is merged with diagnoses and pharmacy codes to produce a series of risk factors and risk scores. Last year's expenditure risk score was based on the Chronic Illness and Disability Payment System (CDPS), developed by researchers at the University of California, San Diego.

Acknowledgements

This study 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, and Kenneth Yeates-Trotman. Questions about the study 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

[7] http://www.statistics.health.pa.gov/StatisticalResources/UnderstandingHealthStats/ToolsoftheTrade/Documents/Average_Length_of_Stay_in_Hospitals.pdf

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