# Health Sector Economic Indicators<sup>SM</sup>

# Insights from Monthly National Price Indices Through May 2017



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**PRICE BRIEF** 

July 14, 2017

# Health price growth steady at 1.6%

#### **HIGHLIGHTS**

- ▲ Health care prices in May 2017 rose 1.6% above May 2016, equal to the April rate, but the lowest annual growth rate since June 2016.
- ▲ Year-over-year hospital price growth fell to 1.5%, from 1.8% in April. Physician and clinical services price growth was steady at 0.5% in May. Annual drug price growth rose to a 3.9% rate, well below its 20+ year high of 7.0% recorded in November 2016 (though up from 3.1% in April).
- ▲ Economy-wide price indices all exhibited lower growth. The Consumer Price Index (CPI) fell to 1.9% growth in May from 2.2% in April, the final-demand Producer Price Index (PPI) fell to 2.4% from 2.5%, and the gross domestic product deflator (GDPD) fell from 2.1% to 1.4%.
- ▲ Combining price and health spending data shows implicit per capita health care utilization growth year over year at 1.9% in May, well below its 12-month average of 2.8% (exactly matching the April readings).

#### Health Care Prices and Related Statistics: 12-Month Growth Rates

|                                | May. 2015 | May. 2016 | Apr. 2017 | May. 2017 |
|--------------------------------|-----------|-----------|-----------|-----------|
| Health Care Price Index (HCPI) | 1.1%      | 1.4%      | 1.6%      | 1.6%      |
| GDPD                           | 1.1%      | 1.3%      | 2.1%      | 1.4%      |
| HCPI-GDPD                      | 0.0%      | 0.1%      | -0.5%     | 0.2%      |
| Addendum                       |           |           |           |           |
| Health care spending           | 6.3%      | 6.0%      | 4.5%      | 4.2%      |
| Health care utilization        | 5.2%      | 4.6%      | 2.9%      | 2.6%      |
| CPI—medical                    | 2.8%      | 3.1%      | 3.0%      | 2.7%      |
| CPI—all items                  | 0.0%      | 1.0%      | 2.2%      | 1.9%      |
|                                |           |           |           |           |

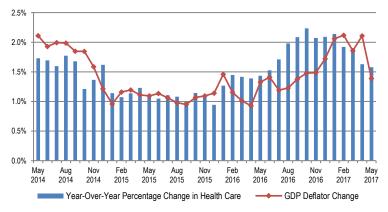
Source: Altarum analysis of U.S. Bureau of Labor Statistics (BLS) data. HCPI is a composite price index designed to measure overall price changes for personal health care spending and is patterned after the price index developed by the Centers for Medicare & Medicaid Services (CMS). Details are provided on page 4.

Numbers may not subtract properly due to rounding.

#### **HEALTH CARE AND ECONOMY-WIDE PRICES**

In May 2017, the Health Care Price Index (HCPI) rose 1.6% above May 2016. The 12-month moving average, at 1.9% growth, is unchanged for 3 months. The HCPI declined from 3.4% in October 2009, oscillated near 2% growth for 2 years, hit a historic low of 0.9% in December 2015, and increased sharply through 2016 but is now (unexpectedly) falling (Exhibit 1). We thought that the HCPI would stay above 2% and even trend higher. Instead, we now see 4four straight months below that rate. Economy-wide price inflation, as measured by the GDPD, trended upward beginning in September 2009, peaked at 2.4% in September 2011, and stands at 1.4% year-over-year growth as of May 2017. The HCPI growth rate is again tracking the GDPD rate. Exhibit 5 shows long-term comparisons.

## Exhibit 1. Year-over-Year Growth Rates in HCPI and GDPD

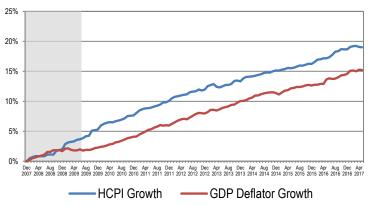


Source: Altarum analysis of monthly BLS data.

Note: This exhibit compares monthly prices with the same month from the previous year.

Since the start of the recession in December 2007, health care prices have increased only 19.0% (actually falling from last month), while prices in the economy as a whole (using the GDPD) have increased 15.2% (Exhibit 2). Low economy-wide inflation and structural changes in the health sector may again be putting downward pressure on health care prices, and Affordable Care Act repeal and replace uncertainty appears to be having a large effect. In May, the CPI rose 1.9% above the previous year, and the medical CPI, emphasizing out-of-pocket prices, fell to 2.7% growth, its lowest rate since December 2015. The final-demand PPI growth rate for May fell one-tenth to 2.4%.

# Exhibit 2. HCPI and GDPD, Cumulative Percentage Change Since December 2007



Source: Altarum analysis of monthly BLS price data and monthly GDPD data published by Macroeconomic Advisers.

Note: Shading indicates the recession period.

<sup>\*\*</sup> Data are not yet available.

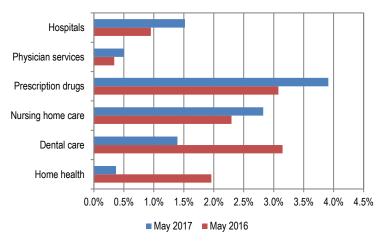
#### **HEALTH CARE PRICES BY CATEGORY**

In May 2017, the annual price growth for prescription drugs, at 3.9%, was easily the fastest growing category, higher than nursing home care at 2.8% growth. The drug rate is down substantially from the multi-decade high 7.0% level hit in October 2016. Hospital price growth fell to 1.5%, from 1.8% in April, and physician price growth was steady at 0.5%. Hospital price growth plays a dominant role in the HCPI due to its large spending weight, which largely accounts for the aggregate index holding at 1.6% growth in May. Annual inflation rate comparisons—May 2017 year over year versus May 2016 year over year—show 4 categories higher (hospitals, physician services, prescription drugs, and nursing home care), and the other 2 lower (Exhibit 3, with additional detail in Exhibit 4).

Price "momentum," which highlights the latest three months of data, is lower for the aggregate HCPI and for five of the ten price categories. These data argue for a stable HCPI trend in June.

Medicare and Medicaid hospital prices typically grow less quickly than private-sector prices. Hospital price growth for Medicare patients was steady at 0.9% in May, and also steady at 1.5% for Medicaid patients, and fell sharply for private pay patients (from 2.6% in April to 2.0% in May). For "other" patients (e.g., Veterans, TRICARE, self-pay), hospital price growth was steady at 4.1% (data not shown). While hospital prices for privately-insured patients are growing quite slowly (the May 2017 rate is the lowest since June 2015), there is a large cumulative gap compared to public payments. Specifically, since June 2014 (when BLS created the private-only data series), *cumulative* hospital prices for Medicare, Medicaid, and private pay patients have grown by -0.7%, -0.9%, and 7.0%, respectively.

# Exhibit 3. Year-over-Year Price Growth for Selected Health Categories



Source: Altarum analysis of monthly BLS data.

### PRICES, SPENDING, AND UTILIZATION

Trends in health care utilization and intensity can be computed from the price data combined with Altarum's monthly health spending estimates.<sup>1</sup>

- ▲ Exhibit 6 displays year-over-year growth rates in personal health care spending broken out by price and utilization. The historic, downward trend in health spending growth that began in 2002 was due to declining utilization growth, followed by very low price growth. Utilization surged in 2014 and 2015, but is now stable. The readings for May 2017 are 4.2% spending growth and 2.6% utilization growth (matching April).
- ▲ Exhibit 7 shows per capita (implicit) utilization growth and highlights the decline between 2002 and 2010, then sharp growth and a jagged 2+ year moderation. Per capita utilization in May rose at an annual rate of 1.9%, far below its 12-month average of 2.8%. On a 12-month average basis, utilization for hospitals rose 3.1%, home health care is up 3.0%, physician services rose 5.2%, the prescription drug rate is -1.5%, nursing care rose 1.4%, and dental care utilization is up 1.6%.

#### **DISCUSSION**

In May 2017, the HCPI rose by 1.6% compared to a year earlier, equal to the April rate, which is the lowest reading since June 2016. The 12-month moving average of the HCPI stands at 1.9% for the third straight month. The index appeared poised to top 2% and even trend higher, but the situation is now dramatically different compared to the end of 2016. It appears that in addition to the significant uncertainty introduced by the continuing Affordable Care Act repeal and replace saga, economy-wide prices are once again putting downward pressure on health care prices. Indeed, at the highest levels, Federal Reserve Board Chair Janet Yellen noted on July 12, 2017 that special (presumably unclear) factors are affecting national inflation data, to the downside.

We pay close attention to the hospital and physician components of the price index. The former fell from 1.8% growth in April to 1.5% in May; the latter held steady at 0.5%. These categories served to keep a lid on the overall HCPI rate, despite increasing price growth for prescription drugs (from 3.1% in April to 3.9% in May), dental services and other non-durable medical products.

As we note each month, health care inflation is quite low for this stage of the economic recovery. May 2017 was the 95th month of expansion following the Great Recession. Yet the HCPI growth is actually falling!

Hospital prices for privately-insured patients exhibited an annual growth rate of 2.0% in May, the lowest reading since June 2015. There is evidence of deteriorating hospital admissions trends which, in conjunction with fears over accelerating uncompensated care should ACA repeal be enacted, could be affecting the behavior of hospitals.<sup>2</sup> All told, it is difficult to imagine health care prices accelerating anytime soon.

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Altarum Spending Brief #17-7: May 2017 Data. Please note: The Spending Briefs cover all health care spending; this Price Brief covers only personal health care.

<sup>&</sup>lt;sup>2</sup> Daly, R (2017). "Hospitals See 'Surprising' June Hiring Surge." HFMA Healtheare Business News, July 6. http://www.hfma.org/Content.aspx?id=54807

#### **PRICE GROWTH BY DETAILED CATEGORIES**

Exhibit 4. Annualized Percentage Change in Prices for the Major Components of National Health Expenditures

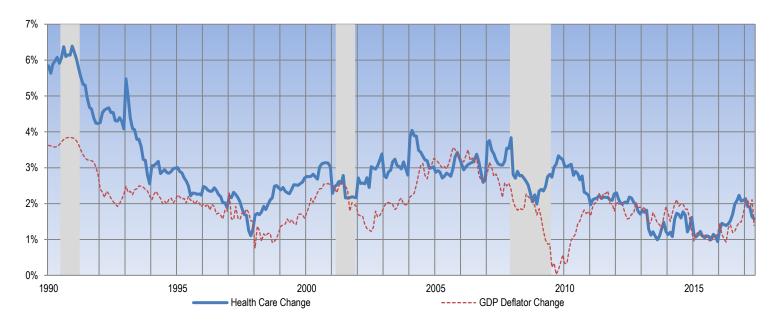
|                                   | Ending May<br>2015 | Ending May<br>2016 | Ending May<br>2017 |
|-----------------------------------|--------------------|--------------------|--------------------|
| HCPI                              | 1.1%               | 1.4%               | 1.6%               |
| Hospital care                     | 0.8%               | 1.0%               | 1.5%               |
| Physician and clinical services   | -1.2%              | 0.3%               | 0.5%               |
| Prescription drugs                | 5.3%               | 3.1%               | 3.9%               |
| Nursing home care                 | 2.0%               | 2.3%               | 2.8%               |
| Dental services                   | 2.4%               | 3.1%               | 1.4%               |
| Home health care                  | 1.0%               | 2.0%               | 0.4%               |
| Other professional services       | 1.2%               | 1.4%               | 2.2%               |
| Other personal health care        | 1.7%               | 3.1%               | 1.5%               |
| Other nondurable medical products | -0.7%              | -1.3%              | 1.2%               |
| Durable medical equipment         | -0.2%              | 0.5%               | 0.3%               |

Source: Altarum analysis of monthly BLS data.

Notes: This exhibit compares a given month's prices with those of the same month from the previous year.

## **TIME SERIES TRACKER**

## Exhibit 5. Year-over-Year Percentage Change in Health Prices Compared with the GDPD



Source: Altarum analysis of monthly BLS price data and Macroeconomic Advisers GDP data.

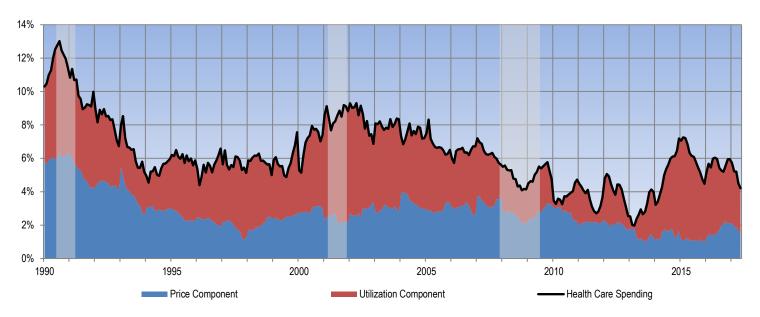
Note: Lightly shaded bars denote recession periods.

Altarum Institute is a 501(c)(3) nonprofit health care research and consulting organization. Altarum integrates independent research and client-centered consulting to deliver comprehensive, systems-based solutions that improve health and health care.

The Center for Sustainable Health Spending (CSHS) was launched in 2011 to lead Altarum's research on the cost growth trends and key drivers of U.S. health spending and to formulate policy strategies to help bend the cost growth curve.

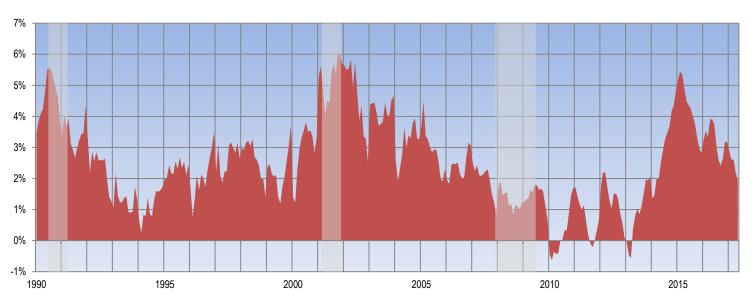
The *Health Sector Economic Indicators*<sup>SM</sup> reports are a monthly publication of Altarum's CSHS and provide an analysis of health spending, employment, and prices. For more information, contact **Charles Roehrig, PhD,** at 734-302-4600 or <a href="mailto:charles.roehrig@altarum.org">charles.roehrig@altarum.org</a>. Paul Hughes-Cromwick (principal author); George Miller, PhD; Ani Turner; and Matt Daly, PhD, contributed to this brief. Media Contact: Sarah Litton, 202-772-5062, <a href="mailto:press@altarum.org">press@altarum.org</a>. For more information, visit <a href="http://www.altarum.org/cshs">http://www.altarum.org/cshs</a>.

Exhibit 6. Personal Health Care Spending Growth by Price and Utilization Components



Source: Altarum calculations from Health Sector Economic Indicators data. Note: Lightly shaded bars denote recession periods.

Exhibit 7. Year-over-Year Change in Per Capita Personal Health Care Utilization



Source: Altarum calculations from Health Sector Economic Indicators data. Note: Lightly shaded bars denote recession periods.

Methods. Altarum's estimates for the monthly HCPI, a price index for personal health care spending within the National Health Expenditure Accounts, are essentially monthly versions of the annual index developed by the CMS National Health Statistics Group (NHSG). The advantages of this measure over the medical care component of the CPI are well documented. Information on the CMS index is presented in the following source: U.S. Department of Health and Human Services. (2016). National Health Expenditure Accounts: Methodology Paper, 2015—Definitions, Sources, and Methods. Washington, DC: Centers for Medicare & Medicaid Services. Retrieved from <a href="http://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/dsm-15.pdf">http://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/dsm-15.pdf</a>. The HCPI is calculated by using BLS data on PPIs for hospital, physician, nursing home, and home health components and CPIs for prescription drugs and other remaining items. Following NHSG, we use the GDPD rather than the CPI as our measure of economy-wide inflation. While this brief focuses on prices, it also incorporates data from our spending brief and shows the power of looking at prices and spending together. In particular, it reveals the striking role of utilization in health spending growth trends.