SPOTLIGHT ON
MARYLAND

MHCC MARYLAND HEALTH CARE COMMISSION

STATE HEALTH CARE EXPENDITURES

One mission of the Maryland Health Care Commission (MHCC) is to develop timely and accurate information for policymakers, purchasers, providers, and the public to promote informed decisionmaking.

This report provides information about total and per capita personal health care expenditures by Maryland residents in 2011, and the distribution of those expenditures by type of service and payer source. It compares expenditures in 2011 with those over the past decade, from 2000 through 2010. It also compares spending in Maryland with spending nationally. All expenditures measure personal health care spending annually by type of service delivered and are in nominal terms.

MARYLAND'S HEALTH CARE SPENDING: 2000–2011. In 2011, Maryland residents spent an estimated $47.7 billion on personal health care[1], including hospital care, professional services, prescription drugs, and long-term care. The rate of growth in total spending for Maryland fell between 2010 and 2011 from 5.7 percent to 4.9 percent, while it rose nationally from 3.7 percent to 4.1 percent. Except for a spike in 2006, the growth in total personal health care spending has been slowing in Maryland over the last decade and is currently about one-half of what it was in 2000—4.9 percent versus 9.9 percent (data not shown).

On a per capita basis, which controls for changes in population, spending in Maryland remained above that nationally—$8,199 for 2011, 11 percent higher than the national average. Between 2010 and 2011, per capita spending in Maryland grew, on average, at an annual rate of 4.2 percent. This rate of growth was slightly higher than the rate of growth between 2009 and 2010, suggesting that the impact of the recession on health care spending may have leveled off. The rate of growth for Maryland was higher than the 3.3 percent observed for the nation as a whole. Growth rates in per capita spending for Maryland and the United States are shown in Figure 1 as 3-year annual averages in order to reduce the effect of short-term fluctuations. On average, the annual rate of growth in per capita spending throughout the decade has been higher for Maryland than for the United States overall.

[1] Personal health care expenditures measure the total amount spent to treat individuals but do not include government public health activity and administration or the net cost of health insurance. In this Spotlight, personal health care expenditures in Maryland represent the amount spent on health care received by Maryland residents. See the Methods box on page 6 for more information.

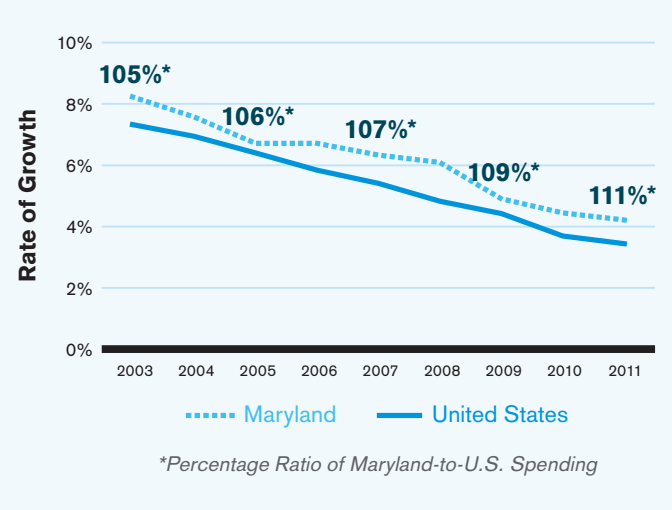
HIGHLIGHTS

- In 2011, Maryland's personal health care expenditures totaled $47.7 billion, up 4.9 percent from 2010.
- In 2011, per capita personal health care spending for Maryland residents was $8,199, 11 percent higher than the national average.
- Between 2010 and 2011, per capita spending in Maryland grew 4.2 percent, compared with 3.3 percent nationally.
- The share of personal income devoted to health care in Maryland was steady for 2010 and 2011, at 16 percent.
- The gap in the rate of growth in per capita personal income and per capita health care spending generally narrowed between 2000 and 2011.
- Hospital care in Maryland accounted for 37 percent and physician care for 23 percent of total personal health care spending—similar to the United States as a whole.
- The mix of long-term care spending in Maryland and the United States differed, with a lower share of spending on home health care and a higher share of spending on nursing home care in Maryland.
- In terms of payer source, the private/out-of-pocket share in Maryland was 64 percent, with Medicare and Medicaid accounting for 21 percent and 15 percent of spending, respectively.

Figure 1 also shows the ratio of per capita spending in Maryland to that nationally. Per capita spending has been consistently higher in Maryland, with the gap increasing over time, from about 103 percent in 2000 to 111 percent in 2011. However the general trend shows the rate of growth in per capita spending declining for both Maryland and the United States.

The ratio of per capita personal health care spending to per capita personal income (shown in Figure 2) represents the share of personal income devoted to health care and is one

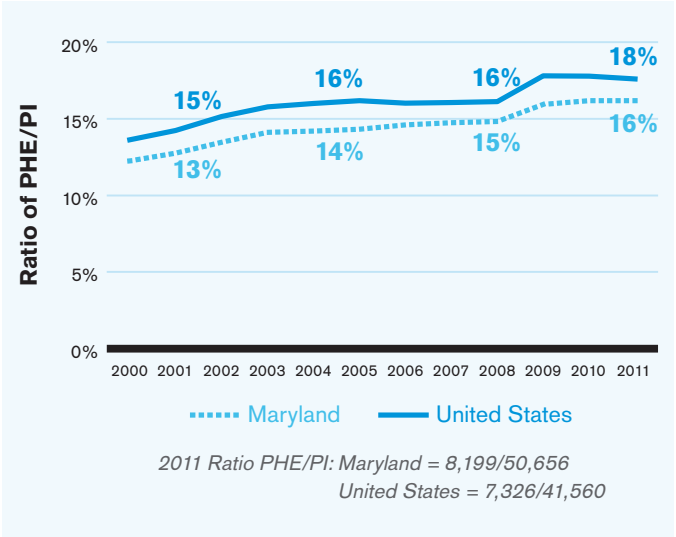
FIGURE 1. Growth in Per Capita Personal Health Care Expenditures, Maryland and the United States, 2000–2011



NOTE: Growth rates are calculated as a 3-year moving average of the annual percentage change in spending. Moving averages are used to reduce the effect of short-term fluctuations so as to observe underlying data trends. Percentage ratios are the average of ratios in the 3 corresponding years.

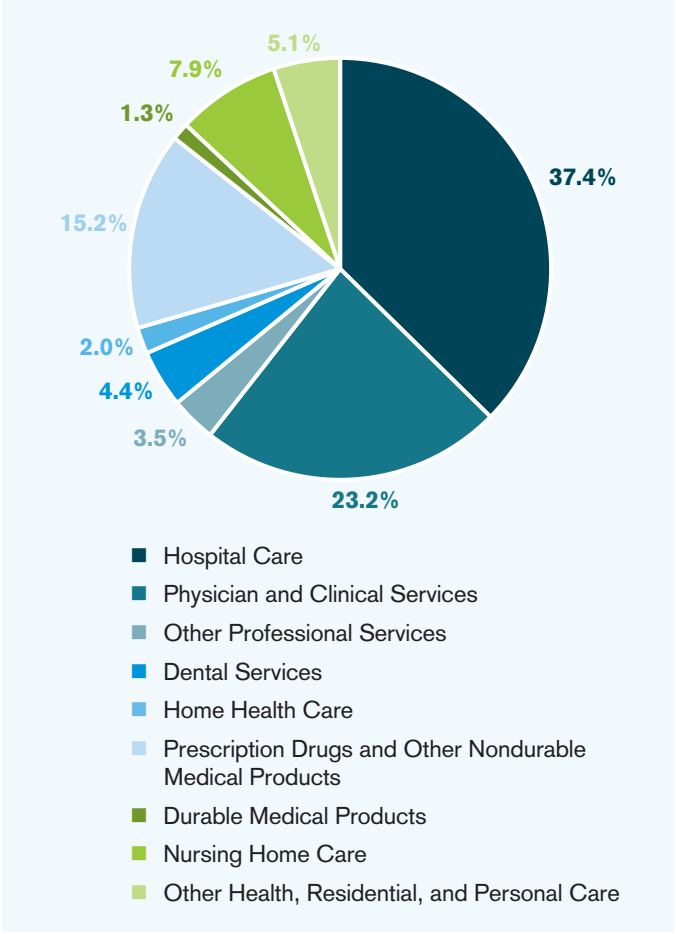
SOURCE: Tabulations of data from the Centers for Medicare & Medicaid Services (CMS) and the U.S. Census Bureau. Personal health care expenditures in Maryland in 2010 and 2011 were projected by Social & Scientific Systems, Inc. (SSS), using time series models.

FIGURE 2. Ratio of Per Capita Personal Health Care Expenditures (PHE) to Personal Income (PI), Maryland and the United States, 2000–2011



SOURCE: Tabulations of data from CMS and the U.S. Census Bureau. Personal health care expenditures in Maryland in 2010 and 2011 were projected by SSS using time series models.

FIGURE 3. Share of Total Personal Health Care Expenditures by Type of Service, Maryland, 2011



SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2011 were projected by SSS using time series models.

indicator of individual purchasing power for health care needs. In 2011, Maryland residents spent an average of 16.2 percent of their personal income on health care, compared with 17.6 percent spent nationally. Both per capita spending and income were higher for Maryland than for the nation overall, but the gap in income was larger. In 2011, personal income was 22 percent higher and health care spending was 11 percent higher in Maryland than in the United States; therefore, the share of income devoted to health care spending in Maryland was lower than it was in the nation overall.

Comparing the spending-to-income ratios for Maryland and the United States over time, the relationship between the ratios is fairly constant. However, for both Maryland and the United States, the share of income devoted to health care spending has been increasing.

How Were Maryland's Health Care Dollars Spent?

BY TYPE OF SERVICE. The single largest share of personal health care expenditures was attributable to hospital care—including both inpatient and outpatient services—accounting for 37.4 percent of Maryland's total health expenditures in 2011 (see Figure 3). Physician and clinical services made up the next largest share, at nearly one-quarter of total health expenditures (23.2 percent). Prescription drugs and other nondurable medical products made up 15.2 percent, followed by almost 10 percent for long-term care (nursing home and

home health care combined). Dental services and other health, residential, and personal care accounted for 4.4 percent and 5.1 percent of total spending, respectively. Other professional services and durable medical products together accounted for less than 5 percent of total personal health care expenditures in Maryland in 2011.

Over the last decade, spending for hospital care and prescription drugs and nondurable medical products grew modestly as a share of total personal health care expenditures in Maryland, while the spending share for physician and clinical services declined somewhat (see Figure 4). Although the share of spending devoted to hospital care was similar in Maryland and nationally, the share of spending on prescription drugs and nondurable medical products remained fairly constant in the United States overall but increased slightly in Maryland. The share of spending attributable to physician and clinical services has declined steadily over the last decade for both Maryland and the United States.

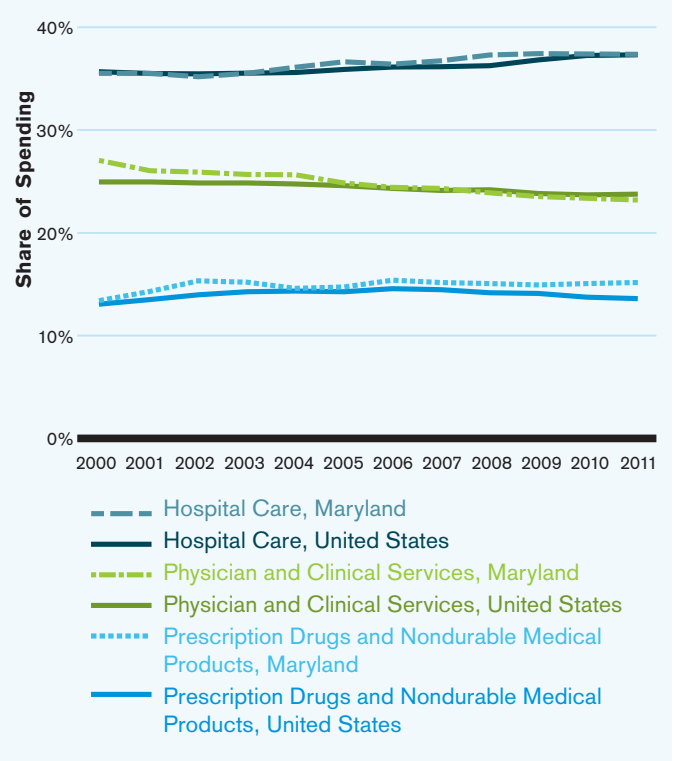
Table 1 shows the average annual rates of growth in spending by type of service, both in Maryland and the United States, for selected years over the past decade. The rate of growth for all three services declined between the two time periods shown, for both Maryland and the United States. Maryland showed the largest decline in the rate of growth for spending on prescription drugs and nondurable medical products—from almost 11 percent to under 7 percent. Similarly, for the United States, the rate of growth in spending for prescription drugs and nondurable medical products fell from almost 10 percent to about 4 percent. Compared with the United States, the rate of growth for all these services was higher in Maryland in the period from 2006–2011.

As shown in Figure 5, the share of personal health care expenditures allocated to long-term care[2] has remained between 9 percent and 10 percent for Maryland as well as nationally from 2000 through 2011. While overall long-term care spending has been similar for Maryland and the nation as a whole, the composition of that spending has differed. The share of spending on nursing home care in Maryland continued to be above the national average—for 2011, nursing home care accounted for 7.9 percent of spending in Maryland compared with 6.6 percent nationally. Conversely, the state's share of spending on home health care (2.0 percent) remained below the national average (3.3 percent).

Table 2 shows the average annual rates of growth in spending on long-term care services for the United States and Maryland for selected years over the past decade. The rates of growth declined between the two time periods of 2001–2005 and 2006–2011 for the United States and Maryland. The exception to this was home health care services in Maryland, which showed an increase from about 4 percent to almost 9 percent, suggesting that the composition of long-term care spending in Maryland may look more like that for the United States in coming years.

[2] Expenditures for services provided through Medicaid's home and community-based waiver programs are included in Other Health, Residential, and Personal Care (not shown here).

FIGURE 4. Trend in Share of Personal Health Care Expenditures for Selected Type of Service, Maryland and the United States, 2000–2011



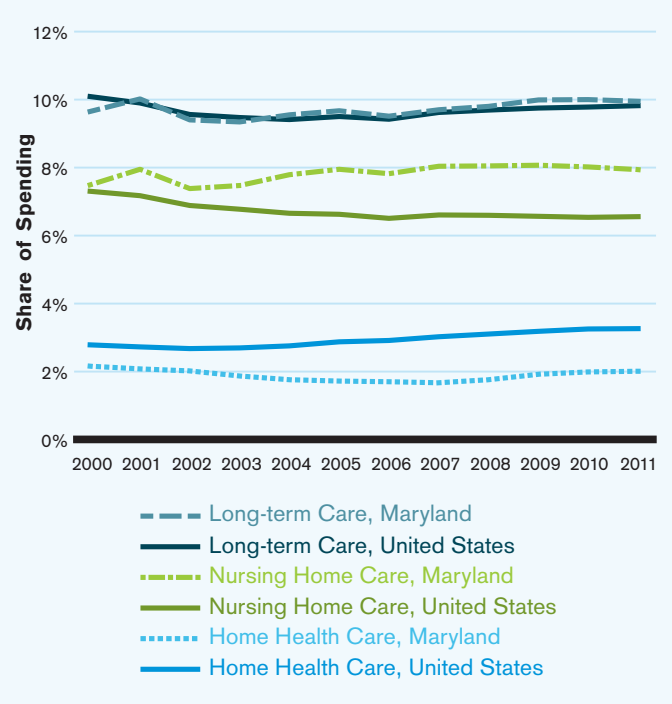
SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2010 and 2011 were projected by SSS using time series models.

TABLE 1. Growth Rates in Share of Personal Health Care Expenditures for Selected Type of Service, Maryland and the United States, 2001–2011 (Selected Years)

	2001–2005	2006–2011
Hospital Care, Maryland	9.1%	6.3%
Hospital Care, United States	8.0%	5.7%
Physician and Clinical Services, Maryland	6.7%	4.7%
Physician and Clinical Services, United States	7.5%	4.4%
Prescription Drugs and Nondurable Medical Products, Maryland	10.6%	6.5%
Prescription Drugs and Nondurable Medical Products, United States	9.7%	4.2%

SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2010 and 2011 were projected by SSS using time series models.

FIGURE 5. Trend in Share of Personal Health Care Expenditures for Long-Term Care by Type of Service, Maryland and the United States, 2000–2011



SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2010 and 2011 were projected by SSS using time series models.

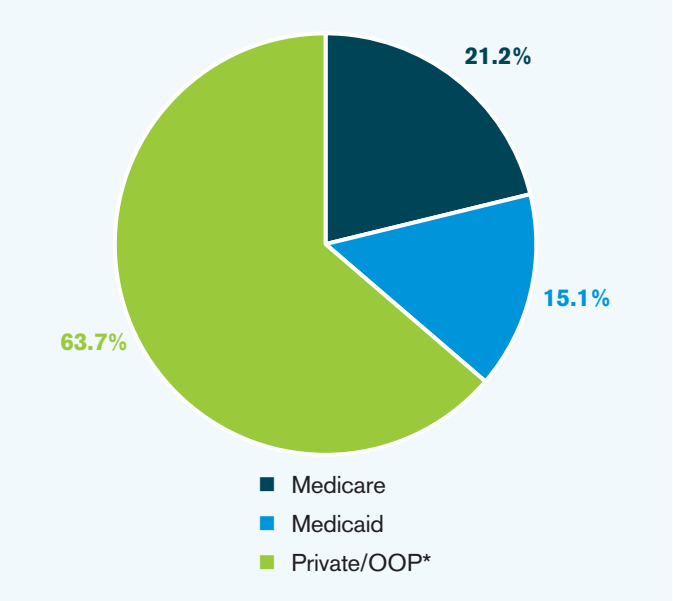
TABLE 2. Growth Rates in Share of Personal Health Care Expenditures for Long-Term Care by Type of Service, Maryland and the United States, 2001–2011 (Selected Years)

	2001–2005	2006–2011
Long-Term Care, Maryland	8.6%	6.4%
Long-Term Care, United States	6.5%	5.6%
Nursing Home Care, Maryland	9.9%	5.9%
Nursing Home Care, United States	5.7%	4.8%
Home Health Care, Maryland	3.7%	8.8%
Home Health Care, United States	8.5%	7.3%

SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2010 and 2011 were projected by SSS using time series models.

BY SOURCE OF PAYER. Spending reimbursed by private health insurers or paid out-of-pocket (OOP) by individuals made up the bulk of personal health care expenditures by payer in 2011 for Maryland, at almost 64 percent. Medicare had the next largest share at 21 percent, followed by Medicaid at 15 percent (See Figure 6). Compared with the United States overall, the share of spending paid by private payers or OOP was about 3.5 percentage points higher in Maryland. The state's higher-than-average private/OOP share is likely due to a higher private (rather than OOP) share, explained largely by the higher percentage of privately insured Maryland residents. About 70 percent of nonelderly Maryland residents had private insurance coverage (2010/2011 estimates) compared with 61 percent in all states combined.[3] Shares of spending paid by Medicare and Medicaid were higher in the United States than in Maryland.

FIGURE 6. Share of Total Personal Health Care Expenditures by Payer for Maryland, 2011

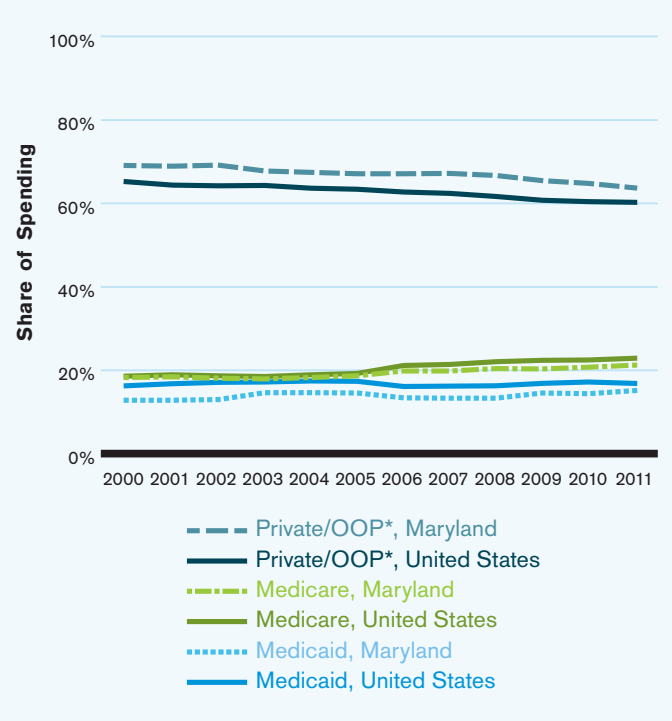


*Also includes small shares of Department of Veterans Affairs, Department of Defense, and other third-party payers and programs.
SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2011 were projected by SSS using time series models.

While private/OOP payers have the largest share of expenditures in Maryland, their share has been declining continuously since 2000, from a high of 69 percent to 64 percent (see Figure 7). There has been a similar trend nationally, with the share attributable to private/OOP payers dropping from 65 percent to 60 percent. In contrast, the shares of Medicare expenditures were at similar levels for Maryland and the United States in 2000 (18 percent and 19 percent, respectively) but have grown more slowly for Maryland than nationally, reaching 21 percent in Maryland and 23 percent nationally by 2011. The share of Medicaid spending for Maryland rose through 2005; fell slightly in 2006, 2007, and 2008; rose again in 2009; dropped in 2010; and finally increased slightly in 2011. Nationally, the trend was similar except that the share of Medicaid expenditures stayed constant from 2009 through 2011.

[3] *http://kff.org/other/state-indicator/nonelderly-0-64/*

FIGURE 7. Trends in Share of Personal Health Care Expenditures by Payer, Maryland and United States, 2000–2011



*Also includes small shares of Department of Veterans Affairs, Department of Defense, and other third-party payers and programs.

SOURCE: Tabulations of data from CMS. Personal health care expenditures in Maryland in 2010 and 2011 were projected by SSS using time series models.

Implications

The rate of growth in per capita personal health care spending in Maryland ended its 4-year decline in 2011. Many analysts view this as a likely indicator that the impact of the recession on health care spending has leveled off; as a corollary, these same analysts fear that as the economy continues to recover, growth in spending could return to former, higher rates. Under this scenario, as income rebounds, individuals will return to former spending patterns; the coverage expansions of the Affordable Care Act (ACA) will contribute to renewed growth for additional population groups; and innovations in pharmaceuticals, imaging, or other technologies will spur spending. An alternative perspective asserts that the majority of the slowdown in health care spending resulted from fundamental changes in the way that health care delivery is organized and financed. Such changes include new value-based payment initiatives, subdued growth in the development of newer and more costly imaging services, less generous insurance arrangements, and delivery models that incorporate care coordination and medical homes. These delivery system changes, which have been implemented by a host of private payers and for Medicare as part of the ACA, offer a countervailing force. Whether a slower rate of growth is sustainable will depend on the breadth of these delivery system changes and the strength of the momentum behind them.[4, 5, 6]

Maryland hospitals are exempted from Federal Medicare payment methods pursuant to Section 1814(b)(3) of the Social Security Act (the Medicare waiver). Under this waiver, the state has the authority to establish approved charges and payment levels for all Maryland acute care hospitals. This authority rests on two elements—that the system remains "all-payer," and the cumulative growth in Maryland payments per Medicare discharge since 1981 is slower than U.S. payments per Medicare discharge. Until recently, Maryland has maintained a comfortable "waiver margin." However, recent policy changes designed to make Maryland hospitals more efficient have increased overall cost per discharge. By the end of FY 2012, the expected waiver margin had shrunk to about 1.7 percent, and Maryland was precariously close to losing its waiver.

Over the last 16 months, state policymakers, payers, and hospitals have worked to devise a new waiver test that would better reflect overall goals of delivery system reform to achieve the triple aim of health care by achieving patient-centered care, improving population health, and slowing the growth in the costs of care. Earlier this year, Maryland submitted an application to CMS proposing to move progressively to a new, more stringent waiver test that would better align with those goals. Initially the waiver test would be based on the growth in total hospital cost per Medicare beneficiary, but ultimately the waiver test would expand to cover total costs of care per Maryland Medicare beneficiary. As Maryland awaits CMS' response to the proposal, state policymakers continue to focus on delivery system initiatives that facilitate greater integration across sites of care and innovative payment models that encourage providers to deliver population-based health.

[4] Cutler, David, and Nikhil Sahni. "If Slow Rate of Health Care Spending Growth Persists, Projections May Be Off by $770 Billion." *Health Affairs* May 2013. 32:841-50. *PubMed*. Web. 18 June 2013.

[5] Holahan, John, and Stacey McMorrow. "Is the Recent Health Care Spending Growth Slowdown Sustainable Over the Long Term?" *Health Affairs*. 7 May 2013. Web. 18 June 2013. *http://healthaffairs.org/blog/2013/05/07/is-the-recent-health-care-spending-growth-slowdown-sustainable-over-the-long-term/.*

[6] Roehrig, Charles. "Further Thoughts on the Recession and Health Spending." *Health Affairs*. 7 May 2013. Web. 18 June 2013. *http://healthaffairs.org/blog/2013/05/07/further-thoughts-on-the-recession-and-health-spending/.*

METHODS

DATA SOURCES. Expenditure estimates for Maryland and other states for the years 2000–2009 come from the Centers for Medicare & Medicaid Services' *Health Expenditures by State of Residence (2011)*, available online at *http://www.cms.gov/NationalHealthExpendData/downloads/resident-state-estimates.zip*. The national expenditure estimates are from CMS' National Health Expenditures Accounts. Relying on CMS' health expenditures accounts to produce Maryland spending estimates allows for more consistent comparisons with spending trends nationally and in other states and substantially reduces the level of resources required to develop the estimates; however, there are a few limitations in terms of the level of granularity achieved.

WHAT'S INCLUDED IN SPENDING. All expenditures measure personal health care spending annually by type of service delivered and source of payer and are in nominal terms. Personal health care spending excludes administration and the net cost of private health insurance, as well as government spending on public health. The estimates of expenditures in Maryland are for Maryland residents. Spending is based on the location of the health care provider and then adjusted for the flow of residents between states in order to estimate resident-based expenditures for health care services. The estimates include major spending components, but estimates are not available for all specific services of interest. It is not possible to separate out certain components of spending, such as outpatient versus inpatient spending in hospitals and alternative therapies. Hospital care includes hospital-based nursing care facilities and home health care. Prescription drug spending accounts for about 85 percent of the Prescription Drugs and Other Nondurable Medical Products category. Nursing care facilities include continuing care retirement communities. Other Health, Residential, and Personal Care includes expenditures for residential care facilities, Medicaid home and community-based waiver programs, ambulance providers, and medical care delivered in nontraditional settings (such as community centers and schools).

THE PREDICTION MODEL. Time series models using CMS spending data for Maryland and the United States for 1991 to 2009 were used to predict Maryland spending in 2010 and 2011 by type of service and source of payer. The predicted Maryland spending in 2010 and 2011 by type of service and source of payer was controlled by applying the ratios of the *predicted 2010 and 2011* Maryland-to-national spending estimates (for each service category and payer source) to the CMS-published national spending data for 2010 and 2011, respectively.

OTHER ADJUSTMENTS. CMS estimates are published by "vintage," meaning that estimates for earlier years may change as new information becomes available when CMS updates the time series. Estimates in this report are recalibrated to the 2012 National Health Accounts and so may differ slightly from estimates published by MHCC in prior years.

Acknowledgments

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