

Health Sector Economic IndicatorsSM

Insights from Monthly National Price Indices Through October 2016

December 13, 2016

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PRICE BRIEF

Year-over-year price growth up for 6th straight month; drug price growth at 24-year high

HIGHLIGHTS

- ▲ Health care prices in October 2016 rose 2.2% above October 2015, up from 2.1% growth in September 2016, and the highest growth since August 2012.
- ▲ Year-over-year hospital price growth rose to 1.5%, up from 1.2% in September. Physician and clinical services price growth barely rose to 0.1%. Annual drug price growth in October held steady at 7.0%, its highest reading since August 1992!
- ▲ Economy-wide price indices showed higher growth, save for the gross domestic product deflator (GDPD), which fell slightly to 1.2% growth. The Consumer Price Index (CPI) rose to 1.6% growth from 1.5% and the final-demand Producer Price Index (PPI) rose to 0.8% from 0.7%. The Medical CPI growth fell to 4.3% from 4.9% (an 8+ year high).
- ▲ Combining price and health spending data shows implicit per capita health care utilization growth year over year at 2.6% in October, below its 12-month moving average of 3.3%.

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

	Oct. 2014	Oct. 2015	Sep. 2016	Oct. 2016
Health Care Price Index (HCPI)	1.2%	1.1%	2.1%	2.2%
GDPD	1.8%	1.1%	1.2%	**
HCPI-GDPD	-0.7%	0.1%	0.8%	**
Addendum				
Health care spending	6.1%	5.2%	5.7%	5.6%
Health care utilization	4.9%	4.0%	3.6%	3.4%
CPI—medical	2.1%	3.0%	4.9%	4.3%
CPI—all items	1.7%	0.2%	1.5%	1.6%

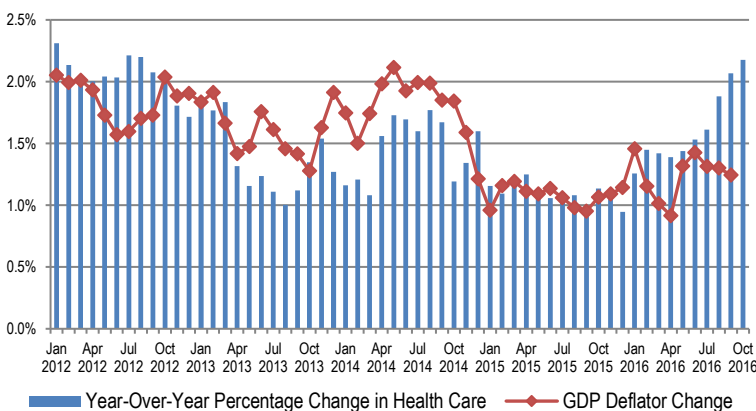
Source: Altarum analysis of U.S. Bureau of Labor Statistics (BLS) data. HCPI is a composite price index designed to measure overall price changes for personal health care spending and is patterned after the price index developed by the Centers for Medicare & Medicaid Services (CMS). Details are provided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

HEALTH CARE AND ECONOMY-WIDE PRICES

In October 2016, the Health Care Price Index (HCPI) rose 2.2% above October 2015. The 12-month moving average, at 1.5% growth, is a tenth higher than September and the highest since August 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 now in 2016 is exhibiting a sharp increase (Exhibit 1). The HCPI, having broken through the 2% rate for the first time since October 2012, could go higher as economic momentum builds. Economy-wide price inflation, as measured by the GDPD, trended upward beginning in September 2009, peaked at 2.4% in September 2011, and has fallen to 1.2% year-over-year growth as of September 2016. HCPI growth rates have now been above GDPD rates since February 2016. Exhibit 5 shows long-term comparisons.

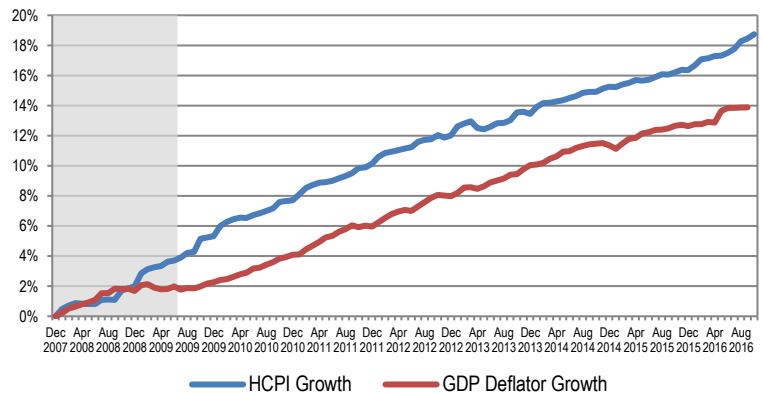
Since the start of the recession in December 2007, health care prices have increased 18.7%, while prices in the economy as a whole (using the GDPD) have increased 13.9% (Exhibit 2). Low economy-wide inflation and structural changes in the health sector (including payment policies in the Affordable Care Act and the Sequester), have put downward pressure on health care prices, but this period now seems over. In October, the CPI rose 1.6%, the highest growth since October 2014, and the medical CPI, emphasizing out-of-pocket prices, fell back from 4.9% growth in September (highest rate since January 2008), to 4.3% in October. The final-demand PPI growth rate for October rose to 0.8%, its highest rate since December 2014. While still low by historical standards, health care price pressures continue to 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.

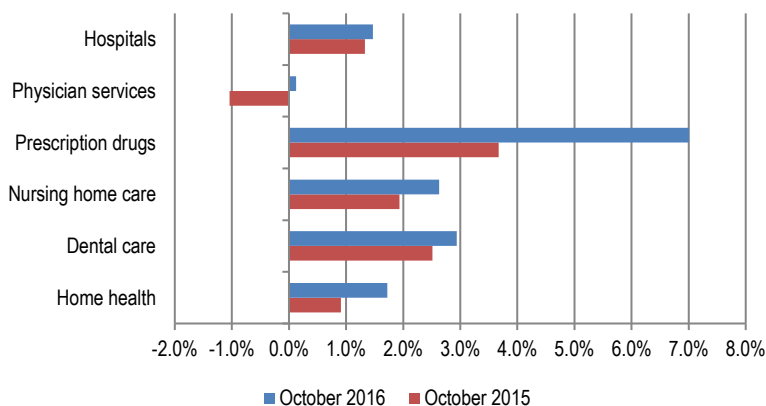
HEALTH CARE PRICES BY CATEGORY

Comparing October 2016 with October 2015, price growth for prescription drugs, at 7.0%, steady from September, is easily the fastest growing price category, far above the next highest, dental services, which grew by 2.9%. Hospital price growth rose to 1.5% in October from 1.2% in September, and physician price growth fell a tenth to a scant 0.1%. Hospital price growth plays a dominant role in the HCPI due to its large spending weight. The moderate hospital increase, a price growth of 2.6% for nursing home care, and mostly stable growth for the other components, boosted the HCPI to 2.2% in October. Annual inflation rate comparisons—September 2016 year over year versus September 2015 year over year—show *all* six categories higher, though most of the differentials are small (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 six of the ten price categories, especially hospital care, drugs, nursing home care, and other personal health care. This momentum, following the 2017 Medicare Prospective Payment System updates, argues for a higher HCPI in November.

Medicare and Medicaid hospital prices typically grow less quickly than private-sector prices. Hospital price growth for Medicare patients rose to 0.7% from -0.3% in September, rose to 2.7% from 2.6% for Medicaid patients (we will investigate this now two-month anomaly), and fell from 2.9% to 2.7% for private pay patients. For “other” patients (e.g., Veterans, TRICARE, self-pay), hospital price growth rose to 1.2% from 1.1% (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%, -0.2%, and 6.4%, 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 October 2016 are 5.6% spending growth and 3.4% 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 2.6%, below its 12-month average of 3.3%. On a 12-month average basis, utilization for hospitals rose 3.2%, home health care is up 4.2%, physician services rose 5.2%, the prescription drug rate is up 0.5%, nursing care rose 1.7%, and dental care utilization is up 2.9%.

DISCUSSION

In October 2016, the HCPI rose 2.2% above the October 2015 rate. While up only 0.1 from September, the HCPI is now growing at its fastest rate since August 2012. Reflecting this upward trend, the 12-month moving average rose by 0.1 to 1.5%, its highest rate since August 2013. Thus, 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. In historical context, it is also normal that health care prices have now risen more quickly than economy-wide prices for the past 9 months. Despite the upward trending HCPI, growth of its two key components, hospitals and physicians, continues to be slow, 1.5% and a low 0.1%, respectively (though the hospital trajectory is now firmly up, and hospital prices are growing at the fastest clip since September 2014). At 7.0% annual growth, steady from September, prescription drug prices are rising faster than they have for over 24 years (going back to July 1992).

As we note each month, and even counting this October increase, health care inflation is very low for this stage of the economic recovery. October 2016 was the 88th month of expansion following the recession.

Last month we noted the disconnect between the health producer price indexes growing slowly, and the rapidly growing medical care price index which hit an 8+ year high. This month’s data go part way toward reconciling this paradox with the hospital PPI and overall HCPI growth rising, albeit slowly, and the MCPI falling from 4.9% growth in September to 4.3% in October. 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 the final demand PPI and CPI is at two-year highs, though the GDP is still lagging), thus no longer exerting downward pressure on health care prices. All told, these signs point to continued, moderate increases in growth of the HCPI.

¹ Altarum Spending Brief #16-12: October 2016 Data. Please note: The Spending Briefs cover all health care spending; this Price Brief covers only personal health care.

² Altarum Labor Brief #16-11: October 2016 Data.

PRICE GROWTH BY DETAILED CATEGORIES

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

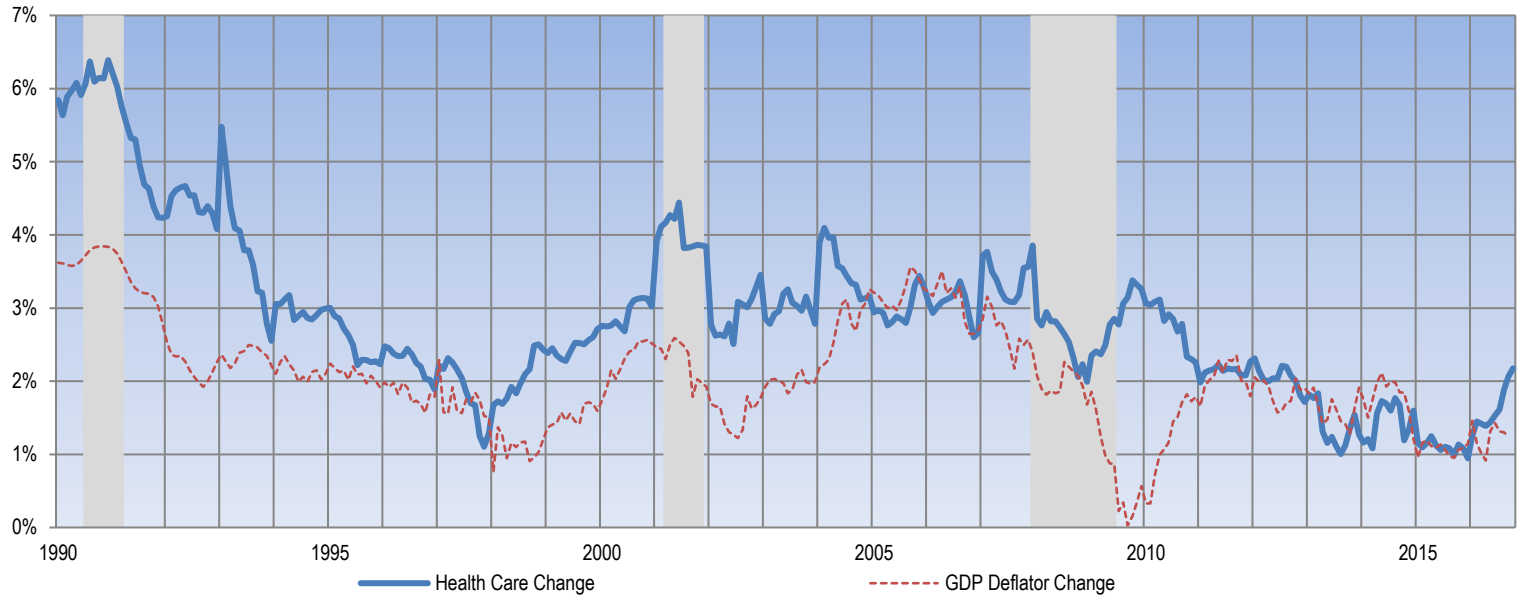
	Ending October 2014	Ending October 2015	Ending October 2016
HCPI	1.2%	1.1%	2.2%
Hospital care	0.3%	1.3%	1.5%
Physician and clinical services	0.7%	-1.0%	0.1%
Prescription drugs	4.1%	3.7%	7.0%
Nursing home care	1.7%	1.9%	2.6%
Dental services	2.0%	2.5%	2.9%
Home health care	1.5%	0.9%	1.7%
Other professional services	1.2%	0.7%	1.4%
Other personal health care	2.5%	2.5%	2.5%
Other nondurable medical products	-2.1%	0.2%	-1.4%
Durable medical equipment	0.5%	-0.4%	0.2%

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.

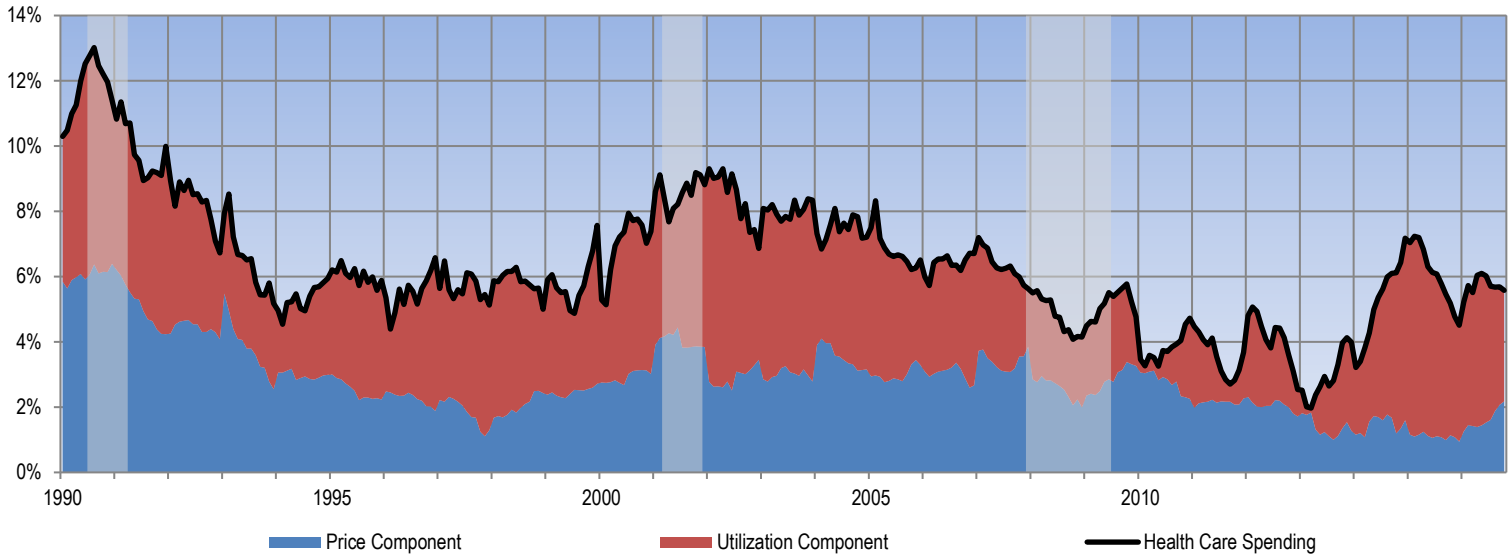
Note: Lightly shaded bars denote recession periods.

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.

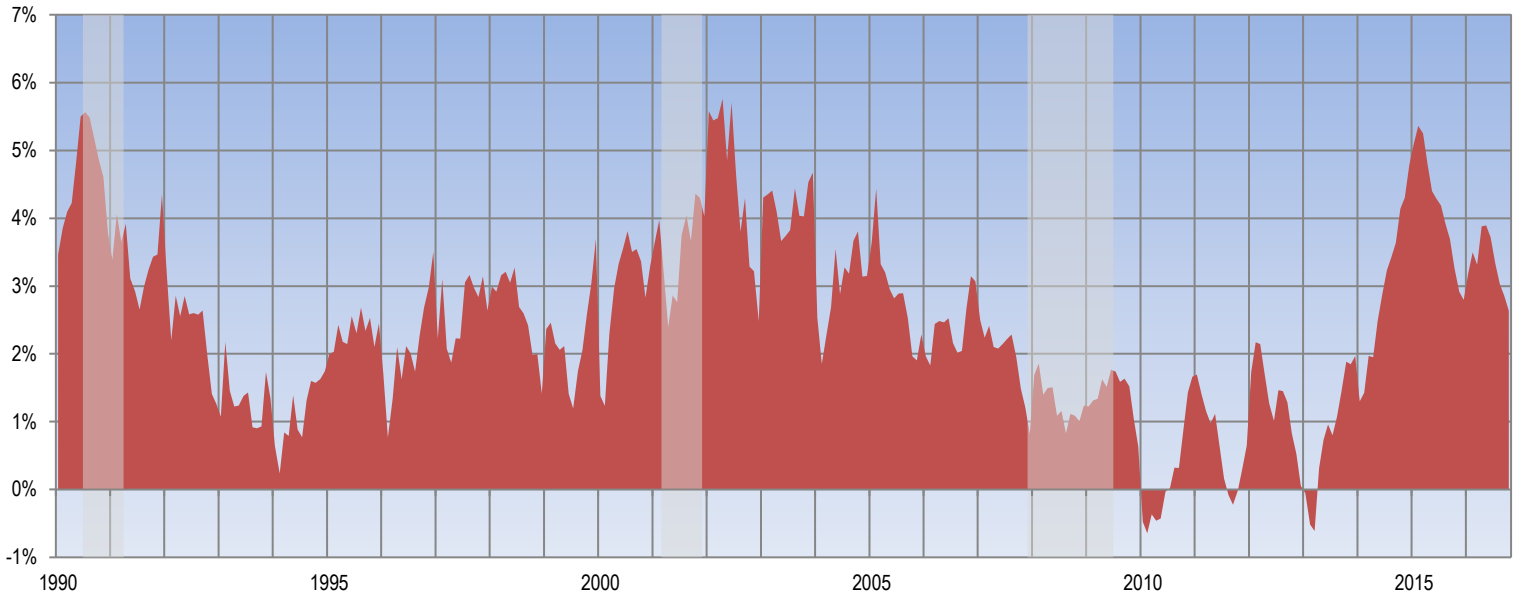
The *Health Sector Economic Indicators*SM reports are a monthly publication of Altarum's CSHS and provide an analysis of health spending, employment, and prices. For more information, contact **Charles Roehrig, PhD**, at 734-302-4600 or charles.roehrig@altarum.org. Paul Hughes-Cromwick (principal author); 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. (2015). *National Health Expenditure Accounts: Methodology Paper, 2014—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-14.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.