SPOTLIGHT ON
MARYLAND

MHCC | MARYLAND HEALTH CARE COMMISSION

The Evolving Landscape of Health Care Reform and Health Care Spending in Maryland

INTRODUCTION

Slowing the growth of health care costs, improving health care quality, and improving population health are the three aims that form the core of health care reform under the 2010 Patient Protection and Affordable Care Act (ACA). In efforts to achieve the Triple Aim[1], a variety of payment and delivery system initiatives have been implemented nationally and in Maryland. A number of other initiatives emphasizing value-based purchasing and more informed consumer decision-making are seeing renewed interest in the wake of health care reform. For this Spotlight, health care spending in Maryland is described in the context of three specific areas relevant to meeting the triple aims of health care reform.

Patient-Centered Medical Home (PCMH). A 3-year Maryland Multi-Payer Patient-Centered Medical Home Program (MMPP) was initiated in 2011 to test this new model of care, with 52 primary and multispecialty practices and federally qualified health centers located across the state. All five of the state's major carriers of fully insured health benefit products (Aetna, CareFirst, CIGNA, Coventry, and UnitedHealthcare) are required to participate in the MMPP; in addition, the Federal Employee Health Benefit Plan, the Maryland State Employee and Retiree Health and Welfare Benefits Program, TRICARE, and private employers such as Maryland hospital systems have voluntarily elected to offer this program to their employees.[2] The PCMH model focuses on the delivery of patient-centered care through evidence-based medicine, expanded access, and communication with a team of health professionals guided by a primary care provider. Through an emphasis on primary care services and coordinated care, the goal is to reduce the costs of care.

Consumer-Directed Health Plans (CDHPs). CDHPs are typically high-deductible plans that are accompanied by a tax-preferred savings or spending account, which employees and their families can use to pay for out-of-pocket health care expenses. These tax-preferred savings accounts are referred to as Health Savings Accounts (HSAs). In order to establish an HSA that qualifies for tax-preferred treatment of funds saved for medical expenses, high-deductible plans must meet certain Federal requirements—in 2012, deductibles had to be at least $1,200 for an individual and $2,400 for family coverage.[3]

CDHP plans are designed to place greater responsibility for health care decision-making in the hands of consumers and to reduce health care spending by exposing consumers to the financial implications of their treatment decisions. The theory is that because enrollees in such plans face high deductibles before their insurance benefits are triggered, this financial requirement will induce them to eliminate unnecessary care and seek lower-cost, higher-quality providers. In addition, because the health savings account linked with these plans allows consumers to roll over their contributions from year to year, it enables them to defer their use of health care services today if not required, and use the savings in the future when they may require them.

Prescription Drugs. Although the rate of pharmaceutical expenditure growth has slowed in the last few years—largely due to the increasing use of generic versions of branded prescription drugs—consumers may not be realizing the savings from generics, as the cost sharing

[1] Berwick, Donald M, Thomas W Nolan, and John Whittington. 2008. "The Triple Aim: Care, Health, and Cost." *Health Affairs* 27 (3)2: 759-769. doi: 10.1377/hlthaff.27.3.759.

[2] http://mhcc.maryland.gov/pcmh/

[3] http://www.treasury.gov/resource-center/faqs/Taxes/Pages/HSA-2012-indexed-amounts.aspx

required by insurance plans in the form of deductibles and copayments continues to grow. Nationally, prescription drug spending is projected to grow by about 5.2 percent in 2014, driven by increases in use of prescription drugs among people who have newly acquired insurance or who have moved to plans with more generous benefits as a result of the premium and cost-sharing subsidies offered by the ACA.[4] In addition, select patient populations — particularly those with chronic or high-risk, high-cost conditions that require expensive specialty medications — are seeing continued growth in prescription drug expenditures. With increased emphasis on care coordination for individuals with multiple chronic conditions, and on value-based purchasing, spending on prescription drugs is an area that merits continued monitoring.

The purpose of this Spotlight is to examine spending and utilization patterns for Maryland residents insured through the individual, small employer group, large private employer, and high-risk pool markets, with an added focus on three different aspects of the health care system. The current analysis focuses on variations in spending and use among enrollees in PCMH programs and CDHPs versus their counterparts not enrolled in such initiatives. This Spotlight also examines prescription drug spending, a growing segment of health care spending, by examining variation in per capita spending, out-of-pocket costs, and use of branded versus generic prescription drugs across different market segments. The analysis relies on 2012 data from Maryland's Medical Care Database (MCDB), which contains health care claims and encounter data submitted annually to the Maryland Health Care Commission (MHCC) by most private health insurance plans serving Maryland residents.

OVERALL MARKET COMPARISONS

In 2012, there were almost 540,000 persons insured through large private employers with fully insured plans, and approximately 410,000 covered by small employers through a Comprehensive Standard Health Benefit Plan (CSHBP). Just under 220,000 individuals purchased coverage through the individual market, and almost 25,000 were covered through Maryland's high-risk pool. In order to be able to make comparisons across markets, the estimates presented in this Spotlight are limited to persons who were covered for the entire year by the same plan. This excludes approximately 430,000 persons for whom full-year records were not available because they lost or gained coverage, changed plans and could not be tracked across plans, or experienced a qualifying event such as birth or death.

Table 1 shows health care spending and utilization by type of coverage for those enrolled throughout 2012. Within each type of coverage, the proportion of enrollees with a CDHP varied from a low of 12 percent for those covered by large private employers to a high of about 44 percent for those with coverage through a CSHBP. About one-quarter of the enrollees in the individual and Maryland Health Insurance Plan (MHIP) markets were covered by one of these high-deductible plans. Details on patterns of spending for those with and without CDHPs are provided later on in this Spotlight.

Spending and utilization varied considerably by market. Spending was higher in the small-group and large employer markets compared with the individual market and highest for persons covered through the high-risk pool. Mean spending for MHIP enrollees was more than three times higher than mean spending for enrollees covered by private employers—both small and large—and almost five times higher than for enrollees with individually purchased policies. Mean out-of-pocket spending was lowest in the large private employer market and highest for MHIP enrollees. However, when viewed as a share of mean total spending, mean out-of-pocket cost was highest in the individual market (32 percent). As is to be expected with health care spending, mean spending—which is affected by even small numbers of individuals with very high spending—was substantially higher than median spending across all markets, both in terms of total spending and out-of-pocket spending.

Patterns of health care utilization were similar to spending, with the percentage of enrollees obtaining health care services highest in the high-risk pool and lowest in the individual market. Differences between the high-risk and individual markets in terms of the percentage of enrollees using a particular service were largest for inpatient care, prescription drugs, and outpatient facility care—where enrollees in the high-risk pool were about twice as likely as those with individual policies to use services. The proportion of enrollees with use was similar across all services in the large- and small-group markets. The median expenditure risk score, which categorizes an individual's risk of

[4] http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2012.pdf

TABLE 1. Spending and Use Among Maryland's Younger-than-65, Privately Insured, by Coverage Type and Type of Service, 2012

	Large Private Employers[a]	CSHBP	Individual	MHIP
Total number of full-year enrollees[b]	332,781	271,086	139,847	16,405
Percentage of full-year enrollees with a CDHP	12%	44%	28%	26%
SPENDING				
Mean spending, all services	$3,011	$3,470	$2,185	$10,015
Median spending, all services	$795	$929	$505	$3,327
PERCENTAGE PAID OUT-OF-POCKET (OOP)	**15%**	**21%**	**32%**	**17%**
Mean OOP ($), all services	$436	$734	$702	$1,732
Median OOP ($), all services	$126	$315	$239	$1,202
PERCENTAGE WITH USE BY SERVICE TYPE				
Inpatient facility	4%	4%	3%	8%
Outpatient facility	21%	24%	20%	37%
Professional services	83%	85%	79%	94%
Labs/Imaging	70%	70%	65%	85%
Prescription drugs[c]	68%	72%	39%	89%
RISK SCORE				
Median expenditure risk score[d]	0.24	0.24	0.19	1.18

NOTES: a. This analysis is limited to enrollees who were fully insured.
b. The analysis is limited to full-year enrollees (i.e., individuals enrolled in the same insurance plan for the entire year) to provide a more accurate picture of annual spending and to be able to make comparisons across markets.
c. The percentage of persons using prescription drugs in the individual market may be artificially low because these policies may not cover prescription drug use.
d. 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.

having significant medical expenditures from the number and mix of diagnoses recorded on his or her insurance claims, is an indicator of the variation across markets in the health status of enrollees. As would be expected given utilization and spending measures, the risk score is highest for MHIP enrollees and lowest for persons insured through the individual market.

Between 2011 and 2012, per capita spending increased similarly across all markets. Enrollees covered by large private employers and MHIP experienced increases of 4 percent, and enrollees with individual policies and those covered by small employer groups experienced increases of 3 percent (see Table 2).

TABLE 2. Changes in Per Capita Spending Overall and by Coverage Type, 2011–2012*

	PER CAPITA SPENDING		
COVERAGE TYPE	2011	2012	Percentage Change
All	$3,057	$3,174	4%
Large Private Employers**	$2,892	$3,011	4%
CSHBP	$3,358	$3,470	3%
Individual	$2,114	$2,185	3%
MHIP	$9,624	$10,015	4%

NOTES: *http://www.hschange.org/CONTENT/1286/
**This analysis was limited to enrollees who were fully insured.

FOCUS ON PATIENT-CENTERED MEDICAL HOMES

The MMPP is the focus of an ongoing multifaceted evaluation to assess how the program is faring in terms of improving health and reducing costs. Here we provide a less formal and narrower look at a few aspects of the program in the context of the different market segments. Although all patients may benefit from coordinated care, many PCMH programs target individuals with chronic conditions who are likely to benefit most through improvements in health status and associated reduction in their health care costs.

Figure 1 provides information on predicted health risk and actual spending for patients who are part of PCMH practices as well as patients who are not in those practices. To make the populations more comparable, the analysis is restricted to patients (both PCMH and non-PCMH) who received an evaluation and management visit from a primary care provider during 2012. The bars in Figure 1 represent ratios of, on the left-hand side, the risk scores of PCMH patients to non-PCMH patients, and, on the right-hand side, median spending for PCMH patients to non-PCMH patients.

Overall and in the large employer market, predicted risk was 35 percent higher for PCMH patients compared with non-PCMH patients. With a ratio of approximately 1, expected risk was similar for both groups of patients in the small employer market, and predicted risk was 25 percent higher for PCMH patients in the individual market compared with non-PCMH patients. PCMH patients in the high-risk pool had a lower expected risk compared with their non-PCMH counterparts.

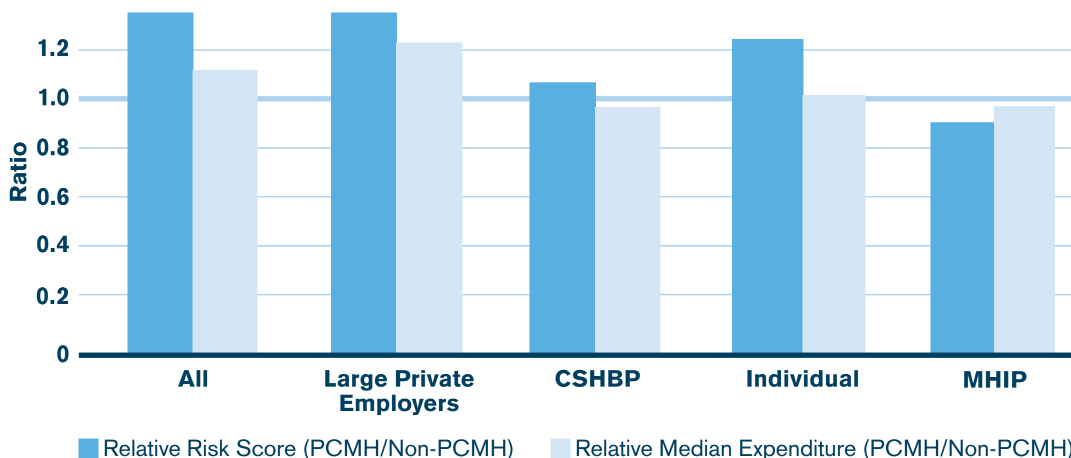
Across all markets, median spending for PCMH patients was 12 percent higher than for non-PCMH patients. As with risk score, the ratio varied across markets, with the gap in spending largest for patients enrolled through the large employer market. For spending, however, the ratio was close to 1 for the small employer group market, the individual market, and the high-risk pool. Of note, spending for MHIP enrollees in the PCMH program was lower than for non-PCMH patients.

Overall and in each of the markets, with the exception of MHIP, the risk ratio was higher than the spending ratio, suggesting that the difference in risk between PCMH and non-PCMH patients was at least somewhat attenuated by the program.

FOCUS ON CONSUMER-DIRECTED HEALTH PLANS

Selection of a CDHP may be influenced by a number of factors, including availability of such a plan, availability of other options, and health status or anticipated use of services. Because of the high deductible, one might expect that with all other factors equal, individuals in better health would be more likely to enroll. In general, little variation was seen between demographic characteristics of CDHP and non-CDHP enrollees across the different coverage types (data not shown). Overall, the age distri-

FIGURE 1. Variation in Spending for PCMH and non-PCMH Users by Coverage Type, 2012



NOTE: This analysis includes only a subset of PCMH-attributed patients. Patients participating in the program are excluded from the analysis if their insurance policies are self-insured, they did not have an evaluation and management (E&M) visit from a primary care provider during 2012, or they do not have private insurance coverage.

bution was similar for CDHP enrollees and non-CDHP enrollees, with differences seen in the individual and MHIP markets. In the individual market, a greater proportion of CDHP enrollees were aged 21 or younger compared with non-CDHP enrollees, and a smaller proportion were aged 55–64. In contrast, for those covered under the high-risk pool, the percentage of enrollees aged 21–45 in CDHP plans was only one-half that for non-CDHP plans, and a greater proportion of CDHP enrollees were over the age of 55 compared with their non-CDHP counterparts.

Looking across all markets, the regional distribution of CDHP enrollees differed from that of non-CDHP enrollees. Almost one-half of CDHP enrollees were from the Baltimore metropolitan area, and about one-quarter were from the Washington, DC, metropolitan area, compared with 37 and 41 percent, respectively, of enrollees in non-CDHP plans. For those enrolled in CDHP plans, the distribution by region was fairly similar across coverage type. There was more variation by coverage type in the regional distribution of non-CDHP enrollees, where the individual and high-risk markets had more individuals from the Baltimore metropolitan area and fewer enrollees from the Washington, DC, metropolitan area than the large or small private employer markets. With the exception of MHIP—where CDHP enrollees appear to have had substantially lower risk scores compared with their non-CDHP counterparts—the median expenditure risk score was very similar between CDHP and non-CDHP enrollees across the different coverage types.

Spending for CDHP and non-CDHP enrollees was examined separately for those with total spending below and above the minimum deductible of $1,200[5] (data not shown). Despite the higher deductible, the same proportion of CDHP and non-CDHP enrollees had spending below $1,200—60 percent. For enrollees who spent no more than $1,200, per capita total spending was similar for CDHP and non-CDHP enrollees in the MHIP and in the large and small employer markets, and about 9 percent higher for CDHP enrollees in the individual market. However, this was not the case for enrollees with spending greater than $1,200—where only among large private employers did CDHP enrollees have higher per capita total spending compared with the non-CDHP enrollees. Non-CDHP enrollees covered by CSHBPs had spending similar to CDHP enrollees, and non-CDHP enrollees covered by individual and MHIP markets had 8 percent and 38 percent higher per capita total spending, respectively, compared with CDHP enrollees.

In contrast to per capita total spending, across all markets, out-of-pocket spending was uniformly higher for CDHP enrollees, regardless of whether total spending was below or above $1,200. (See Figures 2a and 2b.) Among the low-spending enrollees (i.e., with spending less than $1,200), the ratio of average out-of-pocket spending between CDHP

[5] Athough the MCDB allows distinguishing between those with individual insurance policies and those enrolled in family policies, it doesn't allow aggregation of spending across families. Therefore the analysis used the individual minimum deductible limit when examining spending for CDHP and non-CDHP enrollees for 2012.

FIGURE 2a. Variation in Out-of-Pocket Spending for CDHP and non-CDHP Enrollees With Spending Up to $1,200 by Coverage Type, 2012

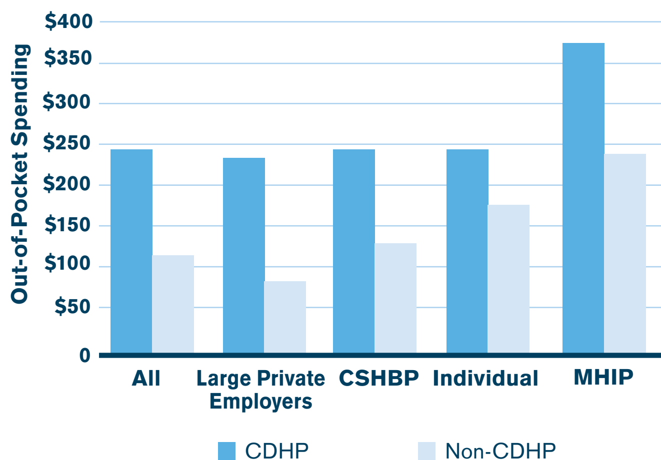


FIGURE 2b. Variation in Out-of-Pocket Spending for CDHP and non-CDHP Enrollees With Spending Greater Than $1,200 by Coverage Type, 2012

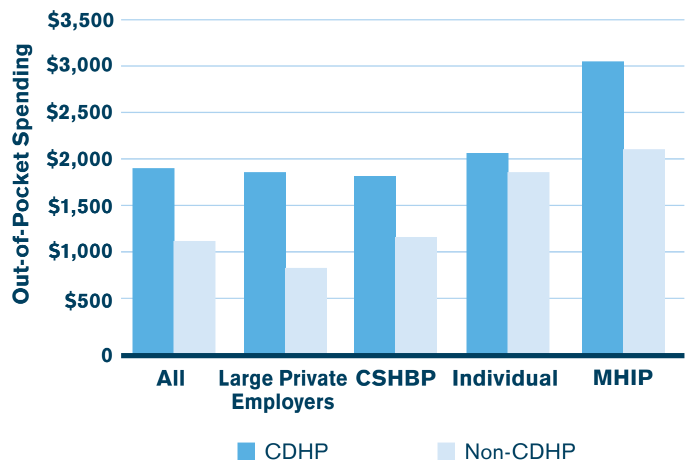


TABLE 3. Variation in Spending and Utilization of Prescription Drugs by Coverage Type, 2012

	Large Private Employers	CSHBP	Individual	MHIP
ENROLLEES				
Total enrollees	332,781	271,086	139,847	16,405
Percentage of enrollees with prescription use	68%	72%	39%	89%
TOTAL SPENDING				
Mean spending, all enrollees	$762	$959	$229	$3,806
Median spending, all enrollees	$60	$95	$0	$856
OUT-OF-POCKET (OOP) SPENDING				
Mean OOP, all enrollees	$181	$276	$119	$637
Median OOP, all enrollees	$30	$55	$0	$317
NUMBER OF PRESCRIPTIONS*, MEAN	**11**	**13**	**4**	**33**

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

and non-CDHP enrollees ranged from 1.4 (individual) to 2.9 (large private employers). Among the high-spending enrollees, ratios ranged from 1.1 (individual) to 2.2 (large private employers).

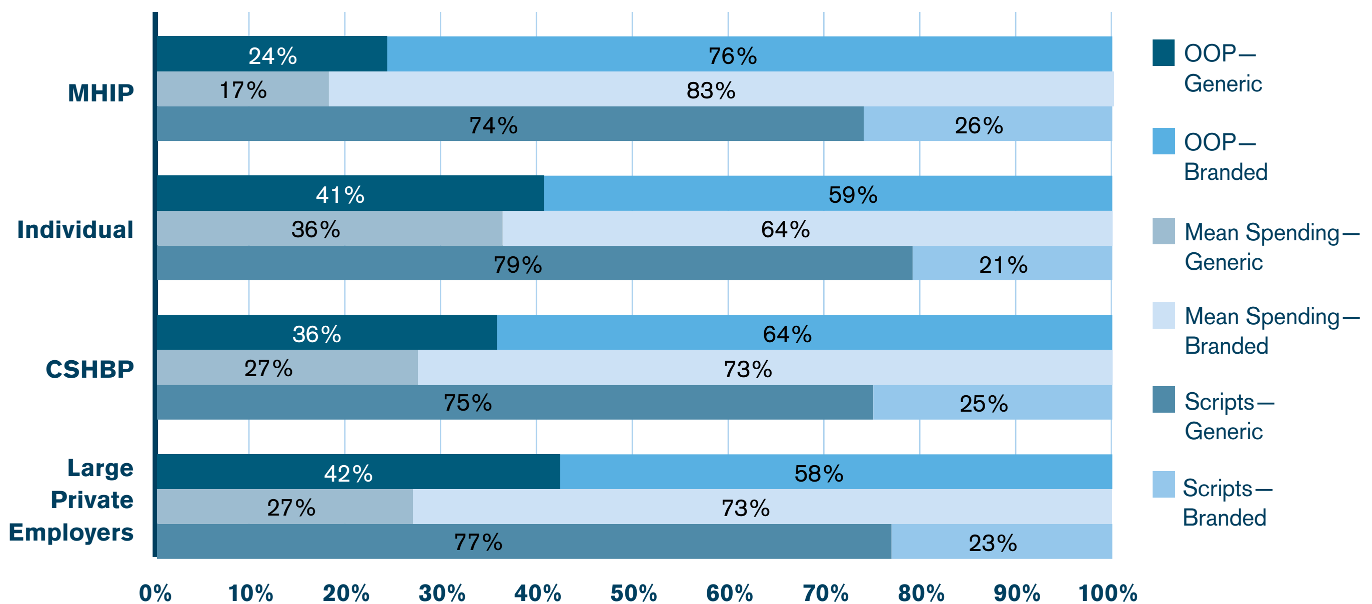
FOCUS ON PRESCRIPTION DRUGS

As shown in Table 3, the use of prescription drugs varied considerably by type of coverage, from less than 40 percent among enrollees covered by individual policies to almost 90 percent for those in the MHIP high-risk pool. The average number of normalized[6] prescriptions filled was lowest in the individual market (4) and highest in the MHIP market (33). On average, enrollees in large private employer plans filled 11 prescriptions, and enrollees in CSHBP plans filled 13 prescriptions.

In terms of spending, enrollees with individual policies spent less than one-third as much as those with coverage

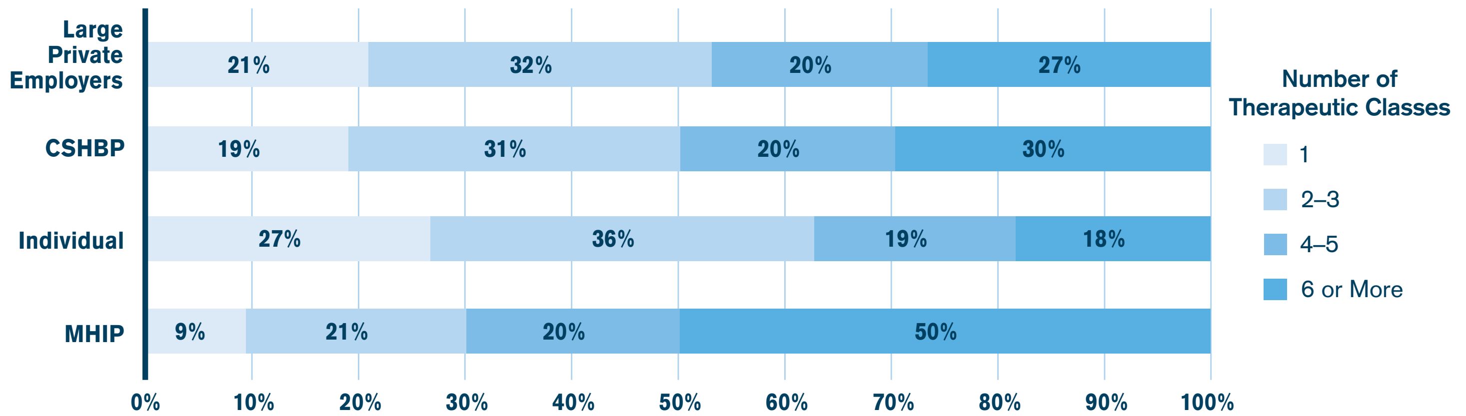
[6] Prescriptions have been "normalized" or adjusted so that they are counted in terms of 30-day supply of medication. Therefore, each 90-day prescription is counted as three 30-day prescriptions.

FIGURE 3. Generic Versus Branded Prescriptions and Spending by Coverage Type, 2012*



NOTE: *A small number of drug claims with unknown generic/branded status were excluded from the analysis.

FIGURE 4. Share of Prescription Drugs by Number of Therapeutic Classes and Coverage Type, 2012



through large, private employer plans or CSHBPs, and only about one-seventeenth of those with coverage through the MHIP pool. Although out-of-pocket spending also was lowest in the individual market, the gap in spending between enrollees covered by individual policies and those with other coverage types was not as great with respect to per capita total spending.

As seen in Figure 3, regardless of coverage type, the majority of prescriptions filled were generic rather than branded, ranging from about 74 percent (MHIP) to 79 percent (individual market). However, brand-name drugs accounted for the majority of spending, ranging from 64 percent (individual market) to more than 83 percent (MHIP). Similarly, the majority of out-of-pocket spending was also attributable to brand-name drugs, with shares ranging from about 58 percent (large private employer plans) to 76 percent (MHIP).

Figure 4 shows the share of prescriptions by number of therapeutic classes and coverage type. The number of different therapeutic categories is one possible indicator of the number of different conditions enrollees in a given market may have. Not surprisingly, 50 percent of enrollees in the high-risk pool filled prescriptions in six or more therapeutic classes. Approximately 50 percent of enrollees in the large and small private employer markets, and slightly more than 60 percent in the individual market, filled prescriptions in three or fewer therapeutic classes.

Table 4 shows the therapeutic drug classes that accounted for the highest spending for each market segment. The large private employer market and CSHBP share four of the top five therapeutic categories—central nervous system (CNS) stimulants, Hmg-Coa reductase inhibitors, antirheumatics, and insulin. Two of these categories also are among the top five in spending for enrollees in the indi-

TABLE 4. Therapeutic Classes With Highest Spending by Coverage Type, 2012 (by Percentage)

Large Private Employers	CSHBP	Individual	MHIP
CNS* Stimulants (4.9%)	CNS Stimulants (6.0%)	CNS Stimulants (7.6%)	Antiviral Combinations (22%)
Hmg-Coa Reductase Inhibitors (4.6%)	Hmg-Coa Reductase Inhibitors (4.8%)	Contraceptives (7.0%)	Protease Inhibitors (10%)
Anti-Rheumatics (4.2%)	Anti-Rheumatics (4.8%)	Hmg-Coa Reductase Inhibitors (4.0%)	Atypical Antipsychotics (3.6%)
Antiviral Combinations (3.9%)	Contraceptives (3.4%)	Tetracyclines (3.2%)	CNS Stimulants (3.5%)
Insulin (3.5%)	Insulin (3.3%)	Topical Acne Agents (2.7%)	Antirheumatics (3.2%)

*central nervous system

vidual market. Prescription drug spending in the high-risk pool was highest on antiviral combinations (22 percent), with protease inhibitors and atypical antipsychotics also in the top five.

IMPLICATIONS

Maryland's health care system is going through a period of rapid change, as reforms called out in the ACA are implemented. Foremost is the immediate implementation of the Exchange, with its concomitant expansion of insurance coverage and movement within and across market segments. As plan options available in the Exchange are standardized to cover the essential health benefits laid out in the ACA, insurers are scrutinizing offerings and using their remaining tools—such as consumer incentives and provider networks—to influence utilization and spending. The differences in spending and utilization patterns across markets that are highlighted in this Spotlight are likely to attenuate over time, with the individual market taking on more features of the employer markets.

While much attention is focused on the transformation of the individual market, the broader changes across all markets hold the most promise for fundamental change in the delivery of and payment for health care. Highly anticipated results of the Maryland MMPP evaluation have the potential to drive improvements in and expansion of that program, including an assessment of the specific factors that lead to success at the practice level. In addition to the state-sponsored initiative, private payers have also implemented PCMH programs in the state, and there are likely to be further initiatives that modify the ways primary care physicians are reimbursed and care is coordinated.

Across market segments, the use of CDHPs to promote cost-conscious decision-making among consumers continues to rise in Maryland. Results presented here show few differences in total spending between enrollees with these high-deductible plans and those with more traditional policies, with the difference showing up in the out-of-pocket portion of spending. More sophisticated analyses—CDHP use in other settings controlling for individual and plan characteristics—find mixed results with regard to whether these plans reduce total spending and, in particular, for what service types spending is affected.[7, 8]

Nationally, incentives for use of generic prescription drugs appear to have moderated the rise in prescription drug spending. In Maryland, across market segments, the use of generic drugs is pervasive, with between 75 percent and 80 percent of prescriptions filled as generics. Because coverage of prescription drugs in policies purchased in the individual market has tended to be less generous, with associated lower spending in that market, inclusion of prescription drugs among the essential health benefits within the Exchange will likely cause prescription drug spending to rise. With the increasing use of expensive specialty drugs and as new drugs come to market, there will be continued need for incentives for the use of generic drugs where possible and step therapies or other controls on the use of expensive medications.

All of these changes will have both immediate and longer-term effects on Maryland's health care system. As health care reform continues to be implemented, MHCC will be using the MCDB to monitor and report on the various impacts on Maryland's health care system, with a focus on enrollee spending across payers, markets, and service sectors.

[7] Fronstin, Paul, Martín J Sepúlveda, and M Christopher Roebuck. 2013. "Consumer-Directed Health Plans Reduce the Long-term Use of Outpatient Physician Visits and Prescription Drugs." *Health Affairs* (Project Hope) 32 (6) (June): 1126–1134. doi:10.1377/hlthaff.2012.0493.

[8] Waters, Teresa M, Cyril F Chang, William T Cecil, Panagiotis Kasteridis, and David Mirvis. 2011. "Impact of High-Deductible Health Plans on Health Care Utilization and Costs." *Health Services Research* 46 (1 Pt 1) (February): 155–172. doi:10.1111/j.1475-6773.2010.01191.x.

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