

Health Sector Economic IndicatorsSM

Insights from Monthly National Price Indices Through November 2016

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PRICE BRIEF

January 13, 2017

Health price growth stable; drug price growth retreats from 24+ year high

HIGHLIGHTS

- ▲ Health care prices in November 2016 rose 2.1% above November 2015, fractionally down from 2.2% growth in October 2016, the first drop in this rate since December 2015.
- ▲ Year-over-year hospital price growth rose to 1.6%, up from 1.5% in October. Physician and clinical services price growth held steady at 0.1%. Annual drug price growth in November dropped to 6.0%, from 7.0% in October—which had been a 24+ year high.
- ▲ Economy-wide price indices showed higher growth. The Consumer Price Index (CPI) rose to 1.7% growth in November from 1.6% and the final-demand Producer Price Index (PPI) rose to 1.3% from 0.8%. The gross domestic product deflator (GDPD) rose to 1.4% growth in October from 1.2% in September (November data are not yet available).
- ▲ Combining price and health spending data shows implicit per capita health care utilization growth year over year at 2.2% in November, below its 12-month moving average of 3.1%.

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

| | Nov. 2014 | Nov. 2015 | Oct. 2016 | Nov. 2016 |
|---------------------------------------|-----------|-----------|-----------|-----------|
| Health Care Price Index (HCPI) | 1.3% | 1.1% | 2.2% | 2.1% |
| GDPD | 1.6% | 1.1% | 1.4% | ** |
| HCPI-GDPD | -0.2% | 0.0% | 0.7% | ** |
| Addendum | | | | |
| Health care spending | 6.4% | 4.8% | 5.1% | 5.1% |
| Health care utilization | 5.1% | 3.7% | 3.0% | 3.0% |
| CPI—medical | 2.5% | 2.9% | 4.3% | 4.0% |
| CPI—all items | 1.3% | 0.5% | 1.6% | 1.7% |

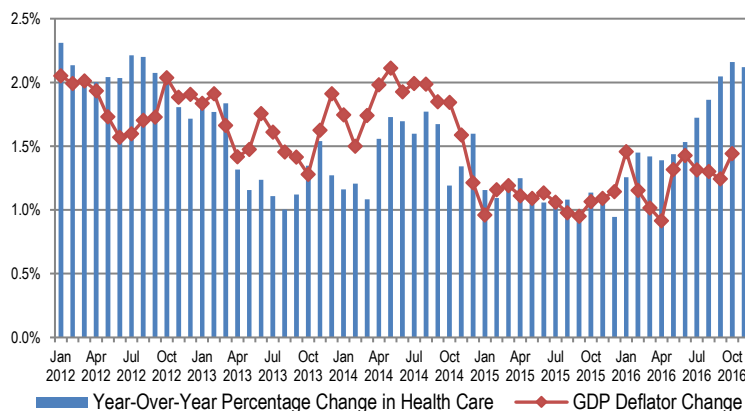
Source: Altarum analysis of U.S. Bureau of Labor Statistics (BLS) data. HCPI is a composite price index designed to measure overall price changes for personal health care spending and is patterned after the price index developed by the Centers for Medicare & Medicaid Services (CMS). Details are provided on page 4.
Numbers may not subtract properly due to rounding.
** Data are not yet available.

HEALTH CARE AND ECONOMY-WIDE PRICES

In November 2016, the Health Care Price Index (HCPI) rose 2.1% above November 2015. The 12-month moving average, at 1.6% growth, is one-tenth higher than October and the highest rate since July 2013. The HCPI declined steadily from 3.4% in October 2009, oscillated near 2% growth for 2 years, ultimately hit historic lows of roughly 1% in 2015, and through 2016 is exhibiting a sharp increase (Exhibit 1). The HCPI, having broken through the 2% rate for the first time since October 2012, may go higher as the economy strengthens. 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 October 2016. HCPI growth rates have been above GDPD rates since February 2016. Exhibit 5 shows long-term comparisons.

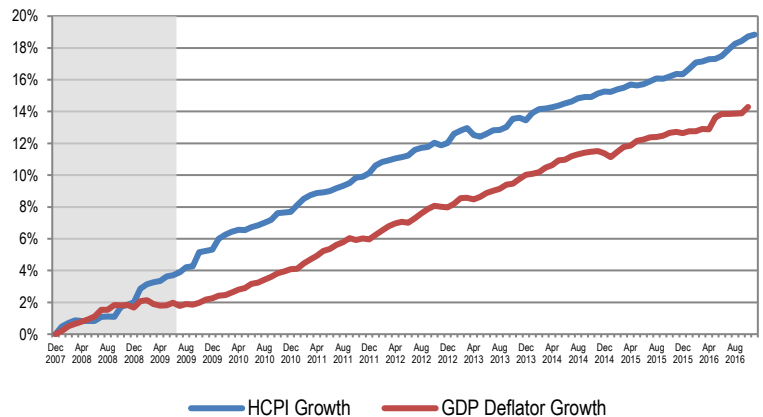
Since the start of the recession in December 2007, health care prices have increased 18.8%, while prices in the economy as a whole (using the GDPD) have increased 14.3% (Exhibit 2). Low economy-wide inflation and structural changes in the health sector (including payment policies in the Affordable Care Act and the Sequester), have put downward pressure on health care prices, but this period now seems over. In November, the CPI rose 1.7%, the highest growth since August 2014, and the medical CPI, emphasizing out-of-pocket prices, fell from 4.3% growth in October to 4.0% in October. The final-demand PPI growth rate for November rose to 1.3%, its highest rate since November 2014. While low by long-run standards, health care price pressures are clearly on the rise since the record lows hit in 2015.

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.

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.

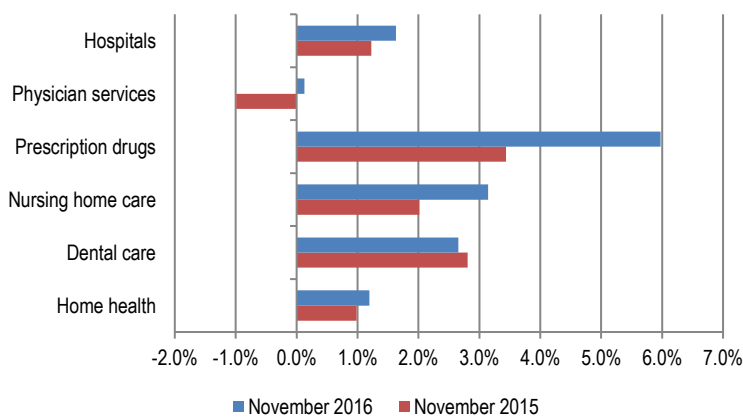
HEALTH CARE PRICES BY CATEGORY

Comparing November 2016 with November 2015, price growth for prescription drugs, at 6.0%, down from 7.0% in October, remains the fastest growing price category. It is far above the next two highest, other personal health care and nursing home care, which each grew by 3.1%. Hospital price growth rose to 1.6% in November from 1.5% in October, and physician price growth stayed at a very low 0.1% rate. Hospital price growth plays a dominant role in the HCPI due to its large spending weight. The small hospital price growth was offset by lower growth of drugs, home health care and dental services, though other components saw higher price growth. Annual inflation rate comparisons—November 2016 year over year versus November 2015 year over year—show five of six categories higher, with dental services being the exception (Exhibit 3, with additional detail in Exhibit 4).

Price “momentum,” which highlights the latest three months of data, is higher for the aggregate HCPI and for four of the ten price categories, especially hospital care and physician services. This hospital momentum, following the 2017 Medicare Prospective Payment System updates, argues for a higher HCPI in December, but we said that last month!

Medicare and Medicaid hospital prices typically grow less quickly than private-sector prices. Hospital price growth for Medicare patients held steady at 0.7% in November, fell from 2.7% to 2.3% for Medicaid patients (which is a quirk that warrants further inquiry), and rose from 2.7% to 3.0% for private pay patients. For “other” patients (e.g., Veterans, TRICARE, self-pay), hospital price growth rose to 2.2% from 1.2% (data not shown). While prices for privately-insured patients show moderate growth, there is a large cumulative gap compared to public payments. Specifically, since June 2014 (when the private-only data series was created), cumulative hospital prices for Medicare, Medicaid, and private pay patients have grown -0.7%, -0.2%, and 6.8%, respectively.

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



Source: Altarum analysis of monthly BLS data.

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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.¹

- ▲ 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 mainly to declining utilization growth, followed by very low price growth. Resurgent utilization has reversed the spending trend. The readings for November 2016 are 5.1% spending growth and 3.0% utilization growth.
- ▲ Exhibit 7 shows per capita (implicit) utilization growth and highlights the decline between 2002 and 2010, then sharp growth and two-year moderation. Per capita utilization in October rose at an annual rate of 2.2%, below its 12-month average of 3.1%. On a 12-month average basis, utilization for hospitals rose 3.1%, home health care is up 3.1%, physician services rose 5.2%, the prescription drug rate is minus 0.1%, nursing care rose 1.6%, and dental care utilization is up 2.2%.

DISCUSSION

In November 2016, the HCPI rose 2.1% above the November 2015 rate. This represents a fractional decrease from 2.2% in October, but does not contradict the upward trend. Indeed, the 12-month moving average of the HCPI rose by 0.1 to 1.6%, its highest rate since July 2013. After hitting its December 2015 all-time low of 0.9% year-over-year growth, the index has now returned to a more “normal” 2%+ rate. It is also normal that health care prices have risen more quickly than economy-wide prices for the past 10 months. We pay close attention to the hospital and physician components. The former has been steadily rising, and while still low at 1.6% growth, it is at its highest rate since September 2014. The latter, at 0.1% growth in November, has been below 1% since July 2012! At 6.0% annual growth, prescription drug prices have retreated from the over 24-year high rate of 7.0% seen in the previous 2 months.

As we note each month, health care inflation is very low for this stage of the economic recovery. November 2016 was the 89th month of expansion following the recession.

We also note, as we did last month, the extremely high annual MCPI growth of 4.9% recorded in August and September—the highest since January 2008. Yet, it has now fallen to 4.0%, thus partially resolving the paradox between it and the much lower overall HCPI growth. It seems a good bet that such narrowing in the two types of health care price indexes will continue. Moreover, economy-wide inflation has clearly turned up (growth for each of the final demand PPI and CPI is at two-year highs), thus no longer exerting downward pressure on health care prices. All told, these signs point to continued, moderate increases in growth of the HCPI.

As we go to press, we realize that the PPI data for December were released on Friday, January 13. See our Twitter account for updated price information.

¹ Altarum Spending Brief #17-1: November 2016 Data. Please note: The Spending Briefs cover all health care spending; this Price Brief covers only personal health care.

PRICE GROWTH BY DETAILED CATEGORIES

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

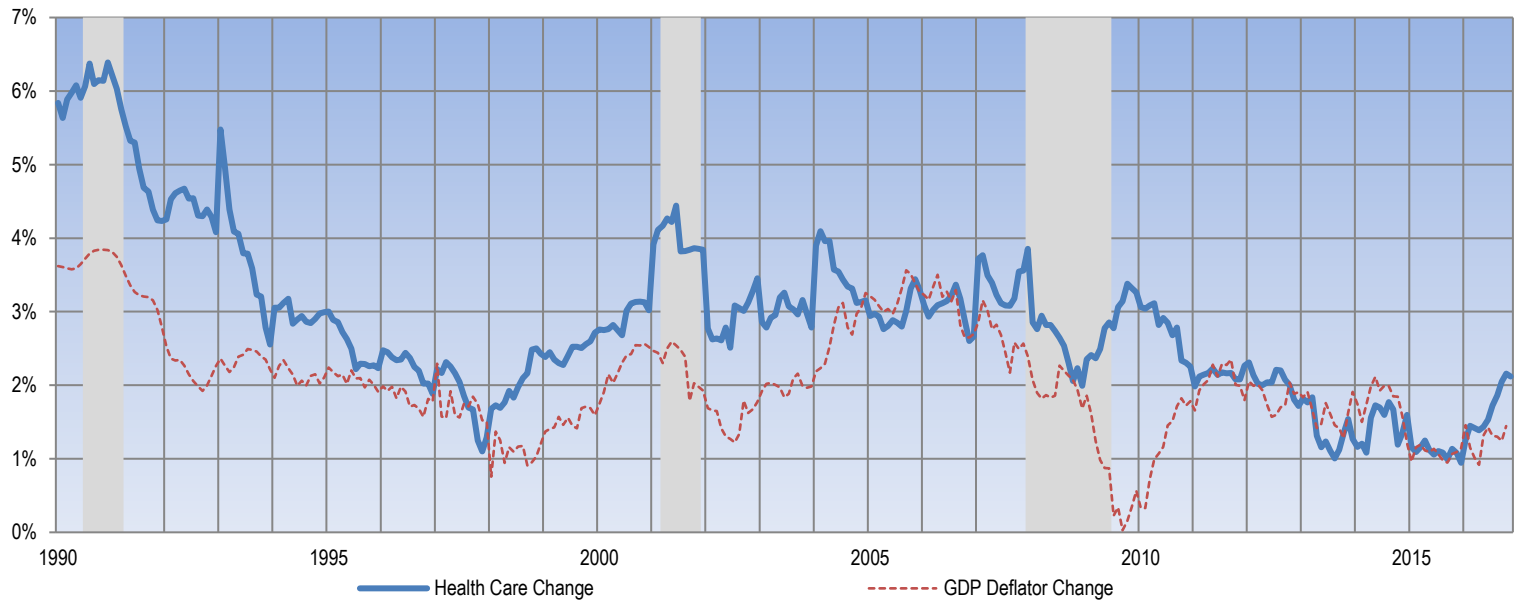
| | Ending November 2014 | Ending November 2015 | Ending November 2016 |
|-----------------------------------|----------------------|----------------------|----------------------|
| HCPI | 1.3% | 1.1% | 2.1% |
| Hospital care | 0.5% | 1.2% | 1.6% |
| Physician and clinical services | 0.6% | -1.0% | 0.1% |
| Prescription drugs | 4.6% | 3.4% | 6.0% |
| Nursing home care | 1.5% | 2.0% | 3.1% |
| Dental services | 1.9% | 2.8% | 2.7% |
| Home health care | 1.6% | 1.0% | 1.2% |
| Other professional services | 1.9% | -0.3% | 2.1% |
| Other personal health care | 2.5% | 2.7% | 3.1% |
| Other nondurable medical products | -1.4% | -0.2% | -1.3% |
| Durable medical equipment | 1.7% | -1.2% | 0.8% |

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 GDP



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

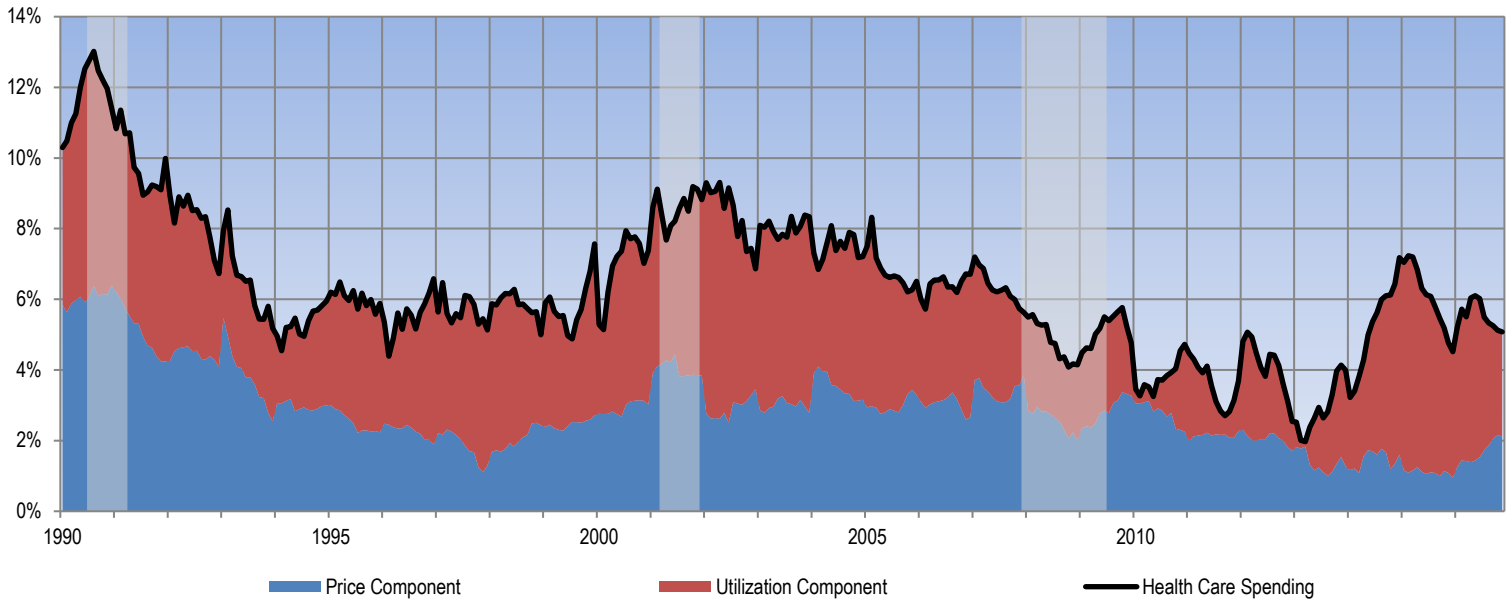
Note: Lightly shaded bars denote recession periods.

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.

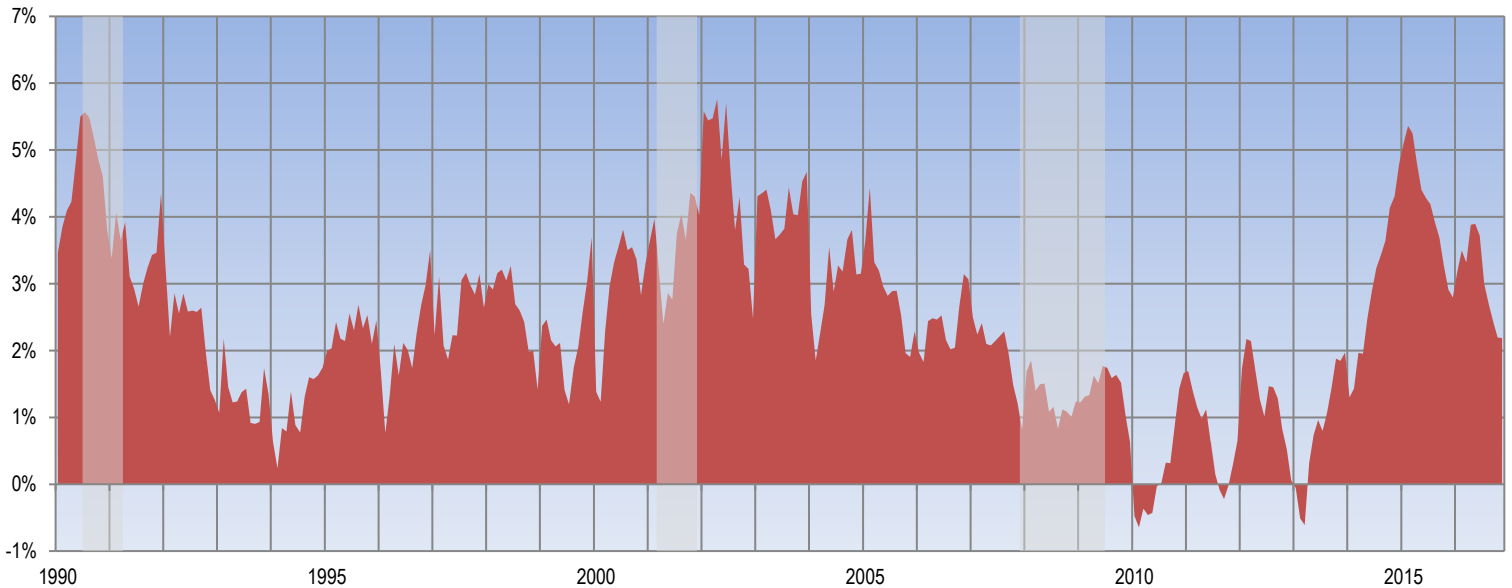
The *Health Sector Economic Indicators*SM reports are a monthly publication of Altarum's CSHS and provide an analysis of health spending, employment, and prices. For more information, contact **Charles Roehrig, PhD**, at 734-302-4600 or charles.roehrig@altarum.org. Paul Hughes-Cromwick (principal author);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

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 <http://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/dsm-15.pdf>. 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.