

Health Sector Economic IndicatorsSM

Insights from Monthly National Price Indices Through December 2016

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PRICE BRIEF

February 10, 2017

Health price growth stuck at moderate 2.1% rate; components largely stable

HIGHLIGHTS

- ▲ Health care prices in December 2016 rose 2.1% above December 2015, equaling the November 2016 rate.
- ▲ Year-over-year hospital price growth rose to 1.6%, also stable from November. Physician and clinical services price growth held steady at 0.1% for the 3rd straight month. Annual drug price growth in December rose to 6.2%, up from 6.0% in November (vs. 7.0% in October).
- ▲ Economy-wide price indices showed higher growth. The Consumer Price Index (CPI) rose to 2.1% growth in December from 1.7%, the final-demand Producer Price Index (PPI) rose to 1.6% from 1.3%, and the gross domestic product deflator (GDPD) rose to 1.8% growth from 1.5% in November. These each represent two-plus year high rates.
- ▲ Combining price and health spending data shows implicit per capita health care utilization growth year over year at 2.1% in December, below its 12-month moving average of 3.1%.

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

	Dec. 2014	Dec. 2015	Nov. 2016	Dec. 2016
Health Care Price Index (HCPI)	1.6%	0.9%	2.1%	2.1%
GDPD	1.2%	1.1%	1.5%	1.8%
HCPI-GDPD	0.4%	-0.2%	0.6%	0.4%
Addendum				
Health care spending	7.2%	4.5%	5.1%	4.9%
Health care utilization	5.6%	3.6%	3.0%	2.7%
CPI—medical	3.0%	2.6%	4.0%	4.1%
CPI—all items	0.8%	0.7%	1.7%	2.1%

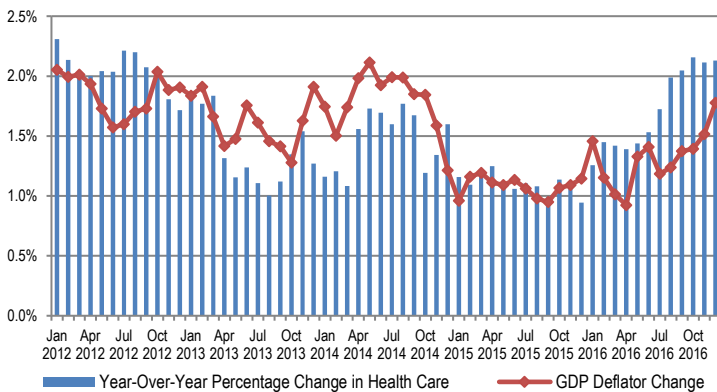
Source: Altarum analysis of U.S. Bureau of Labor Statistics (BLS) data. HCPI is a composite price index designed to measure overall price changes for personal health care spending and is patterned after the price index developed by the Centers for Medicare & Medicaid Services (CMS). Details are provided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

HEALTH CARE AND ECONOMY-WIDE PRICES

In December 2016, the Health Care Price Index (HCPI) rose 2.1% above December 2015. The 12-month moving average, at 1.7% growth, is one-tenth higher than November and the highest rate since June 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 exhibited 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 1.8% year-over-year growth as of December 2016. HCPI growth rates have been above GDPD rates since February 2016. Exhibit 5 shows long-term comparisons.

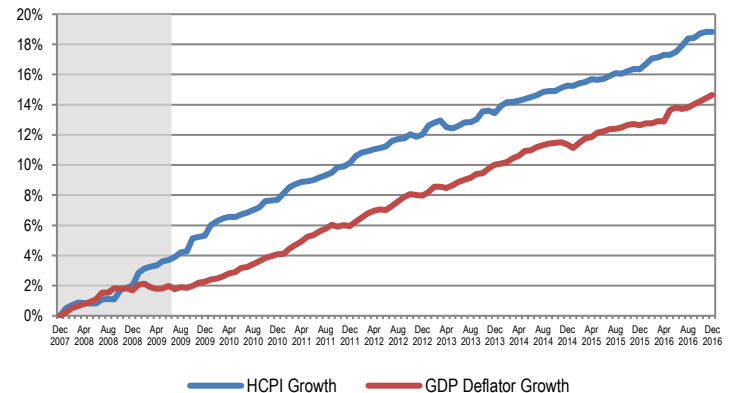
Since the start of the recession in December 2007, health care prices have increased 18.8%, while prices in the economy as a whole (using the GDPD) have increased 14.6% (Exhibit 2). Low economy-wide inflation and structural changes in the health sector (including payment policies in the Affordable Care Act and the Sequester), have put downward pressure on health care prices, but this period now seems over. In December, the CPI rose 2.1%, the highest growth since June 2014, and the medical CPI, emphasizing out-of-pocket prices, rose to 4.1% from 4.0% growth in November. The final-demand PPI growth rate for December rose to 1.6%, its highest rate since September 2014. Health care price pressures are clearly on the rise since the record lows hit in 2015, and economy-wide inflation is now affecting health prices.

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.

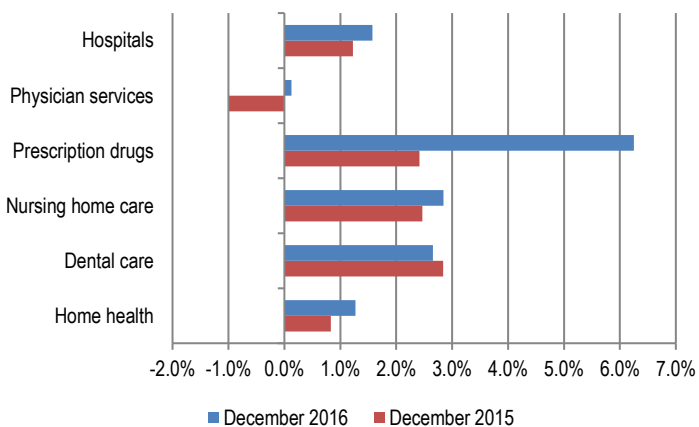
HEALTH CARE PRICES BY CATEGORY

Comparing December 2016 with December 2015, price growth for prescription drugs, at 6.2%, remains the fastest growing price category. It is far above the next two highest, other personal health care and nursing home care, which grew by 3.1% and 2.8%, respectively. Hospital price growth was steady at 1.6% in December, as was physician price growth at a low 0.1% rate for the 3rd straight month. Hospital price growth plays a dominant role in the HCPI due to its large spending weight. The constant growth for hospitals and physicians, plus small, offsetting changes in the other components, accounts for the stable HCPI rate. Annual inflation rate comparisons—December 2016 year over year versus December 2015 year over year—show 5 of 6 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 lower for the aggregate HCPI and for seven of the ten price categories. Nevertheless, higher hospital and physician momentum argue for a modestly higher HCPI next month, 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 December, fell from 2.3% to 2.2% for Medicaid patients (still an uncharacteristically high rate), and fell from 3.0% to 2.8% for private pay patients. For “other” patients (e.g., Veterans, TRICARE, self-pay), hospital price growth fell from 2.2% to 2.1% (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%, -0.4%, and 6.7%, respectively.

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



Source: Altarum analysis of monthly BLS data.

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¹ Altarum Spending Brief #17-2: December 2016 Data. Please note: The Spending Briefs cover all health care spending; this Price Brief covers only personal health care.

² Surveys of Consumers – Final Results for January 2017. University of Michigan, January 27, 2017. Available at: <https://data.sca.isr.umich.edu/>

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 to declining utilization growth, followed by very low price growth. Utilization surged, but now appears to be cooling. The readings for December 2016 are 4.9% spending growth and 2.7% utilization growth.
- ▲ Exhibit 7 shows per capita (implicit) utilization growth and highlights the decline between 2002 and 2010, then sharp growth and a 2-year moderation. Per capita utilization in December rose at an annual rate of 2.1%, below its 12-month average of 3.1%. On a 12-month average basis, utilization for hospitals rose 3.3%, home health care is up 2.9%, physician services rose 5.2%, the prescription drug rate is minus 0.5%, nursing care rose 2.0%, and dental care utilization is up 2.1%.

DISCUSSION

In December 2016, the HCPI rose to 2.1%, steady from the November reading. The 12-month moving average of the HCPI rose by 0.1 to 1.7%, its highest rate since June 2013. With 2016 now in the books, the average annual price growth for the past 6 years (2011-2016) was 2.1%, 2.0%, 1.4%, 1.5%, 1.1% (the *all-time* low rate), and 1.7%, respectively. This suggests that following a period of extraordinarily low health care price growth—partly because of special health factors such as Affordable Care Act payment policies and the Sequester, and partly because of downward price pressure from the economy writ large—we now see a more normal 2% rate. It is also normal that health care prices have risen more quickly than economy-wide prices for the past 11 months.

We pay close attention to the hospital and physician components of the price index. The former has stalled at 1.6% growth, but had been steadily rising. The latter, at 0.1% growth in December (for the 3rd straight month), has been below 1% since July 2012! Meanwhile, at 6.2% annual growth, prescription drug price growth has barely retreated from the over 24-year high rate of 7.0% seen in September and October.

As we note each month, health care inflation is still quite low for this stage of the economic recovery. December 2016 was the 90th month of expansion following the recession.

While there are indicators that only modest price pressures are mounting in the health sector, it will no longer get as much “help” from economy-wide price growth. That is, the GDP deflator, at 1.8% growth in December, is at its highest rate since October 2014; the Final Demand PPI, at 1.6%, is at its highest rate since September 2014; and the CPI, at 2.1% growth, is at its highest reading since October 2014. Moreover, the final January reading of the University of Michigan Surveys of Consumers showed a one-year-ahead inflation expectation of 2.6%, four-tenths above the December mark.² Accordingly, we look for a slightly higher HCPI when we release the January 2017 data in March.

PRICE GROWTH BY DETAILED CATEGORIES

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

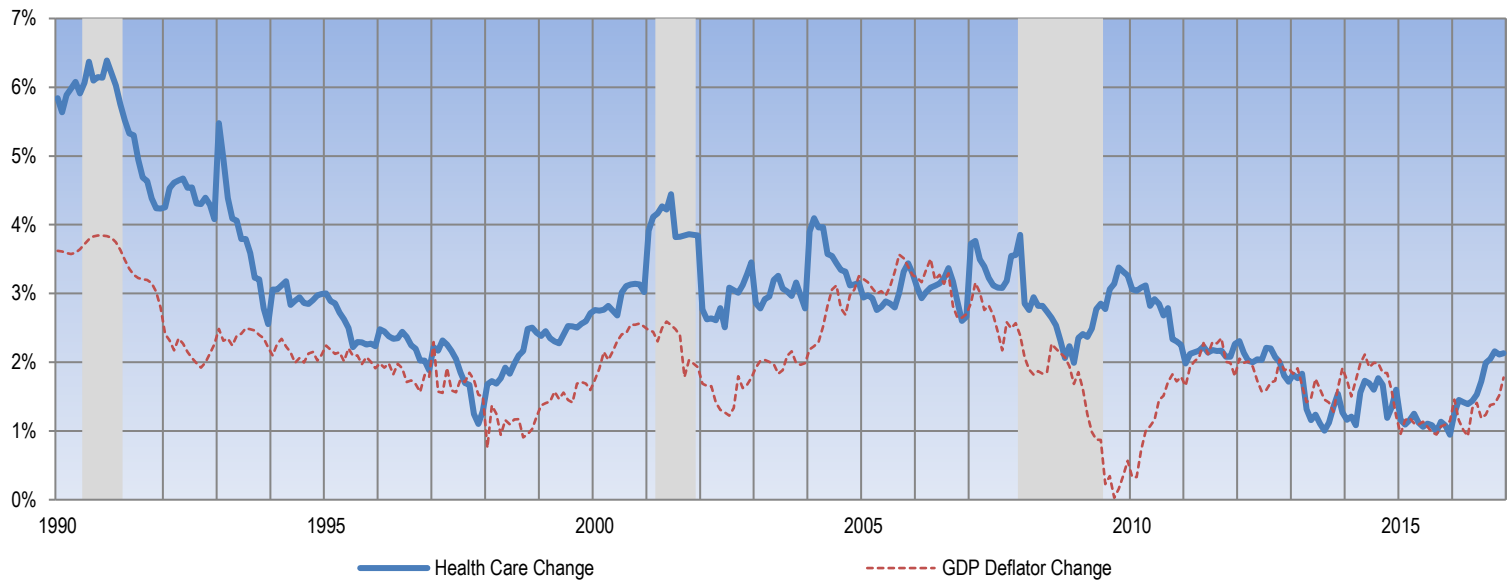
	Ending December 2014	Ending December 2015	Ending December 2016
HCPI	1.6%	0.9%	2.1%
Hospital care	0.5%	1.2%	1.6%
Physician and clinical services	0.6%	-1.0%	0.1%
Prescription drugs	6.4%	2.4%	6.2%
Nursing home care	1.3%	2.5%	2.8%
Dental services	1.8%	2.8%	2.7%
Home health care	1.8%	0.8%	1.3%
Other professional services	2.0%	-0.3%	2.2%
Other personal health care	2.6%	2.7%	3.1%
Other nondurable medical products	-0.2%	-1.3%	-0.6%
Durable medical equipment	1.8%	-1.1%	0.9%

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.

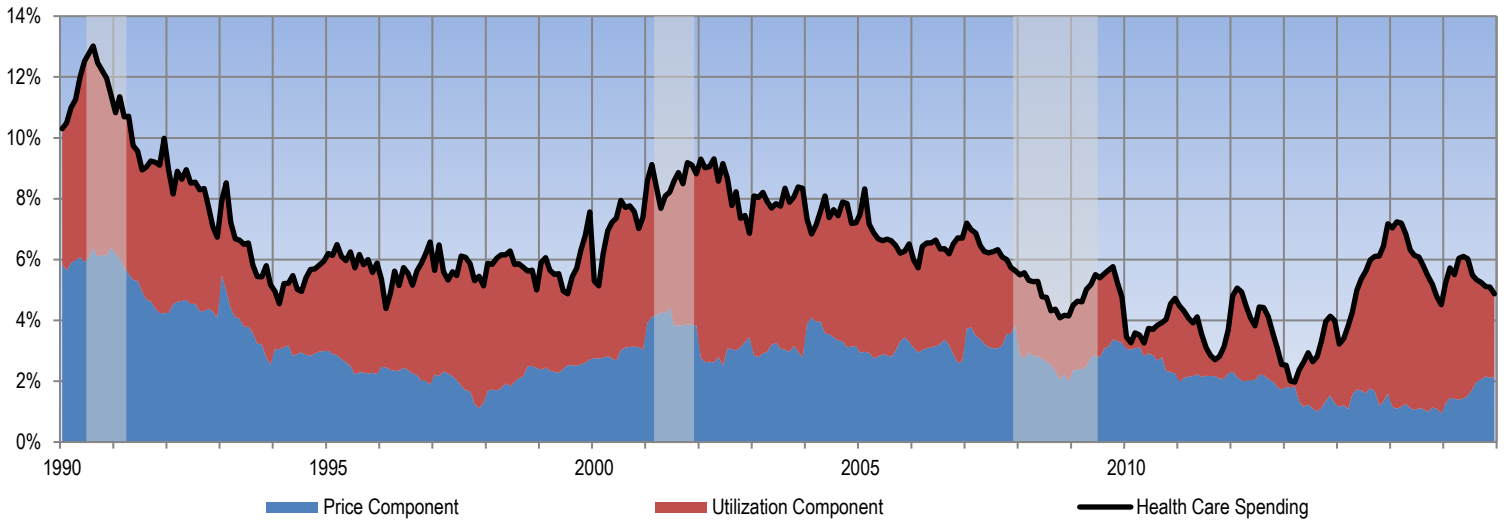
Note: Lightly shaded bars denote recession periods.

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.

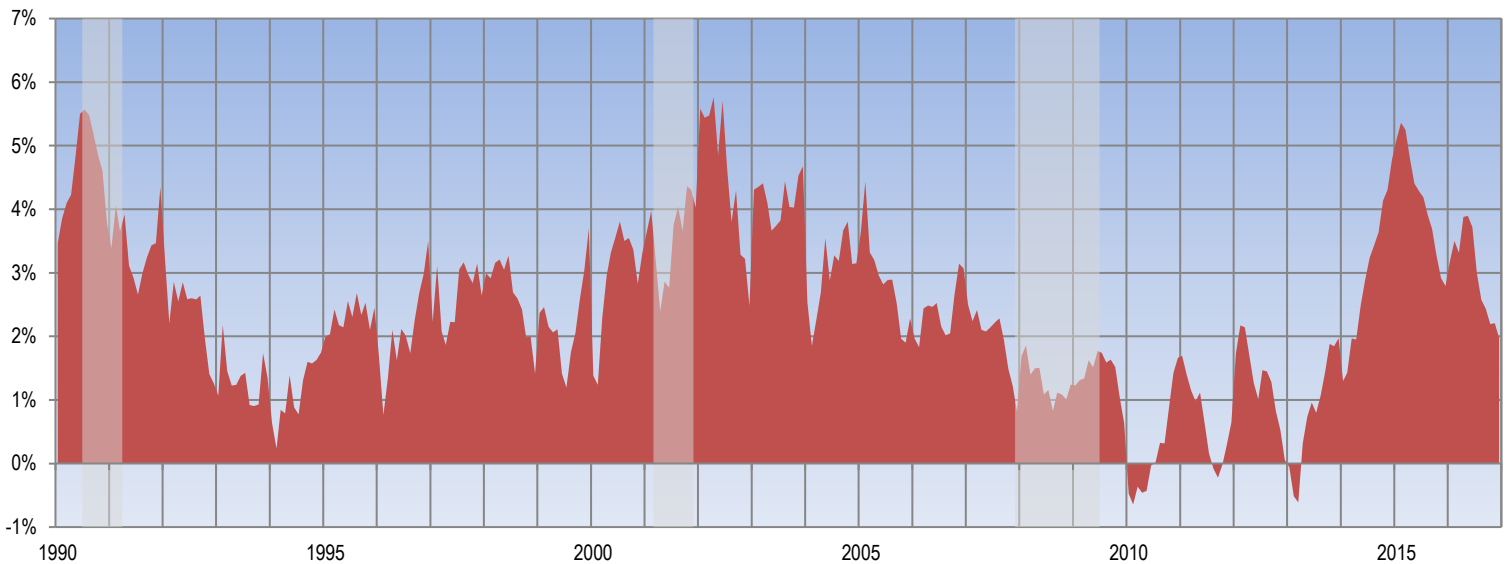
The *Health Sector Economic Indicators*SM reports are a monthly publication of Altarum's CSHS and provide an analysis of health spending, employment, and prices. For more information, contact **Charles Roehrig, PhD**, at 734-302-4600 or charles.roehrig@altarum.org. Paul Hughes-Cromwick (principal author); 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.