

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

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

February 10, 2017

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### SPENDING BRIEF

## Health spending grew 5.4% in 2016; growth rate has declined in recent months

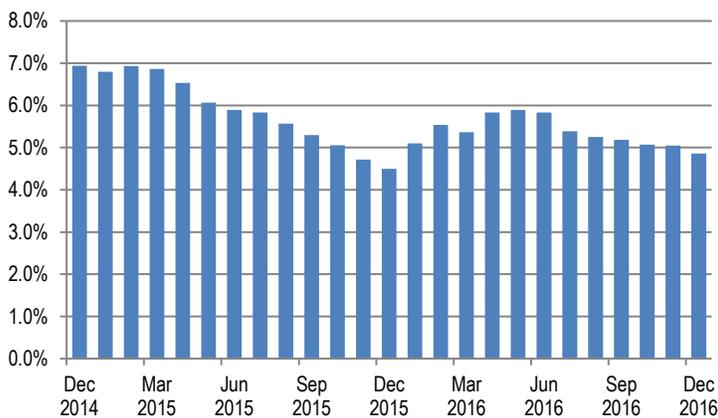
### HIGHLIGHTS

- ▲ Initial estimates suggest that national health spending<sup>1</sup> grew by 5.4% in 2016.
- ▲ At \$3.44 trillion (seasonally adjusted annual rate), national health spending in December 2016 was 4.9% higher than health spending in December 2015.
- ▲ The December 2016 nominal gross domestic product (GDP) growth over a 12-month period was 3.5%.
- ▲ The health spending share of GDP was 18.2% in December.
- ▲ The health spending share of potential GDP (PGDP) was 18.0% in December.<sup>2</sup>
- ▲ Spending in December 2016, year over year, increased in all major categories. Nursing home care grew the fastest, at 5.9%. Dental services grew at a 2.4% rate, the slowest among the major categories.

### HEALTH SPENDING

In December 2016, health spending reached a seasonally adjusted annual rate (SAAR) of \$3.44 trillion, slightly above its November value of \$3.43 trillion. December's health spending accounted for 18.2% of GDP, equal to its November value. As a share of PGDP, December's spending was at 18.0%, also equal to its November value. Year over year, health spending in December grew by 4.9%, down slightly from 5.0% in November (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\***

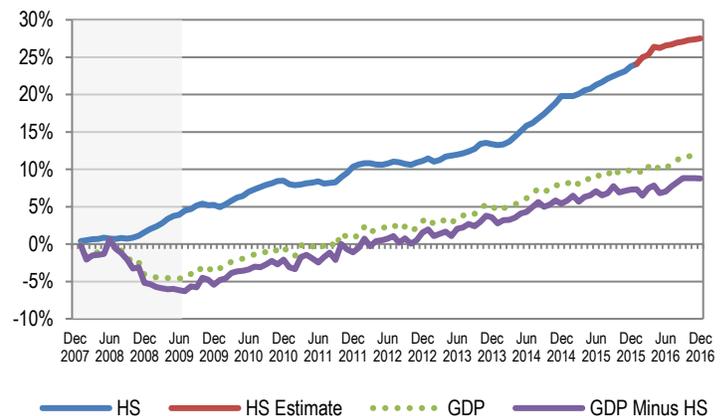
	Dec 2014	Dec 2015	Nov 2016	Dec 2016
<b>GDP</b>	17.69	18.26	18.86	18.90
<b>National Health Spending</b>	3.14	3.28	3.43	3.44
<b>Health Spending Share of GDP</b>	17.7%	18.0%	18.2%	18.2%
<b>Health Spending Share of PGDP</b>	17.5%	17.8%	18.0%	18.0%
<b>Growth from Prior 12 Months</b>				
<b>Health Spending</b>	6.9%	4.5%	5.0%	4.9%
<b>GDP</b>	3.7%	3.2%	3.4%	3.5%
<b>Health Spending Minus GDP</b>	3.3%	1.3%	1.6%	1.4%
<b>Health Spending Minus PGDP</b>	4.1%	1.7%	1.9%	1.5%

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 December 2016 has increased by 27.5% (an annual rate of 2.7%). Real GDP, excluding health spending, fell by more than 6% in mid-2009 and is now 8.8% above its December 2007 level. Including health care, real GDP in October was 11.8% 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.

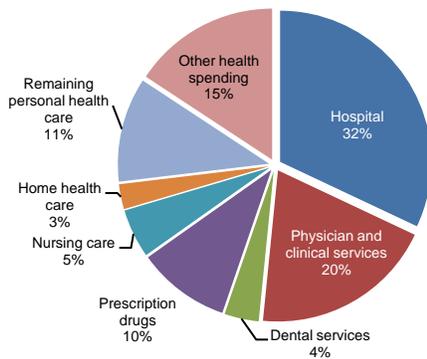
Note: Shading indicates the recession period.

**HEALTH CARE SPENDING BY CATEGORY**

In December 2016:

- ▲ Hospital spending was \$1.11 trillion (SAAR) and represented 32% of total health spending (Exhibits 3 and 5).
- ▲ Physician and clinical services spending was \$683 billion, representing 20% of total health spending.
- ▲ Prescription drug spending was \$348 billion, 10% of total health spending.
- ▲ Nursing home care and home health care spending combined were \$264 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.

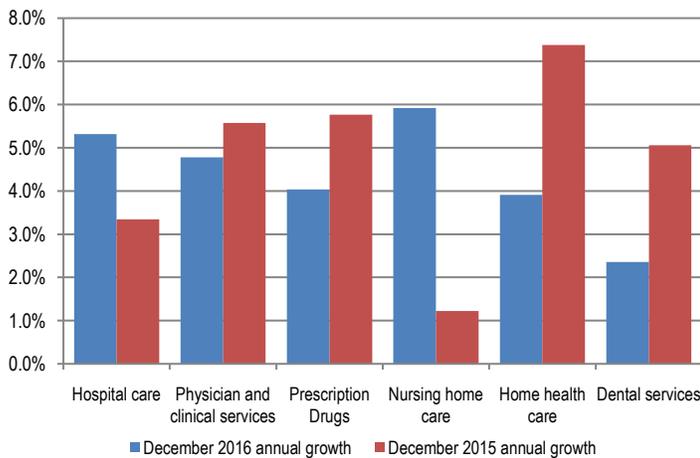
**Exhibit 3. Health Spending by Category, December 2016**



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

**Growth over the past 12 months:** Nursing home care grew most rapidly among the major categories, at 5.9%. Expenditures for dental services grew the slowest among major categories, at 2.4%. For the preceding 12-month period ending November 2015, home health care spending showed the highest growth among the major categories, at 7.4%, and nursing home care was lowest, at 1.2% (Exhibits 4 and 6).

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



Source: Altarum monthly national health spending estimates.

**DISCUSSION**

This month’s spending data provide a first look at health spending growth for all of 2016. This initial estimate suggests that spending for the year was 5.4% higher than in 2015. This is somewhat greater than the 4.8% growth that the Centers for Medicare & Medicaid Services (CMS) forecast for the year in its annual projection published in August 2016,<sup>3</sup> but is less than the growth rate of 5.8% reported in the official NHEA release for 2015.<sup>4</sup> It is significantly greater than the growth rates at or below 4.1% that were observed in each year from 2009 through 2013, including an all-time low of 2.9% in 2013. The higher growth rates since 2013 are likely at least partly attributable to increased insurance coverage associated with provisions of the Affordable Care Act. Spending growth among the major categories in 2016 is grouped around the 5.4% overall rate, with hospital spending growing by 5.2%, physician spending at 6.0%, and spending on prescription drugs at 5.0%.

While overall growth in health spending for 2016 stands at 5.4%, the growth rate has fallen in each month since May of this year and is at 4.9%, year over year, for the month of December. This decline was led by spending on physician services and dental care. Physician services’ growth rate was 7.0% in May and is now 4.8%, while dental care’s growth rate declined from 8.8% in February to 2.4% in December. If the overall decline continues, health spending growth in 2017 will drop to more modest levels.

Our 2016 spending estimates are based largely on the U.S. Bureau of Economic Analysis (BEA) January 30 release of personal income and outlay data. We adjust the BEA data and supplement them with other data to make them consistent with the official NHEA that are now available through 2015. BEA’s data for the fourth quarter are preliminary and will be updated over the next two months.

Our GDP and PGDP estimates for October through December are also based on BEA’s preliminary fourth quarter estimates, allocated across months using a simple trend. (In months in which BEA quarterly data are not available, we rely on estimates published by Macroeconomic Advisers.) These GDP estimates will also be updated in the coming months.

<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 2015 and NHEA projections for 2016.

<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/35/8/1522.full.pdf+html>

<sup>4</sup> <http://content.healthaffairs.org/content/36/1/166.full.pdf+html>

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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)	Dec 2013	Dec 2014	Dec 2015	Dec 2016
GDP	\$17,059.1	\$17,687.8	\$18,257.2	\$18,895.8
National health spending	\$2,933.9	\$3,137.5	\$3,278.6	\$3,438.0
Personal health care	\$2,482.0	\$2,660.1	\$2,780.2	\$2,915.6
Hospital expenditures	\$958.7	\$1,018.6	\$1,052.7	\$1,108.7
Physician and clinical expenditures	\$575.1	\$618.2	\$652.7	\$683.9
Other professional services expenditures	\$79.9	\$87.2	\$91.1	\$96.8
Dental services expenditures	\$111.0	\$115.4	\$121.3	\$124.1
Other health, residential, and personal care expenditures	\$146.5	\$156.9	\$167.6	\$175.0
Home health care expenditures	\$80.4	\$85.4	\$91.7	\$95.3
Nursing care facilities and continuing care retirement communities	\$151.5	\$157.0	\$158.9	\$168.3
Prescription drug expenditures	\$276.3	\$316.0	\$334.3	\$347.7
Durable medical equipment expenditures	\$46.0	\$47.5	\$49.8	\$52.9
Nondurable medical products expenditures	\$56.7	\$57.8	\$60.2	\$62.9
Administration and net cost of health insurance expenditures	\$222.1	\$245.9	\$258.7	\$272.2
Public health activity	\$78.2	\$79.7	\$82.5	\$86.9
Research	\$46.0	\$46.1	\$47.2	\$48.6
Structures and equipment	\$105.6	\$105.7	\$110.0	\$114.6
National health spending share of GDP	17.2%	17.7%	18.0%	18.2%
National health spending share of PGDP	16.8%	17.5%	17.8%	18.0%

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	Dec 2014	Dec 2015	Dec 2016
GDP	3.7%	3.2%	3.5%
National health spending	6.9%	4.5%	4.9%
Personal health care	7.2%	4.5%	4.9%
Hospital expenditures	6.3%	3.3%	5.3%
Physician and clinical expenditures	7.5%	5.6%	4.8%
Other professional services expenditures	9.2%	4.4%	6.3%
Dental services expenditures	4.0%	5.1%	2.4%
Other health, residential, and personal care expenditures	7.1%	6.8%	4.4%
Home health care expenditures	6.3%	7.4%	3.9%
Nursing care facilities and continuing care retirement communities	3.6%	1.2%	5.9%
Prescription drug expenditures	14.4%	5.8%	4.0%
Durable medical equipment expenditures	3.3%	4.8%	6.3%
Nondurable medical products expenditures	1.9%	4.2%	4.5%
Administration and net cost of health insurance expenditures	10.7%	5.2%	5.2%
Public health activity	1.9%	3.6%	5.3%
Research	0.2%	2.5%	3.0%
Structures and equipment	0.1%	4.1%	4.2%
National health spending minus GDP	3.3%	1.3%	1.4%
National health spending minus PGDP	4.1%	1.7%	1.5%

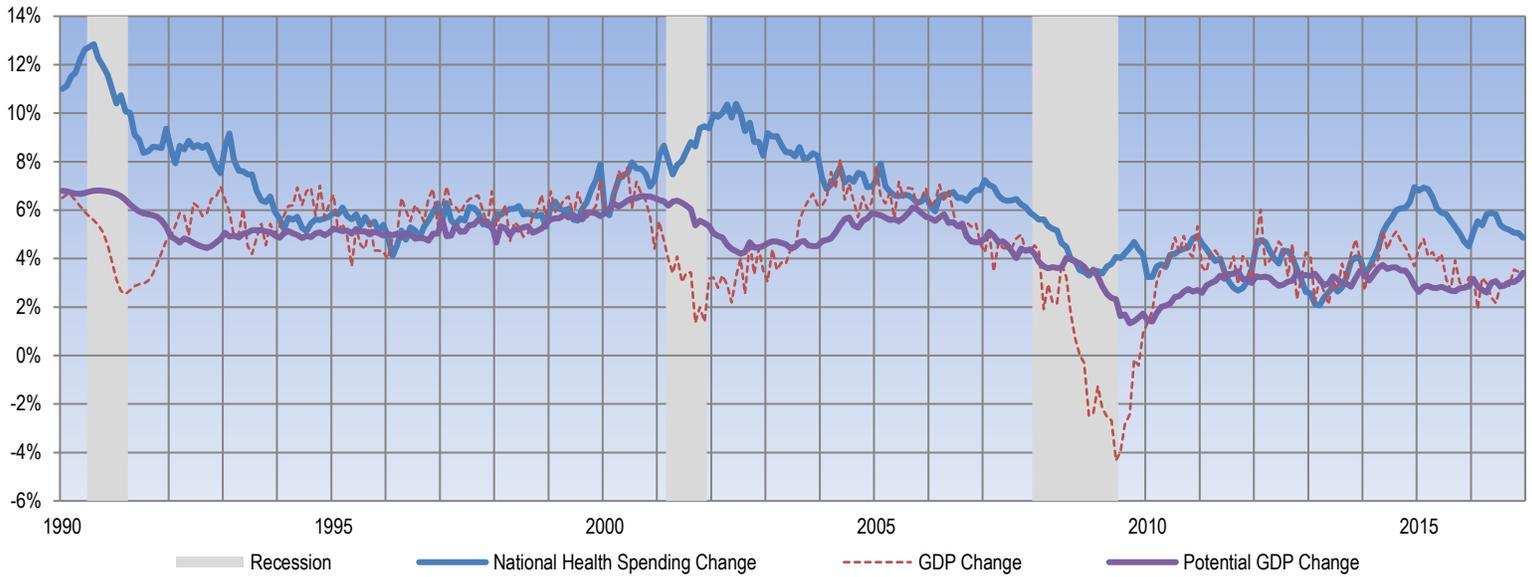
Source: Computed from Exhibit 5.

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

\*\* Data are not yet available.

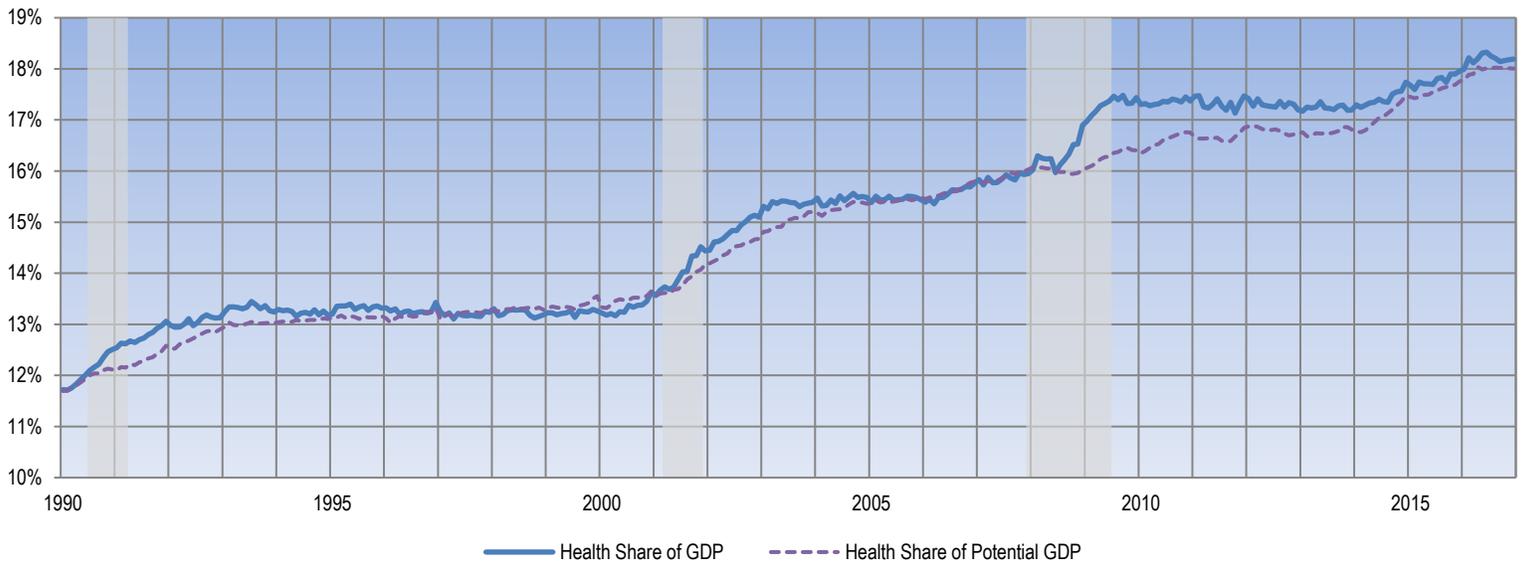
**TIME SERIES TRACKER**

**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 (1990–2015) and projections (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 and ensure that monthly estimates sum exactly to NHEA annual amounts. The 2015 ratios are used to adjust BEA spending for months in 2016.