

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

## Insights from Monthly National Health Spending Data Through September 2016

November 11, 2016

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### SPENDING BRIEF

## Health spending growth has declined gradually since May

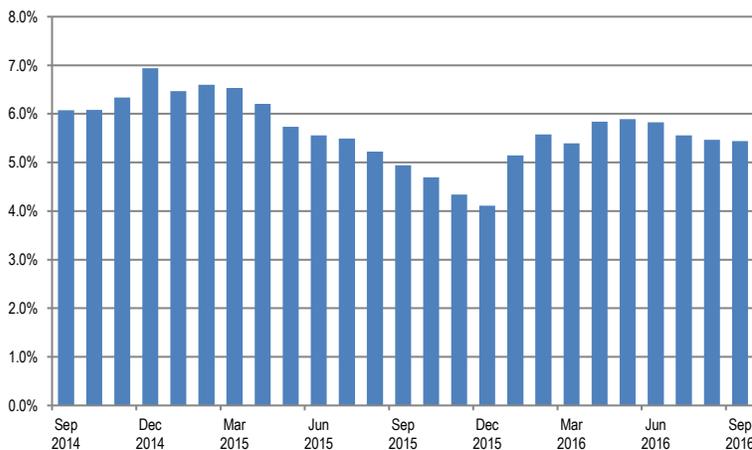
### HIGHLIGHTS

- ▲ At \$3.41 trillion (seasonally adjusted annual rate), national health spending<sup>1</sup> in September 2016 was 5.4% higher than health spending in September 2015.
- ▲ September is the fifth straight month in which spending growth has declined gradually from a recent high of 5.9% in May.
- ▲ The September 2016 nominal gross domestic product (GDP) growth over a 12-month period was 2.5%.
- ▲ The health spending share of GDP was 18.2% in September, matching its August value and falling just below the all-time high of 18.3% seen in June 2016.
- ▲ The health spending share of potential GDP (PGDP) was 17.9% in September and is gradually approaching the health spending share of GDP as the economy approaches full employment.<sup>2</sup>
- ▲ Spending in September 2016, year over year, increased in all major categories. Hospital care grew the fastest, at 6.6%. Prescription drugs grew at a 4.5% rate, the slowest among the major categories.

### HEALTH SPENDING

In September 2016, health spending reached a seasonally adjusted annual rate (SAAR) of \$3.41 trillion, slightly above its August value of \$3.40 trillion. September's health spending accounted for 18.2% of GDP, equal to its August value. As a share of PGDP, September's spending was at 17.9%, the same value as in August. Year over year, health spending in September grew by 5.4%, down from 5.5% in August (Exhibit 1). (Exhibits 7 and 8 show long-term comparisons.)

**Exhibit 1. Year-over-Year Growth Rates in Health Spending**



Source: Altarum monthly national health spending estimates.  
Note: This exhibit compares a given month's health spending with that of the same month from the previous year.

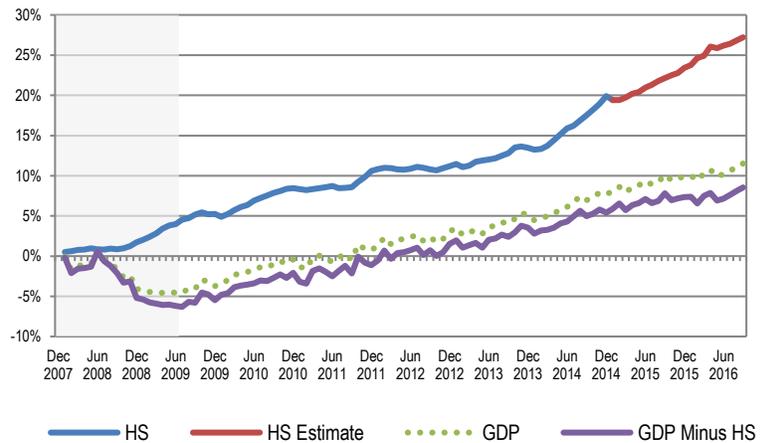
**National Health Spending and GDP\***

	Sep 2014	Sep 2015	Aug 2016	Sep 2016
<b>GDP</b>	17.58	18.26	18.65	18.73
<b>National Health Spending</b>	3.08	3.23	3.40	3.41
<b>Health Spending Share of GDP</b>	17.5%	17.7%	18.2%	18.2%
<b>Health Spending Share of PGDP</b>	17.1%	17.5%	17.9%	17.9%
<b>Growth from Prior 12 Months</b>				
<b>Health Spending</b>	6.1%	4.9%	5.5%	5.4%
<b>GDP</b>	4.7%	3.9%	3.0%	2.5%
<b>Health Spending Minus GDP</b>	1.4%	1.0%	2.5%	2.9%
<b>Health Spending Minus PGDP</b>	2.6%	2.5%	2.6%	2.6%

Source: Altarum Institute monthly health spending estimates (see Methods on page 4). Monthly GDP is from Macroeconomic Advisers and Altarum estimates. PGDP, defined as what GDP would be at full employment, is from the quarterly Congressional Budget Office estimates, converted to monthly by Altarum.  
\* Spending is in trillions of dollars at a seasonally adjusted annual rate.

Since the start of the recession in December 2007, real health spending (using the GDP deflator) through September 2016 has increased by 27.2% (an annual rate of 2.8%). Real GDP, excluding health spending, fell by more than 6% in mid-2009 and is now 8.1% above its December 2007 level. Including health care, real GDP in September was 11.5% above its pre-recession level (Exhibit 2).

**Exhibit 2. Health Spending and GDP: Cumulative Percentage Change (Constant Dollars) Since December 2007**



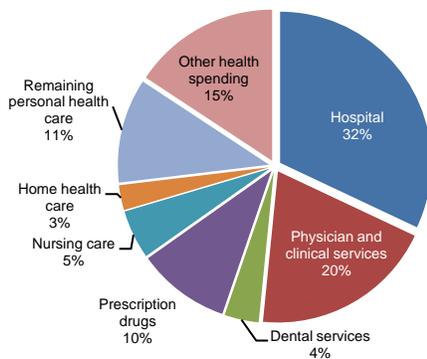
Source: "Health spending" (HS) consists of Altarum monthly estimates that match the government's official National Health Expenditure Accounts (NHEA). "HS estimates" are Altarum estimates designed to be consistent with future NHEA values. Monthly GDP is from Macroeconomic Advisers and Altarum estimates.  
Note: Shading indicates the recession period.

**HEALTH CARE SPENDING BY CATEGORY**

In September 2016:

- ▲ Hospital spending was \$1.09 trillion (SAAR) and represented 32% of total health spending (Exhibits 3 and 5).
- ▲ Physician and clinical services spending was \$677 billion, representing 20% of total health spending.
- ▲ Prescription drug spending was \$342 billion, 10% of total health spending.
- ▲ Nursing home care and home health care spending combined were \$270 billion, 8% of total health spending.
- ▲ Spending on personal health care goods and services accounted for 85% of total health spending. Other major components include public health, research, construction, and net cost of private insurance.

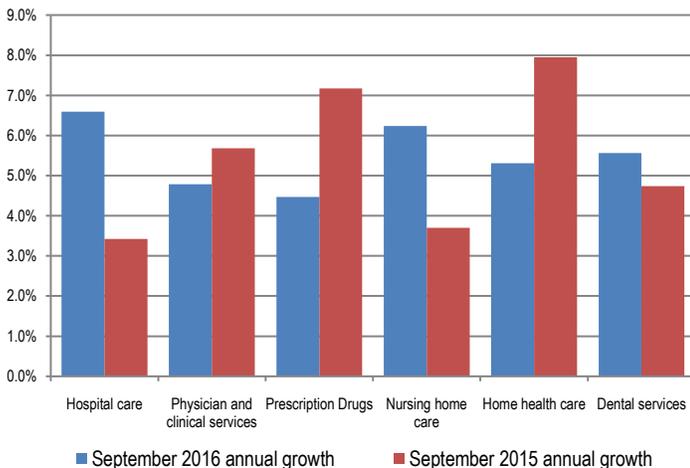
**Exhibit 3. Health Spending by Category, September 2016**



Source: Altarum monthly national health spending estimates.  
 Note: See Exhibit 5 for a complete list of spending categories.

**Growth over the past 12 months:** Hospital care grew most rapidly among the major categories at 6.6%. Prescription drug expenditures grew the slowest among major categories, at 4.5%. For the preceding 12-month period ending August 2015, home health care showed the highest growth among the major categories, at 7.9% (Exhibits 4 and 6).

**Exhibit 4. Health Spending Year-over-Year Growth for Selected Categories**



Source: Altarum monthly national health spending estimates.

**DISCUSSION**

At 5.4% year over year, national health spending growth in September continues a gradual decline that began in May, when the growth rate was 5.9%. A decline in spending growth in 2016 had been expected to accompany a leveling off of expanded coverage under the Affordable Care Act. Largely for this reason, CMS’ annual release this past July of NHEA projections included an estimate that national health spending growth in 2016 would be 4.8%, down from an estimated 5.5% in 2015.<sup>3</sup> However, our data indicate that spending has grown at a year-over-year rate of 5.6% for the first 9 months of 2016. As discussed in our most recent Health Sector Trend Report,<sup>4</sup> this suggests that there has been a smaller impact of the leveling off of expanded coverage than had previously been anticipated. What might otherwise have been more significant moderation in spending this year has been offset by growth in hospital spending, which accounts for nearly a third of national health spending. From a recent low of 2.4% in November 2015, spending on hospital care has accelerated to a year-over-year growth rate of 6.6% in September. This acceleration may be partly due to a lagged effect of expanded coverage, which has reduced uncompensated hospital care and has allowed increased access to hospital services by previously uninsured individuals.

In December, CMS will release its official estimate of national health expenditures for 2015, which will also result in revisions to our spending estimates for 2016. Later in December, the Census Bureau will release the results of its Quarterly Services Survey (QSS) for the third quarter of 2016, which will subsequently be used by the Bureau of Economic Analysis (BEA) to update their estimates of health services spending—a major input to our spending estimates. These updates will help reveal whether this year’s growth in spending has, in fact, been higher than previously anticipated.

<sup>1</sup> Altarum’s monthly estimates of national health spending are intended to approximate the official NHEA produced annually by the Centers for Medicare & Medicaid Services (CMS). Our estimates match NHEA values that are currently available through 2014 and NHEA projections for 2015.

<sup>2</sup> For further discussion of PGDP, see our blog at <http://altarum.org/health-policy-blog/the-case-for-tracking-health-spending-as-a-share-of-potential-gdp>.

<sup>3</sup> <http://content.healthaffairs.org/content/early/2016/07/12/hlthaff.2016.0459.full>.

<sup>4</sup> <http://altarum.org/publications/health-sector-trend-report-october-2016>.

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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, system-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 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](mailto:charles.roehrig@altarum.org). George Miller, PhD (principal author), Paul Hughes-Cromwick, Ani Turner, and Matt Daly, PhD, contributed to this brief. Media Contact: Ken Schwartz, 202-772-5062, [ken.schwartz@altarum.org](mailto:ken.schwartz@altarum.org). For more information, visit <http://www.altarum.org/cshs>.

**DETAILED HEALTH SPENDING**

**Exhibit 5. Monthly National Spending Estimates by Detailed Category**

Levels (in billions of dollars)	Sep 2013	Sep 2014	Sep 2015	Sep 2016
GDP	\$16,786.6	\$17,575.2	\$18,264.7	\$18,728.2
National health spending	\$2,903.5	\$3,079.9	\$3,232.1	\$3,408.0
Personal health care	\$2,461.4	\$2,605.1	\$2,729.9	\$2,883.0
Hospital expenditures	\$942.6	\$989.0	\$1,022.8	\$1,090.2
Physician and clinical expenditures	\$577.7	\$611.3	\$646.1	\$677.0
Other professional services expenditures	\$80.2	\$86.1	\$90.7	\$96.4
Dental services expenditures	\$111.8	\$114.9	\$120.3	\$127.0
Other health, residential, and personal care expenditures	\$145.7	\$151.8	\$159.9	\$167.6
Home health care expenditures	\$79.9	\$83.7	\$90.3	\$95.1
Nursing care facilities and continuing care retirement communities	\$150.9	\$158.5	\$164.4	\$174.6
Prescription drug expenditures	\$271.4	\$305.1	\$327.0	\$341.6
Durable medical equipment expenditures	\$45.1	\$47.3	\$48.7	\$51.3
Nondurable medical products expenditures	\$56.0	\$57.5	\$59.7	\$62.2
Administration and net cost of health insurance expenditures	\$213.3	\$240.4	\$257.3	\$270.4
Public health activity	\$76.6	\$79.8	\$84.2	\$88.2
Research	\$46.0	\$45.5	\$46.4	\$47.6
Structures and equipment	\$106.1	\$109.1	\$114.3	\$118.8
National health spending share of GDP	17.3%	17.5%	17.7%	18.2%
National health spending share of PGDP	16.6%	17.1%	17.5%	17.9%

Source: Altarum monthly national health spending estimates. The monthly GDP is from Macroeconomic Advisers and Altarum estimates.

Note: Spending is expressed in billions of dollars at a SAAR.

\*\* Data are not yet available.

**Exhibit 6. National Health Spending 12-Month Growth Rates by Detailed Category**

Growth Rates	Sep 2014	Sep 2015	Sep 2016
GDP	4.7%	3.9%	2.5%
National health spending	6.1%	4.9%	5.4%
Personal health care	5.8%	4.8%	5.6%
Hospital expenditures	4.9%	3.4%	6.6%
Physician and clinical expenditures	5.8%	5.7%	4.8%
Other professional services expenditures	7.3%	5.4%	6.3%
Dental services expenditures	2.8%	4.7%	5.6%
Other health, residential, and personal care expenditures	4.2%	5.3%	4.8%
Home health care expenditures	4.7%	7.9%	5.3%
Nursing care facilities and continuing care retirement communities	5.0%	3.7%	6.2%
Prescription drug expenditures	12.4%	7.2%	4.5%
Durable medical equipment expenditures	4.7%	3.0%	5.2%
Nondurable medical products expenditures	2.7%	3.8%	4.1%
Administration and net cost of health insurance expenditures	12.7%	7.0%	5.1%
Public health activity	4.1%	5.6%	4.8%
Research	-1.2%	1.9%	2.7%
Structures and equipment	2.8%	4.8%	3.9%
National health spending minus GDP	1.4%	1.0%	2.9%
National health spending minus PGDP	2.6%	2.5%	2.6%

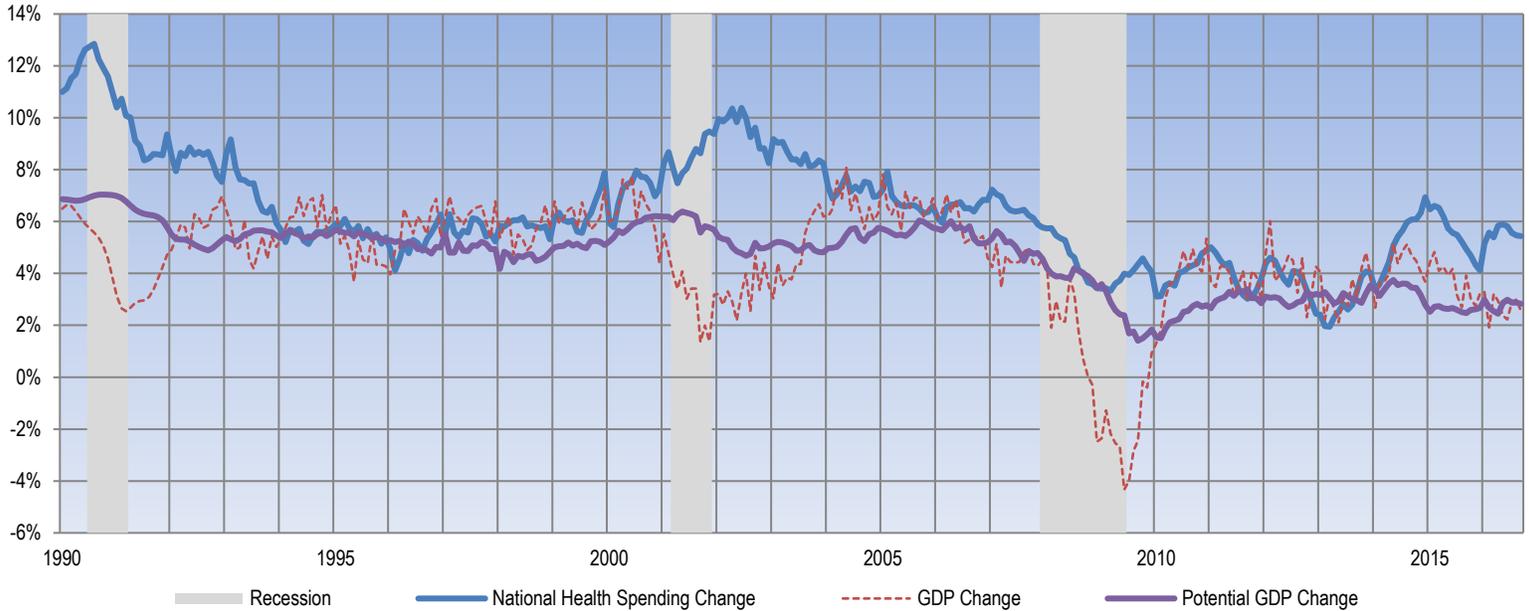
Source: Computed from Exhibit 5.

Note: This exhibit compares monthly national health spending to that of the same month from the previous year.

\*\* Data are not yet available.

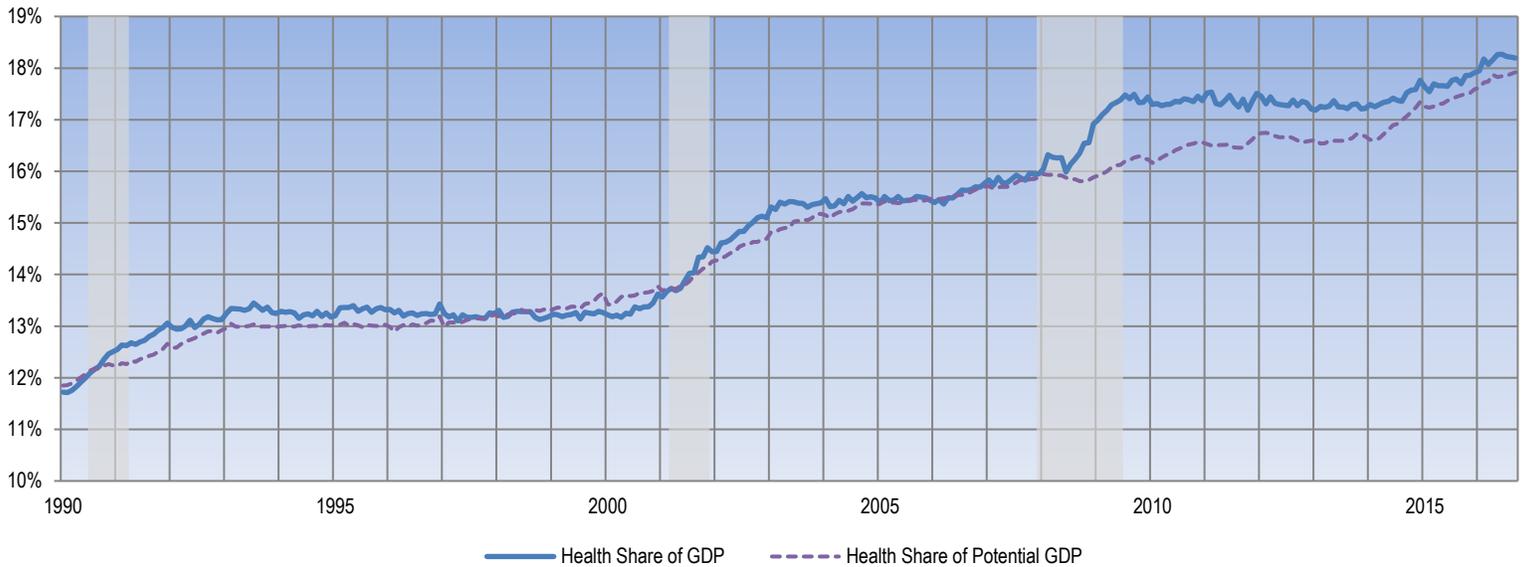
TIME SERIES TRACKER

Exhibit 7. Year-over-Year Percentage Change in Spending and GDP



Source: Altarum monthly national health spending estimates. Monthly GDP is from Macroeconomic Advisers and Altarum estimates.  
 Note: Lightly shaded bars denote recession periods.

Exhibit 8. Monthly Health Spending as a Percentage of Monthly GDP



Source: Altarum monthly national health spending estimates. Monthly GDP is from Macroeconomic Advisers and Altarum estimates. PGDP is from the U.S. Congressional Budget Office and has been converted to monthly estimates.  
 Note: Lightly shaded bars denote recession periods.

**Methods.** Altarum’s estimates are based on BEA monthly health spending (<http://www.bea.gov/iTable/iTable.cfm?ReqID=12&step=1>) and CMS annual NHE estimates (1990–2014) and projections (2015 and 2016) (<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html>). BEA spending categories are matched to NHEA components by using information presented in the following: Hartman, M. B., Kornfeld, R. J., & Catlin, A. C. (2010, September). A reconciliation of health care expenditures in the National Health Expenditures Accounts and in gross domestic product. *Survey of Current Business*, 90(9), 42–52. For all NHEA personal health care categories except “other health, residential, and personal care,” monthly estimates are based on BEA spending adjusted to NHEA by using annual ratios. For the remaining categories, national health spending estimates and projections are allocated across months by using a simple trend. Annual ratio adjustments through 2015 are based on NHEA actuals (through 2014), and projections (for 2015), and ensure that monthly estimates sum exactly to NHEA annual amounts. The 2015 ratios are used to adjust BEA spending for months in 2016.