

# SPENDING AND USE AMONG MARYLAND'S PRIVATELY FULLY INSURED



## Highlights: Spending and Use In Maryland

- Individual Market
  - Total members (insureds) as of December 31, 2014, in the individual market increased by about 26 percent.
  - Per member per month (PMPM) spending in the individual market for all services increased between 2013 and 2014 by about 31 percent, mainly due to increased use of services. Utilization per 1,000 members increased for all service categories, ranging from 16 percent for professional services to 51 percent for prescription drugs.
  - In spite of increases in PMPM spending in the individual market, this market continued to have the lowest PMPM spending across all markets; however, the PMPM portion for insurers increased by 37 percent, while the out-of-pocket (OOP) PMPM for members increased by 19 percent. This difference resulted in a decrease (29 percent) in the members' OOP share of total spending in 2014. However, OOP spending remained the highest in the individual market compared with the other markets (small employer and large employer).
  - The median expenditure risk score increased from 0.19 to 0.24 between 2013 and 2014, indicating that new members entering this market in 2014 were likely sicker, as expected, needing more care, which increased PMPM spending.
- Small Employer and Large Employer Markets
  - PMPM spending for all services combined remained unchanged between 2013 and 2014 for large employers, but declined for small employers.
  - PMPM spending for inpatient services decreased in both the small employer and the large employer markets, but increased in the individual market.
- Across Markets
  - Unit costs for all service categories increased in 2014, except for inpatient facility services,<sup>1</sup> in which unit costs declined across all markets in 2014. This decrease in unit costs for inpatient facility services likely resulted from the State's new hospital global budget program initiated in 2014.<sup>2</sup>

<sup>1</sup> Inpatient facility services include both short-term and long-term inpatient stays (e.g., acute, non-acute, and skilled nursing facilities).

<sup>2</sup> Maryland's Global Hospital Budgets—Preliminary Results from an All-Payer Model. Patel A, Rajkumar R, Colmers JM, Kinzer D, Conway PH, Sharfstein JM. *N Engl J Med* 2015 Nov 12;373:1899-1901. doi: 10.1056/NEJMp1508037.

## BACKGROUND

This Spotlight examines health care spending and utilization patterns for Maryland residents insured through the individual, small employer, and large employer markets. The analysis relies on 2013 and 2014 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 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 insurance market.

Given the impact of the ACA, the focus of this year's Spotlight is the individual market. Prior to 2014, the individual insurance market in Maryland, as in most other states, was medically underwritten. In 2014, the new 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 reductions that reduce out-of-pocket costs, such as deductibles and annual maximums, are capped at 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 that for 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. MHIP enrollees were encouraged to enroll in plans in the individual market through the insurance exchange. In many instances, the new coverage was available with more generous subsidies than were previously offered through MHIP. Some individuals covered under MHIP enrolled in the Medicaid program, which was expanded to cover families with incomes of less than 138 percent of the FPL. MHIP enrollment, which stood at more than 21,000 lives at the end of 2013, declined to about 8,300 lives by the end of 2014. The remaining MHIP members migrated during the 2015 open enrollment period. 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. The rollout of the health coverage provisions, especially the launch of the new insurance exchange, was uneven in 2014, but 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. 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 Spotlight.

Future studies in 2016 on the individual market will examine the change in prescription drug use from 2013 to 2014, and characterize differences among ACA-compliant products available on Maryland Health Connection, products available from carriers that are sold outside Maryland Health Connection, and carriers' grandfathered plans (i.e., those products established before ACA enactment that were not required to conform with EHB standards and not eligible for risk mitigation provisions).

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

### Changes in PMPM Spending, Utilization, and Unit Cost, Individual Market, 2013 to 2014

- Total members (insureds) as of December 31, 2014, in the individual market increased by about 26 percent. (See Exhibit 1.)
- The median expenditure risk score also increased, from 0.19 to 0.24 between 2013 and 2014. (See Exhibit 1.) Prevalence of several chronic conditions increased, along with PMPM spending for these conditions, as shown in Exhibits 6 and 7.
- PMPM spending for all services combined increased between 2013 and 2014, by 31 percent. (See Exhibit 2a.)
  - PMPM spending increased for all service categories, albeit by varying degrees:
    - Inpatient facility spending: 9 percent
    - Outpatient facility spending: 46 percent
    - Spending for professional services: 27 percent
    - Spending for labs/imaging services: 29 percent
    - Spending for prescription drugs: 62 percent
- PMPM spending increases were driven mainly by utilization growth, plus smaller increases in cost per unit of services, except for inpatient facility services. (See Exhibits 2b and 2c.)
  - Utilization growth resulted from an increase in expenditure risk. The 51 percent increase in prescription drug utilization depicts both higher expenditure growth and richer drug benefits in 2014, combined with less healthy members.
  - The decrease in inpatient unit cost could be due to Maryland's new hospital global budget program initiated in 2014.
- As seen in Exhibits 2b and 2c, inpatient and outpatient utilization increased between 2013 and 2014 in the individual market, by about 30 percent and 35 percent, respectively.
- Exhibits 2b and 2d show utilization of professional services, labs/imaging, and prescription drugs and indicate that utilization for professional services increased by about 14 percent; utilization for labs/imaging increased by 24 percent; and prescription drug use increased by 51 percent, as noted earlier.

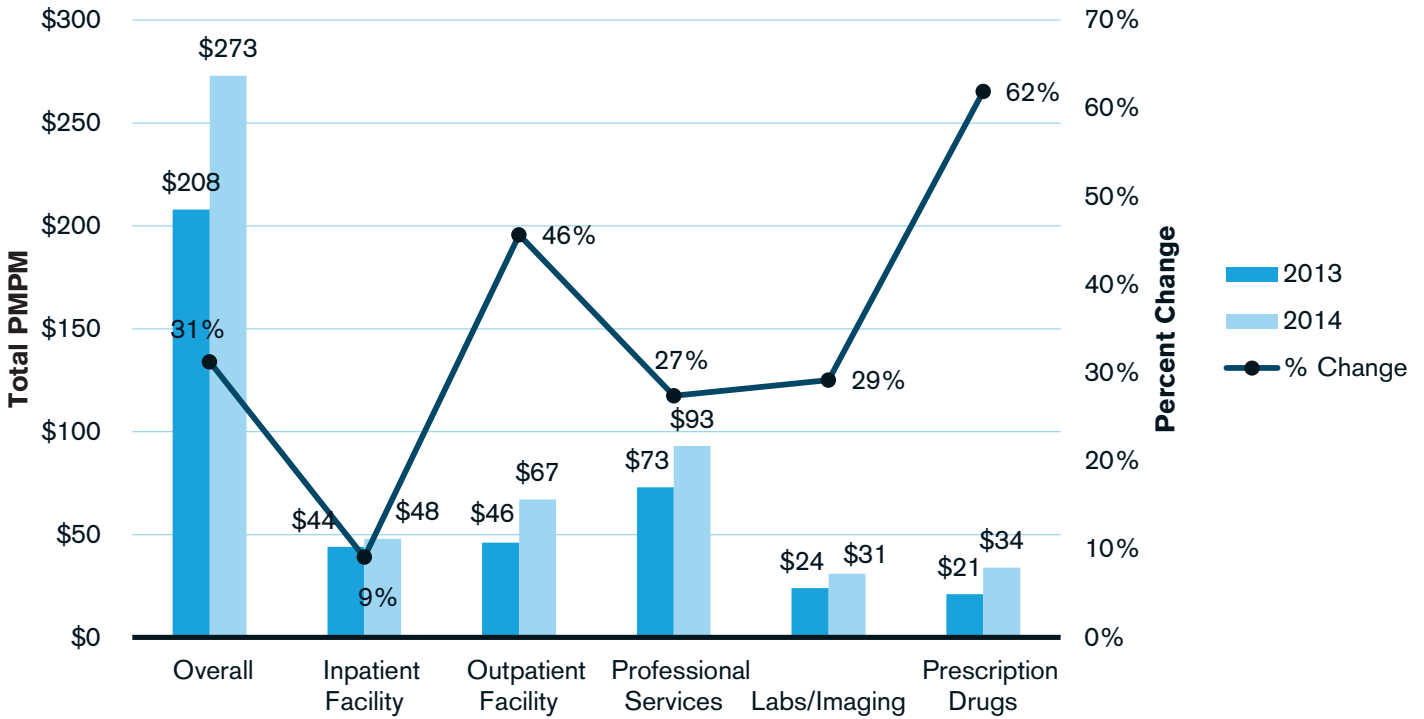
**EXHIBIT 1.** Spending Among Maryland's Younger-Than-65 Population, Privately Insured, Individual Market, 2013 and 2014

	2014	2013	% Change
<b>MEMBERS<sup>a</sup></b>			
Total members as of December 31	225,454	178,509	26%
<b>TOTAL MEMBER MONTHS</b>	2,602,230	2,080,384	25%
<b>SPENDING</b>			
PMPM spending, all services combined	\$273	\$208	31%
PMPM OOP, all services combined	\$81	\$68	19%
<b>PMPM SPENDING BY SERVICE CATEGORY</b>			
Inpatient facility	\$48	\$44	9%
Outpatient facility	\$67	\$46	46%
Professional services	\$93	\$73	27%
Labs/imaging	\$31	\$24	29%
Prescription drugs	\$34	\$21	62%
<b>RISK SCORE</b>			
Median expenditure risk score—FY only <sup>b</sup>	0.24	0.19	

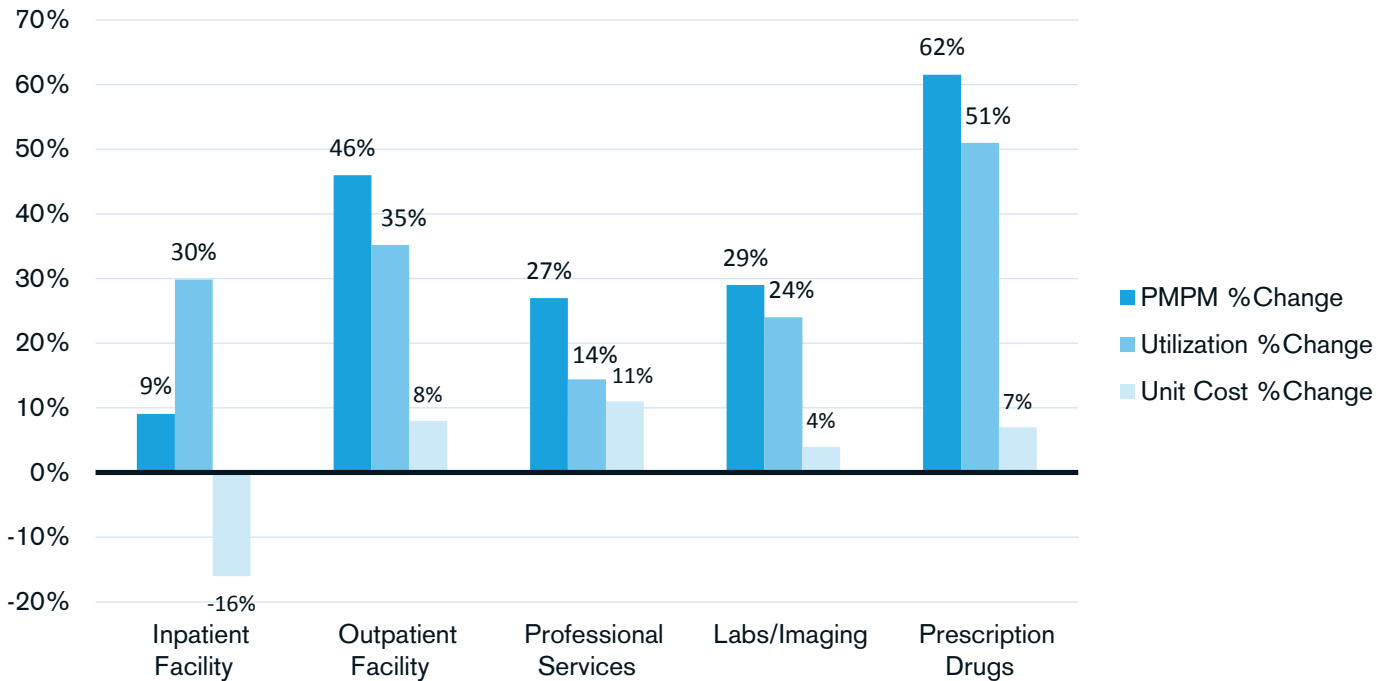
**Notes:**

- a. Individuals can have multiple types of coverage during the year but are counted only once in the total.
- b. FY indicates full year (members enrolled in all 12 months of the year).

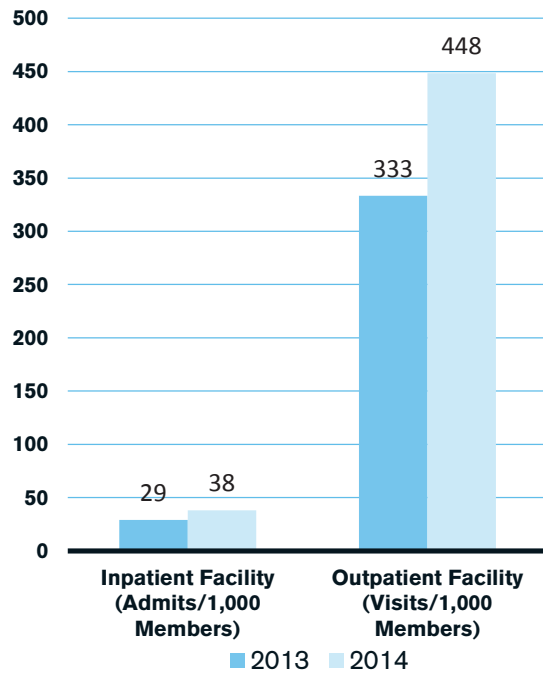
**EXHIBIT 2a.** Total PMPM Changes by Service Category, Individual Market, 2013 to 2014



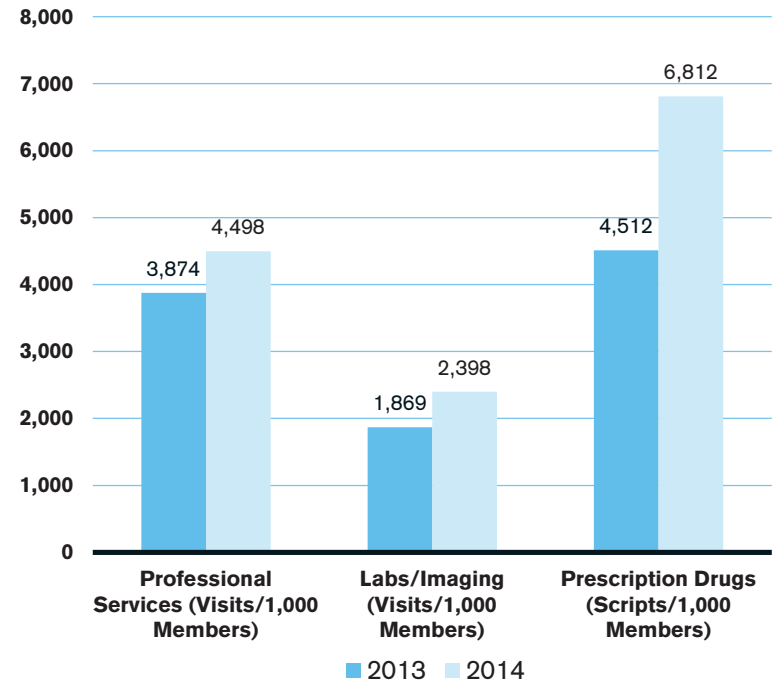
**EXHIBIT 2b.** Annual Changes in PMPM Spending, Utilization Per 1,000 Members, and Cost Per Unit by Service Category, Individual Market, 2013 to 2014



**EXHIBIT 2c.** Inpatient and Outpatient Utilization, Individual Market, 2013 and 2014



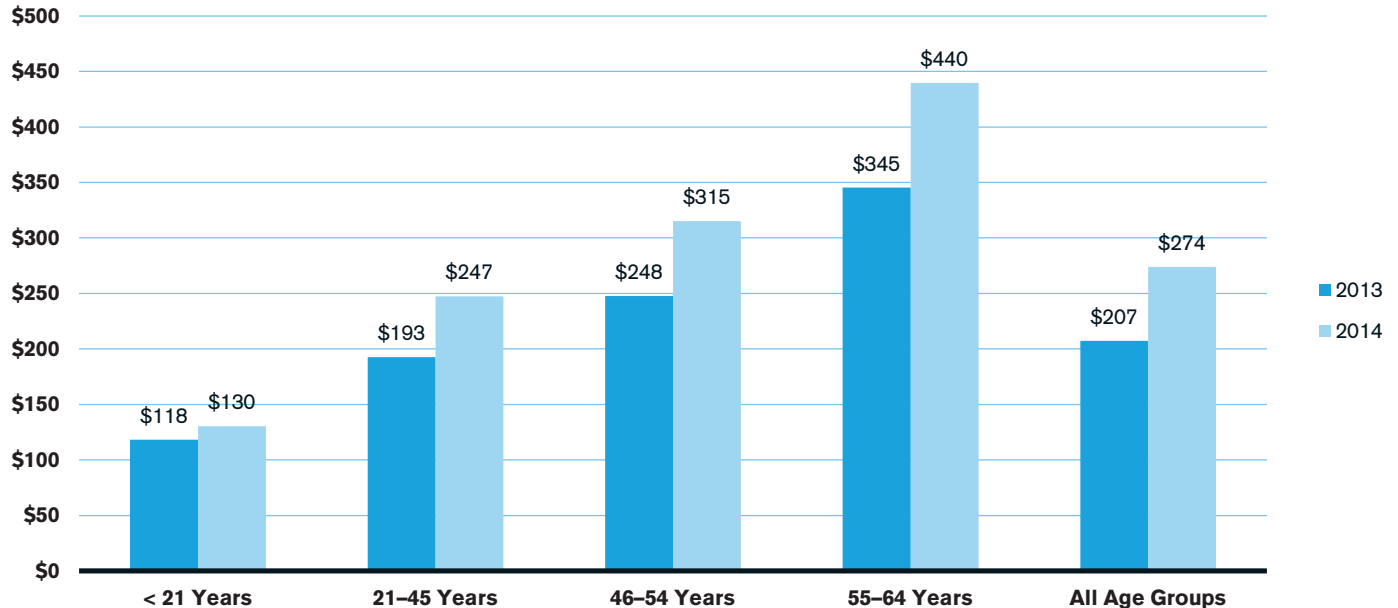
**EXHIBIT 2d.** Utilization of Professional Services, Labs/Imaging, and Prescription Drugs, Individual Market, 2013 and 2014



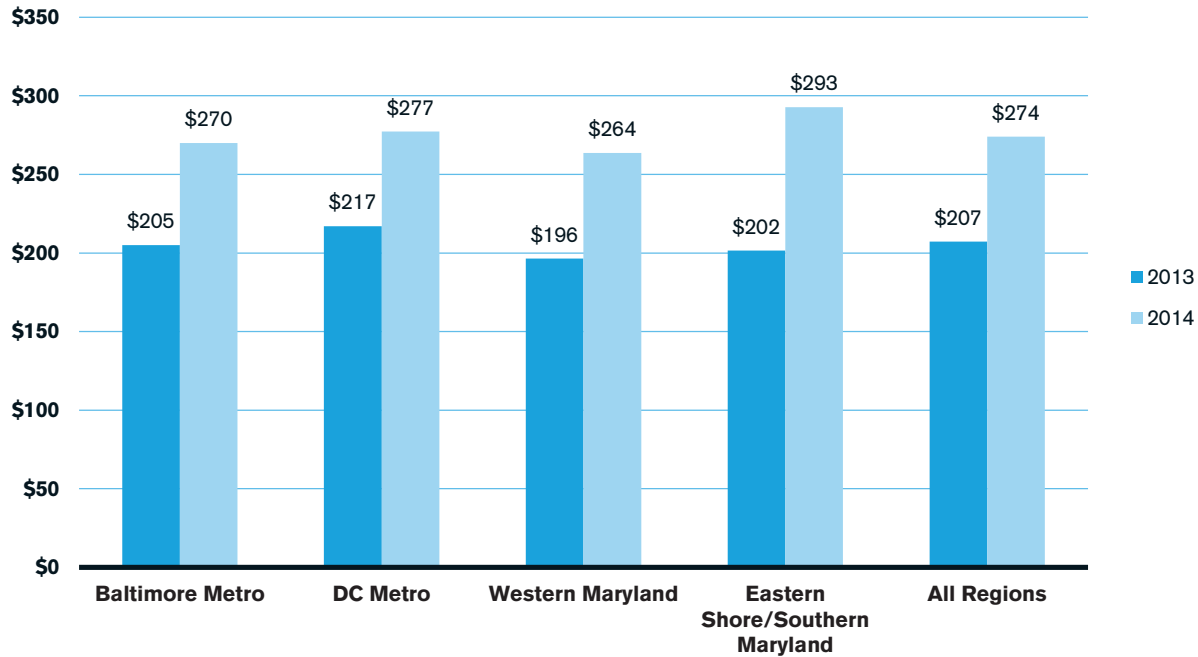
**PMPM Spending by Age and Region, Individual Market, 2013 to 2014**

- PMPM spending increased between 2013 and 2014 across all age bands, which is consistent with an increase in expenditure risk across all members, regardless of age. (See Exhibit 3.)
- As shown in Exhibit 3, members under 21 years of age had the lowest PMPM spending in 2013 and 2014, while members between 55 and 64 years of age had the highest PMPM spending.
- PMPM spending in the individual market increased between 2013 and 2014 across all regions, as shown in Exhibit 4.

**EXHIBIT 3.** PMPM Spending by Age of Member, Individual Market, 2013 and 2014



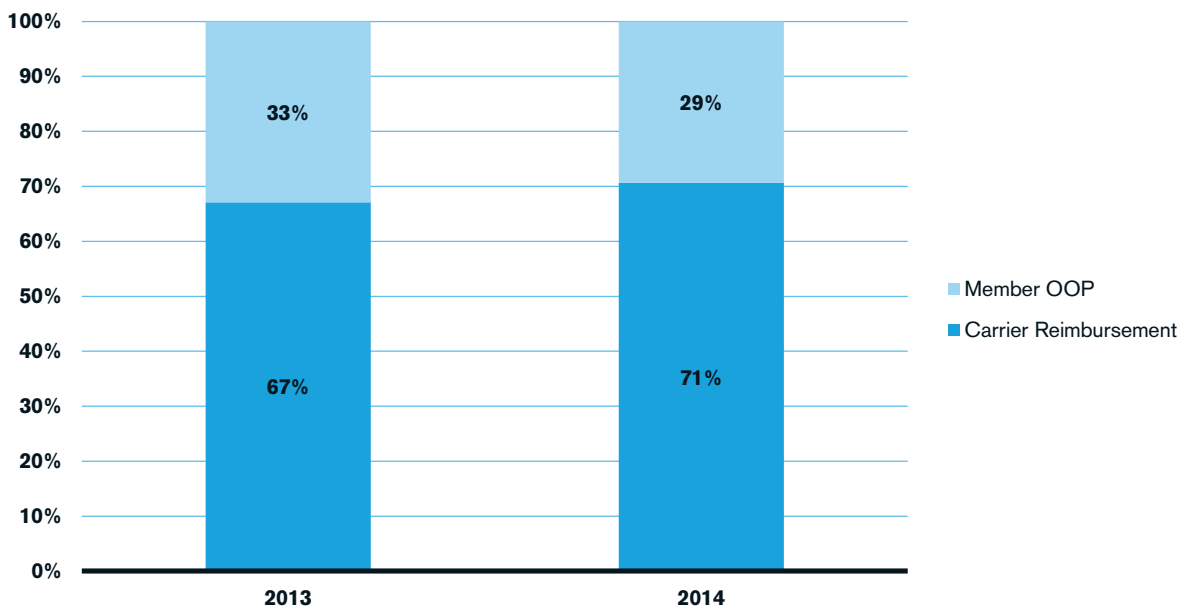
**EXHIBIT 4. PMPM Spending by Region of Members, Individual Market, 2013 and 2014**



**Member OOP Share Versus Carrier Share of Total Spending, Individual Market, 2013 and 2014**

- The PMPM portion paid by carriers (overall spending PMPM less OOP PMPM) increased by about 37 percent between 2013 and 2014; however, the OOP PMPM for members increased by about 19 percent. (See Exhibit 1.) This difference resulted in a decrease (29 percent) in the members' OOP share of total spending in 2014. (See Exhibit 5.) However, OOP spending remains the highest in the individual market compared with the other markets. (See Exhibit 8a.)

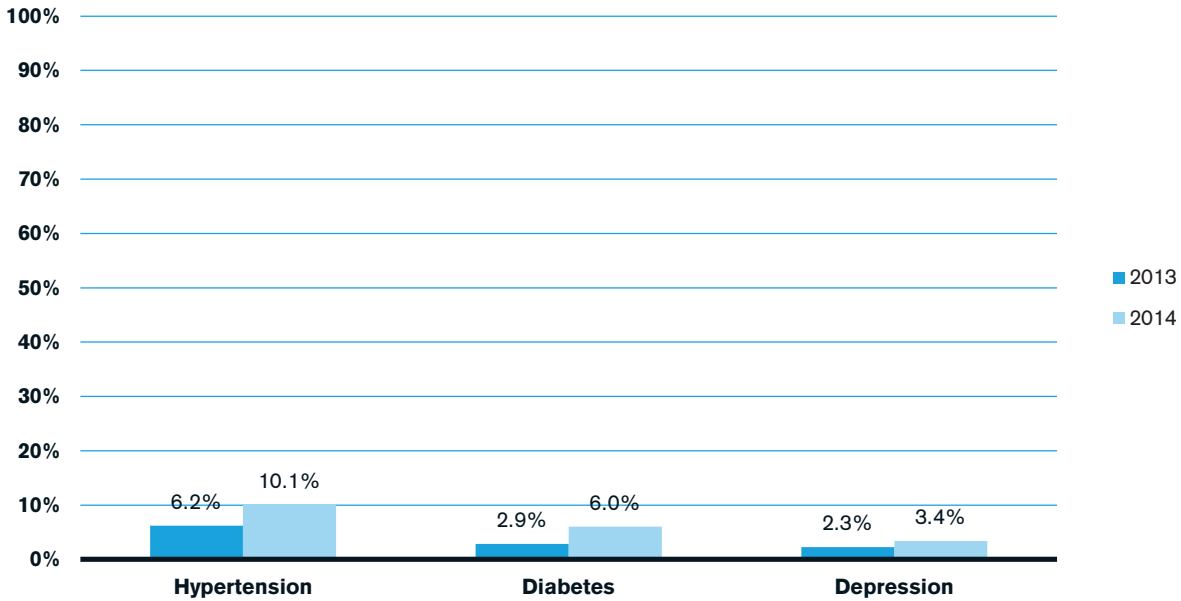
**EXHIBIT 5. Member OOP Share Versus Carrier Share of Total Spending, Individual Market, 2013 and 2014**



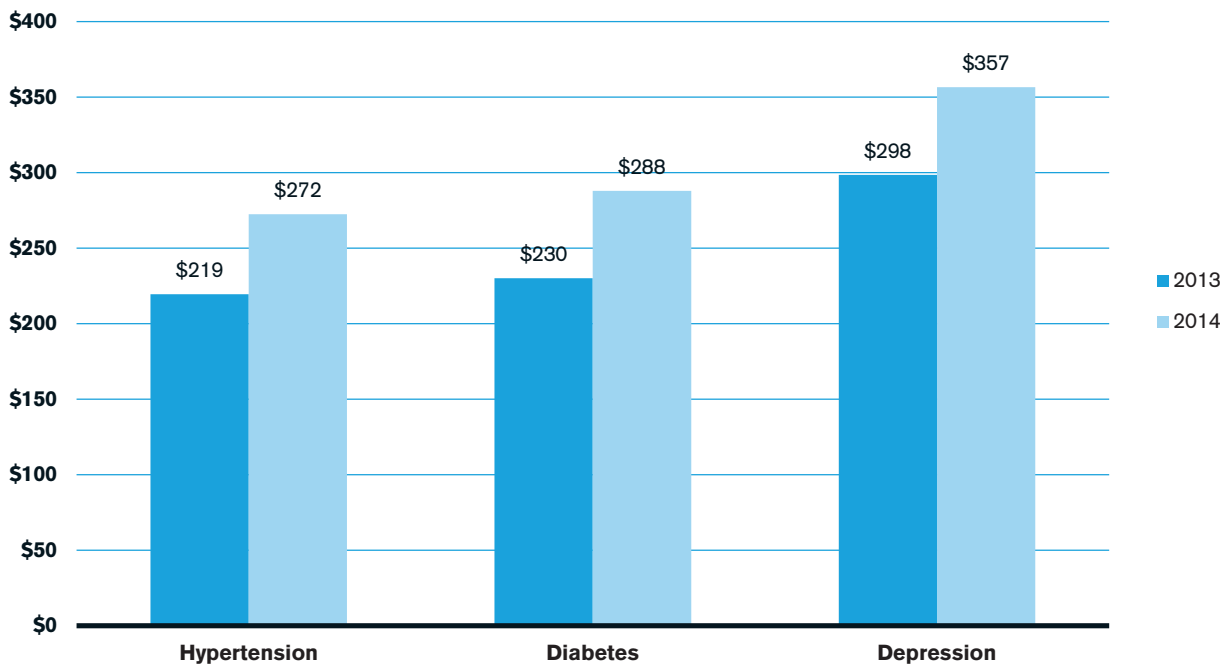
### Prevalence of Select Conditions, Individual Market, 2013 and 2014

- From 2013 to 2014, increases occurred in the prevalence of select conditions, including hypertension, diabetes, and depression (see Exhibit 6), leading to a corresponding increase in PMPM spending for each condition. (See Exhibit 7.)

**EXHIBIT 6.** Prevalence of Select Conditions, Individual Market, 2013 and 2014



**EXHIBIT 7.** PMPM Spending for Select Conditions, Individual Market, 2013 and 2014



## PMPM Spending and Unit Costs in 2014: Market Comparisons

- In spite of PMPM increases in the individual market, this market continues to have the lowest PMPM spending across all markets. (See Exhibits 8a, 8b, and 8c.)
- PMPM spending for all services combined was unchanged in 2014 for large employers; however, PMPM spending declined for small employers. (See Exhibits 8a, 8b, and 8c.)
- The decrease in PMPM (all services) in the small group market appears to be driven by a significant decrease (16 percent) in inpatient spending, and a slight decrease (3.5 percent) in spending on prescription drugs. (See Exhibit 8c.)
- Member OOP PMPM spending was highest in the individual market and lowest in the large group market. (See Exhibit 8a.)
- Unit costs for all service categories increased in 2014, except for inpatient facility services, in which unit costs declined across all markets in 2014. This decrease in unit costs for inpatient facility services likely resulted from the State's new hospital global budget program initiated in 2014. (See Exhibits 8d and 8e.)
- The decline in payment for average admission does not result from a decrease in average length of stay (see Exhibit 8f), but instead reflects a reduction in the average total per day pricing.

### EXHIBIT 8a. Spending Among Maryland's Younger-Than-65 Population, 2014

	Total	Market		
		Large Employers	Small Employers	Individual
<b>SPENDING</b>				
PMPM spending, all services combined	\$308	\$313	\$329	\$274
PMPM OOP, all services combined	\$66	\$52	\$71	\$81
<b>PMPM SPENDING BY SERVICE CATEGORY</b>				
Inpatient facility	\$51	\$51	\$52	\$48
Outpatient facility	\$62	\$58	\$62	\$67
Professional services	\$98	\$97	\$102	\$93
Labs/imaging	\$30	\$30	\$30	\$31
Prescription drugs	\$68	\$77	\$83	\$34

### EXHIBIT 8b. Spending Among Maryland's Younger-Than-65 Population, 2013

	Total	Market		
		Large Employers	Small Employers	Individual
<b>SPENDING</b>				
PMPM spending, all services combined	\$298	\$313	\$336	\$207
PMPM OOP, all services combined	\$62	\$52	\$72	\$68
<b>PMPM SPENDING BY SERVICE CATEGORY</b>				
Inpatient facility	\$57	\$59	\$62	\$44
Outpatient facility	\$56	\$58	\$61	\$46
Professional services	\$91	\$95	\$98	\$73
Labs/imaging	\$28	\$29	\$29	\$24
Prescription drugs	\$66	\$72	\$86	\$21



**EXHIBIT 8c.** Percentage Changes in Spending Among Maryland's Younger-Than-65 Population, 2014 Over 2013

	Total	Market		
		Large Employers	Small Employers	Individual
<b>SPENDING</b>				
PMPM spending, all services combined	3.4%	0.0%	-2.1%	32.4%
PMPM OOP, all services combined	6.5%	0.0%	-1.4%	19.1%
<b>PMPM SPENDING BY SERVICE CATEGORY</b>				
Inpatient facility	-10.5%	-13.6%	-16.1%	9.1%
Outpatient facility	10.7%	0.0%	1.6%	45.7%
Professional services	7.7%	2.1%	4.1%	27.4%
Labs/imaging	7.1%	3.4%	3.4%	29.2%
Prescription drugs	3.0%	6.9%	-3.5%	61.9%

**EXHIBIT 8d.** Unit Cost by Market and Service Category, 2014

Service Category	Total	Large Employers	Small Employers	Individual	% Change			
					Total	Large Employers	Small Employers	Individual
Inpatient Facility (Cost per Admit)	\$13,502	\$12,719	\$13,403	\$15,074	-3.1%	-2.7%	-2.2%	-15.9%
Outpatient Facility (Cost per Visit)	\$1,466	\$1,314	\$1,418	\$1,793	6.4%	1.7%	2.7%	7.8%
Professional Services (Cost per Visit)	\$247	\$249	\$244	\$249	5.6%	5.9%	2.8%	10.8%
Labs/Imaging (Cost per Visit)	\$147	\$144	\$142	\$157	3.9%	3.6%	1.6%	4.2%
Prescription Drugs (Cost per Script)	\$78	\$84	\$79	\$61	1.3%	5.0%	1.7%	6.7%

**EXHIBIT 8e.** Unit Cost by Market and Service Category, 2013

Service Category	Total	Large Employers	Small Employers	Individual
Inpatient Facility (Cost per Admit)	\$13,927	\$13,068	\$13,702	\$17,913
Outpatient Facility (Cost per Visit)	\$1,378	\$1,292	\$1,380	\$1,663
Professional Services (Cost per Visit)	\$234	\$236	\$237	\$225
Labs/Imaging (Cost per Visit)	\$141	\$139	\$139	\$151
Prescription Drugs (Cost per Script)	\$77	\$80	\$78	\$57

**EXHIBIT 8f.** Inpatient Average Length of Stay (Days per Admit) by Market, 2013 Versus 2014

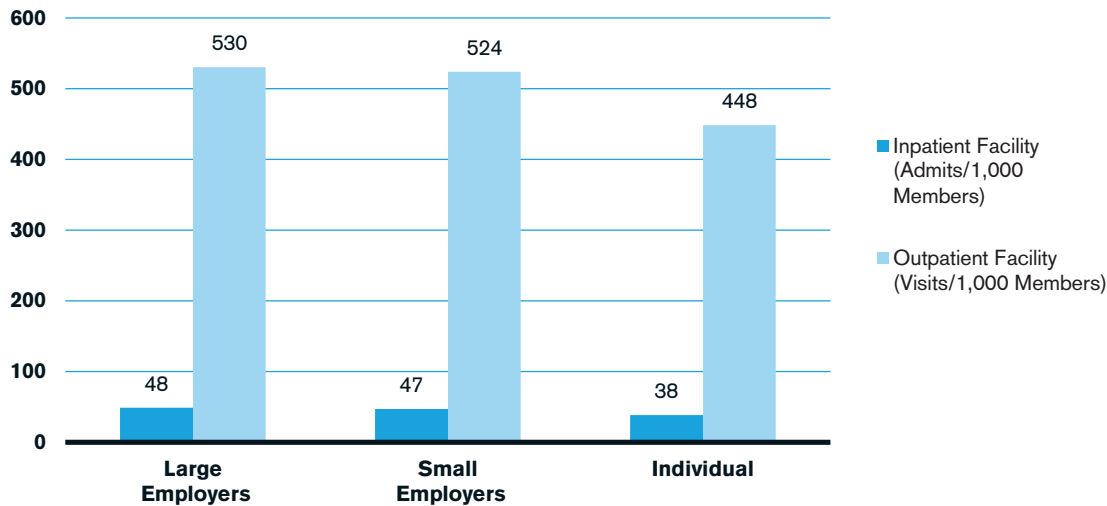
Market	Inpatient Average Length of Stay (Days per Admit)		
	2013	2014	% Change
Large Employers	4.3	4.3	0.8%
Small Employers	4.1	4.1	-0.9%
Individual	4.4	4.7	6.9%
Total	4.2	4.3	2.2%

**NOTE:** Inpatient facility services include both short-term and long-term inpatient stays (e.g., acute, non-acute, and skilled nursing facilities).

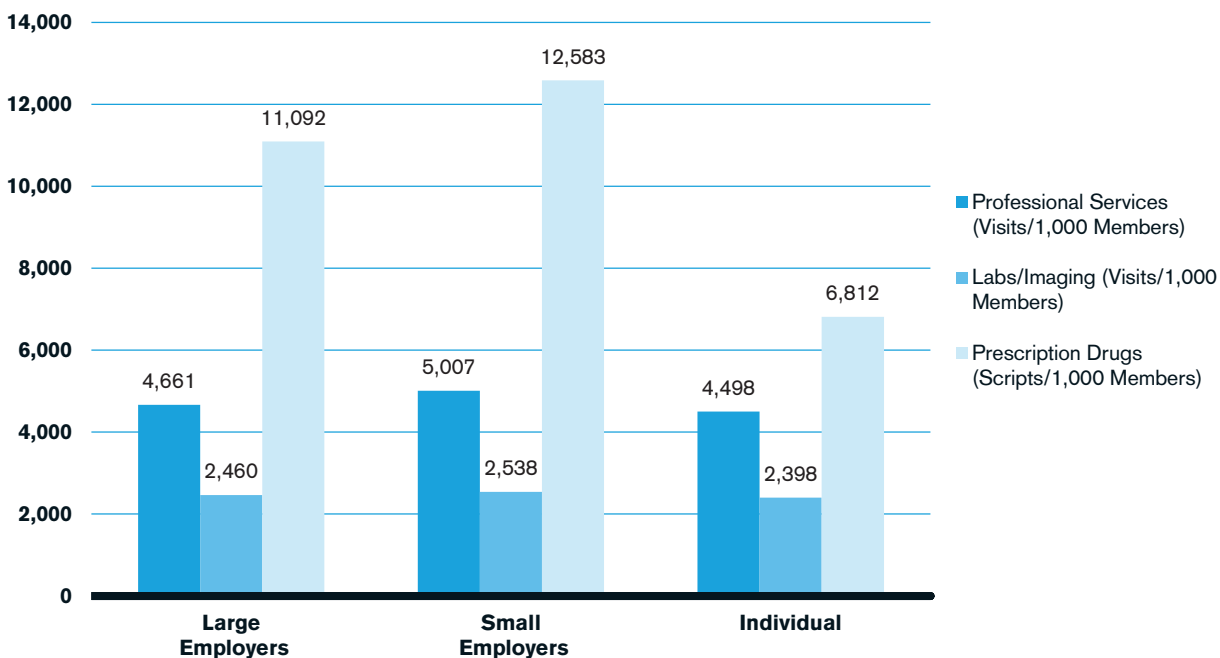
### Utilization of Services in 2014: Market Comparisons

- Inpatient and outpatient utilization of services is about the same for large and small employers and lowest in the individual market. (See Exhibit 9a.)
- Use of professional services, labs/imaging, and prescription drugs is highest in the small employer market.
- Labs/imaging utilization patterns are similar across markets. However, utilization patterns for professional services and prescription drugs show more variations across markets. (See Exhibit 9b.)

**EXHIBIT 9a.** Inpatient and Outpatient Utilization by Coverage Type, 2014



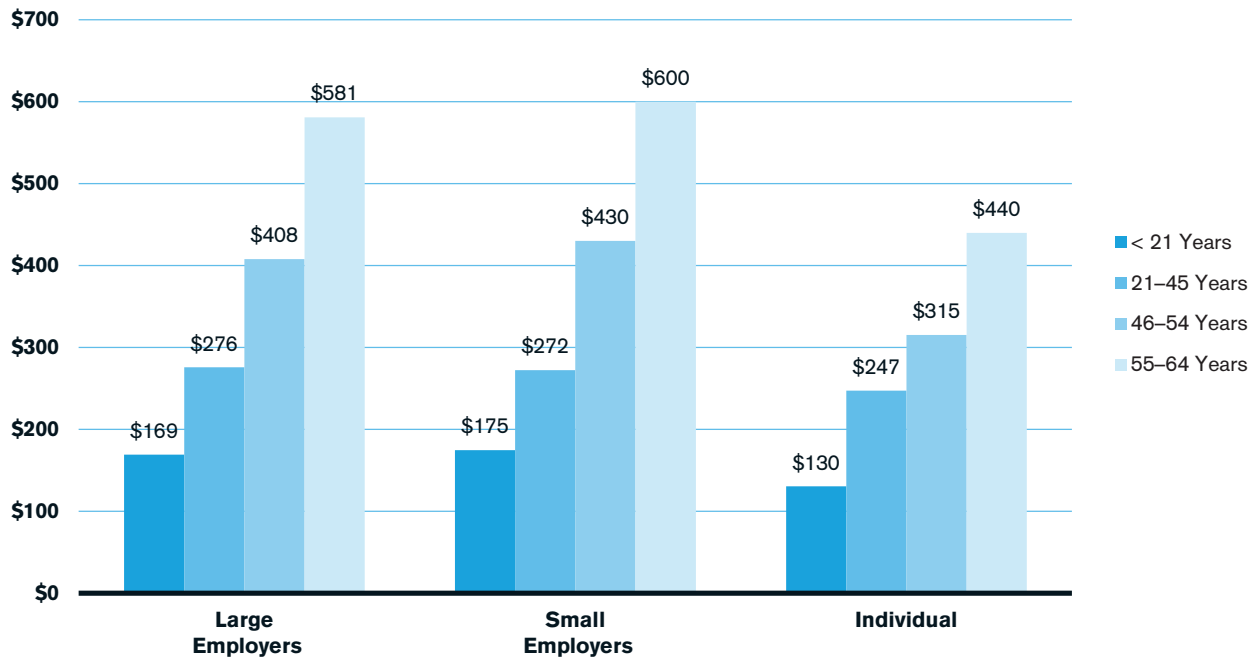
**EXHIBIT 9b.** Utilization of Professional Services, Labs/Imaging, and Prescription Drugs: Market Comparisons, 2014



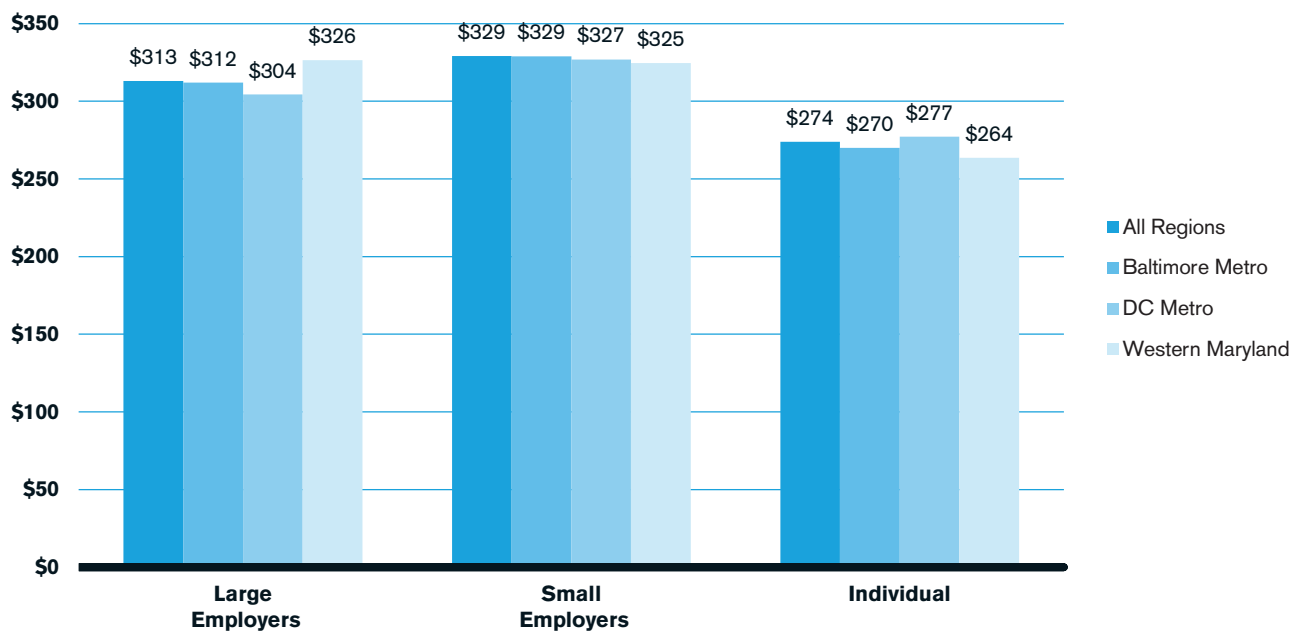
### PMPM Spending by Age and Region in 2014: Market Comparisons

- The individual market had the lowest PMPM spending across all markets, regardless of age. (See Exhibit 10.)
- Within each market, PMPM spending increased with age, as expected.
- Within each market, PMPM spending showed relatively little variation by region. (See Exhibit 11.)

**EXHIBIT 10.** PMPM Spending by Age and Market, 2014



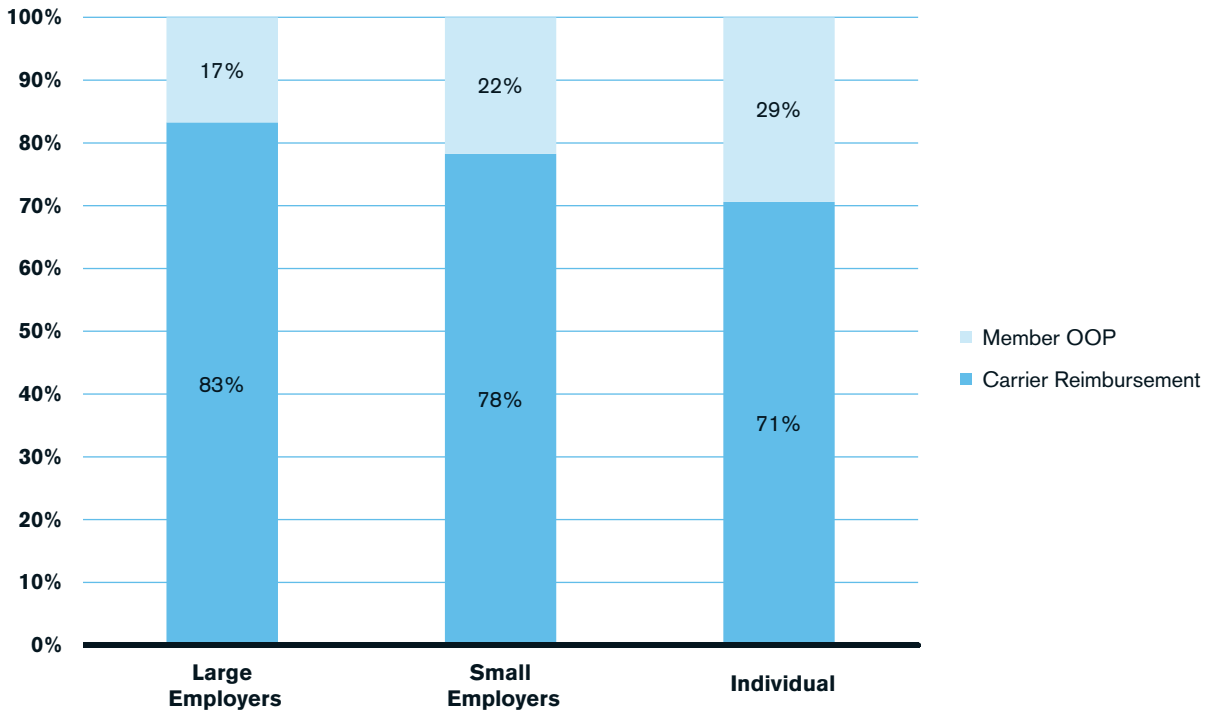
**EXHIBIT 11.** PMPM Spending by Region and Market, 2014



### Member OOP Share and Carrier Shares of Total Spending in 2014: Market Comparisons

- Despite the reduction in the member OOP share that is seen in the individual market, the member OOP share is still the largest for the individual market and the smallest for large employers. (See Exhibit 12.)

**EXHIBIT 12.** Member OOP and Carrier Share of Total Spending by Market, 2014



## METHODS

### DATA SOURCES

The figures and tables in this Spotlight are based on 2013 and 2014 data analyses from Maryland's MCDB. It includes all members, regardless of whether an individual used any health care services.

### MARKETS

**Large Employer (fully insured):** The large employer market refers to businesses with more than 50 full-time employees.

**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

PMPM is 12 months of incurred cost of all services (institutional, professional, or prescription drugs) spread across all covered medical members. It is calculated as 12 months of spending dollars divided by 12 months of members.

**Spending PMPM is calculated as:** Total Spending/Total Member Months.

**OOP PMPM is calculated as:** Total OOP Spending/Total Member Months. (Out-of-pocket spending is the member's cost-sharing responsibility.)

**Inpatient Facility (Admits per 1,000 Members) is calculated as:** Total Admissions/Total Member Months\*1000\*12.

**Outpatient Facility (Visits/1,000 Members) is calculated as:** Total Outpatient Visits/Total Member Months\*1000\*12.

**Professional Services (Visits per 1,000 Members) is calculated as:** Total Days With Service/Total Member Months\*1000\*12.

**Labs/Imaging (Visits per 1,000 Members) is calculated as:** Total Days with Service/Total Member Months\*1000\*12.

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

*Notes:*

*Prescriptions have been "normalized" or adjusted so that they are counted in terms of a 30-day supply of medication. Therefore, each 90-day prescription is counted as three 30-day prescriptions.*

*For outpatient visits, professional services visits, and lab/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 Chronic Illness and Disability Payment System (CDPS). The CDPS, developed by researchers at the University of California, San Diego, categorizes an individual's risk of having significant medical expenditures from the number and mix of diagnoses recorded on his or her insurance claims.

## Acknowledgments

This study was conducted by staff from the Maryland Health Care Commission (MHCC) and Social & Scientific Systems, Inc. (SSS), of Silver Spring, Maryland. SSS staff included Niranjana Kowlessar, PhD; Lan Zhao, PhD; and Adrien Ndikumwami. MHCC staff were 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 and Mental Hygiene.  
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