Executive Summary

This analysis incorporates monthly health sector data on expenditures and prices by payer into the existing Altarum Health Sector Economic Indicators (HSEI). It provides a timely view of trends in spending, prices, enrollment, and utilization separately for Medicare, Medicaid, and private payers through May 2018, plus showing the component impacts on national health care spending and prices. We find that spending and price growth among the privately-insured population accelerated in 2017 and early 2018 relative to Medicare and Medicaid, despite very low growth in private insurance enrollment. This is a notable reversal in the post-recession period, as prior to 2017 private spending growth was near or below Medicare and Medicaid rates. We also find that:

▲ Since the start of the economic recovery in 2009, total Medicaid spending has grown by 72.6%—more than Medicare (50.7%) and private payer spending (49.4%)—largely due to increases in enrollment, although Medicaid spending has slowed significantly, averaging only 2.3% since January 2017.

▲ On a per-enrollee basis, private payer spending has grown 45.9% since 2009, three times the rate of Medicare and Medicaid per-enrollee spending.

▲ Faster rising private prices are a major factor in the divergence between public and private spending growth, with private prices up 8.2% since June 2014, although recent data show an uptick in public prices as well.

▲ Breaking down spending growth attributable to enrollment, prices, and utilization & intensity, we find more than half the growth in both Medicare and Medicaid spending since 2014 is due to higher enrollment, while private spending growth over this period has been driven almost entirely by higher prices and increased utilization & intensity, in nearly equal measure.

The primary data sources for this analysis in addition to the HSEI data are the U.S. Department of Treasury Daily Treasury Statements detailing Medicare and Medicaid outlays, and Bureau of Labor Statistics (BLS) price indices by payer. We processed these data using existing HSEI methodologies, benchmarked the previous year’s data to the Centers for Medicare & Medicaid Services (CMS) National Health Expenditure Accounts (NHEA), and combined the findings with existing Altarum HSEI data to produce estimates of spending and prices by payer. Data on enrollment and “other” sources of spending come from the NHEA and CMS National Health Expenditure projections.

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In the post-coverage expansion period, from 2017 through May 2018, private payer health spending is growing faster than Medicare and Medicaid spending.

Examining trends during three recent periods—the post-recession slowdown (2011-2013), coverage expansion (2014-2016), and post-coverage expansion (2017-present)—reveals very different patterns by payer type. Medicare spending growth was remarkably consistent across the periods, at 4.3%, 4.4%, and 4.5%. Medicaid spending growth was 3.9% during the slowdown, rose to 8.4% during coverage expansion, then fell sharply to 2.3% in the most recent period. Private payer spending growth was 3.1% during the slowdown and rose to 5.9% during coverage expansion.

In the post-coverage expansion period, rather than moderating, private payer health spending growth has accelerated to an average of 6.2%. This year-over-year growth rate is 1.7 percentage points faster than the 4.5% growth in total national health expenditures (NHE) over the same period, and is now a major component holding NHE above 4.0% (Figure 1). This rate of spending growth for private payers is higher than the average during the period of coverage expansion (2014-2016) and is double the growth rate seen during the health spending slowdown from 2011-2013. As we discuss later in this brief, growth in private spending appears to be driven by accelerations in both prices and utilization of products and services as enrollment growth has remained relatively flat. The spending growth difference between private and public payers is nearly at its largest gap since our data begin in 2009. If private spending growth rates had matched the average of the public payers between January 2017 and May 2018, NHE growth would have been almost a percentage point lower, a more modest 3.6%.

While we expect long-term demographic trends will eventually result in public payer spending growth exceeding private growth in future years, the recent acceleration in private sector spending has shown that private spending remains a driving factor on NHE. The extremely tight labor market and continued economic expansion in the past year is likely causing the divergence between private spending acceleration and the slower growth in public expenditures. The strong economy increases spending by the privately-insured and decreases public spending on health care as there are fewer individuals eligible for Medicaid; however, these trends would be expected to reverse during a future recession. As we continue to monitor the NHE data for spending moderation to follow declining coverage, these data show the impacts of both private and public spending trends on total NHE growth.

Figure 1: Average Year-over-Year Spending Growth by Payer, Selected Periods

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Since 2009, total health spending from Medicaid grew 72.6%, the fastest among all sources of U.S. health care spending.

Figure 2 shows the monthly trends in health spending, measured as cumulative growth since January 2009. Unsurprisingly, given Medicaid expansion, total Medicaid spending has exceeded the growth in spending from Medicare, private insurance, and other sources. All three of the major payers and total national health spending have exceeded GDP growth consistently over this time, leading to health spending increasing as a share of GDP to nearly 18% as of May 2018. Despite the growth in Medicaid spending, it remains the smallest component of the $3.6 trillion of national health spending as of May 2018, at 16.6% of the total (an annualized rate of $600 billion). Medicare and private insurance account for somewhat larger portions, 20.2% ($732 billion) and 34.2% ($1.24 trillion) respectively, where the remainder “Other” sources include out-of-pocket spending, other public payers such as the Veterans Administration, Indian Health Service, public health spending, net cost of insurance, and investment. Combined growth among these other sources has been somewhat slower than national health spending since 2009, particularly out-of-pocket spending, investments, and public health expenditures.

While the long-term demographic shifts in the U.S. are projected to cause the share of total spending from private insurance to fall relative to the total, the recent acceleration in private spending since 2017 has delayed this change. Future policy changes would be expected to have an impact on the share of spending by payer, particularly if new state and/or federal action is taken to control private sector health care prices.

*Figure 2: Cumulative Health Spending Growth by Payer & GDP Growth since January 2009*

Private payer spending per enrollee has grown at three times the rate of Medicare and Medicaid spending per enrollee, at 45.9% growth versus 14.7% and 14.9%, respectively.

While Medicaid and Medicare total cumulative spending growth has outpaced private spending since January 2009 (Figure 2), this has largely been driven by increases in the enrollee population. When expressed as spending per enrollee, as seen in Figure 3, the divergence between private and public spending trends is notable over this time period. Since 2014, Medicare and Medicaid spending growth rates have moderated significantly, while private spending per enrollee is 23% higher in just five years. This growth is occurring despite the increasing prevalence of high-deductible health plans and increased cost-sharing for the privately-insured, which might be expected to
contain spending growth per enrollee relative to public payers. This finding is therefore surprising and also demonstrates the relative success of the public payers in containing per enrollee cost growth compared to the private sources, particularly in holding down prices paid for products and services, discussed in more detail below.

**Figure 3: Cumulative Health Spending Growth per Enrollee by Payer since January 2009**

It is important to note these trends represent the growth in spending per enrollee. Spending per Medicare and adult Medicaid enrollee is still higher than per private enrollee due to differences in age and health care needs (Medicare annualized spending per enrollee in May 2018 was $12,395 compared to private spending per enrollee of $6,270). When looking at year-over-year growth in spending by payer (Figure 5), we see that from 2016 to the present, private spending growth has generally been above Medicare, Medicaid and total NHE growth rates, while the public payers recently have fallen below total NHE.

**Figure 5: Year-over-Year Spending Growth by Payer**
Faster growing private prices are a major factor in the divergence between public and private spending growth over this period, although recent data show an uptick in public prices as well.

Total health spending is the product of utilization and prices paid. Recently published academic work has again highlighted the overwhelming disparity between U.S. prices and those in other developed countries and the importance of U.S. health care prices on spending growth. However, also important to note is the disparity between public and private prices paid for services within the U.S., particularly as providers argue that they cross-subsidize the low prices paid by Medicare and Medicaid with significantly higher prices for privately-sourced products and services. Recent literature has shown that cost-shifting may not directly result in higher private prices when public reimbursement rates fall, yet a persistent gap in public vs. private prices remains in the U.S. health care system. We do not address the absolute differences in prices in this brief, but instead offer new data to describe the trends in health care sector price growth between public and private sources and the impacts this has on total spending.

Data on prices by payer from the Bureau of Labor Statistics (BLS) are available starting in June 2014, from which we compute a combined health care service price index. The cumulative growth in these prices is shown in Figure 6, where, perhaps unsurprisingly, we see private price growth exceeded Medicare and Medicaid over this period. Private health care prices were 8.2% higher in June 2018 compared to June 2014, having risen at a relatively constant rate over the past four years. We also see a notable uptick in Medicare and Medicaid prices beginning in 2017 and somewhat accelerating in early 2018. The source of these price increases is at this time unclear. While private prices are free to fluctuate over time as insurers, providers, and manufactures negotiate, public sector prices are controlled by government policy decisions, so the price increases seen in the data are at this time perplexing. We will continue to monitor the incoming data through 2018.

Health care price growth in recent history has been largely constant, showing less variation than spending growth during macroeconomic changes such as recessions. Yet, in their most recent projections for health spending through 2026, CMS indicates that price growth will play an increasing factor in health care spending growth. Given the controlled nature of public prices, we would expect that this growth must occur in private sector prices for this result to be realized. To date, private price growth shows little sign of abating, reaching 2.2% year over year in June.

Figure 6: Cumulative Health Care Price Index Growth by Payer since June 2014
Since June 2014, private spending growth has been driven mostly by higher prices and increased utilization, while Medicare and Medicaid spending have risen mostly due to higher enrollment.

Below are three charts demonstrating the three primary components of spending growth for the three major health care payers: private insurance, Medicare, and Medicaid. These data, combining the results of the spending and price data collected above, highlight that while all three payers have experienced spending growth over the past four years, the sources of this growth are very different. Notable for the Medicare and Medicaid populations are the very low and sometimes negative impacts of prices, and the different shape of the changes in enrollment. While Medicare can be expected to have a linear growth trend in enrollment for the foreseeable future, Medicaid enrollment growth is likely to moderate as the effects of expansion lessen—although further policy changes could impact this, for example as more states like Virginia take part in expansion. The ability of the public payers to somewhat control spending growth through prices and utilization controls are notable, despite their expanded populations.

Future demographic and economic conditions will likely play a large role in the share of health care spending by payer. A possible future economic downturn could drive spending back towards Medicaid, and the continued aging of the population will increase the number of Medicare enrollees. CMS estimates in their most recent projections that between 2017 and 2026 the share of all health spending paid by Medicare will climb from 20.2% to 24.0%, while Medicaid will climb from 16.7% to 17.5%. Yet, while this trend is very likely to occur eventually, the recent data for 2017 and 2018 indicate a pause in the long-term transition. In fact, the share of total spending by private insurance actually increased from 33.8% to 34.2% between January 2017 and May 2018, while the Medicaid and Medicare shares fell to 16.6% and 20.2% respectively.

Figure 7: Private Insurance Spending Growth Components
**Methodology and Data**

Primary data inputs for this report include information on Medicare and Medicaid expenditures derived from the U.S. Department of Treasury [Daily Treasury Statements](https://www.treasury.gov/). Data are collected from the last statement of each month from the column “This month to date.” Daily Treasury Statement data are adjusted to account for time-shifted Medicare Advantage (MA) payments, seasonally adjusted to account for persistent intra-year trends, and then smoothed using a nine-month exponential moving average. The corrected and smoothed results are then rescaled to match the Center for Medicare and Medicaid Services (CMS) [National Health Expenditure Accounts (NHEA)](https://www.cms.hhs.gov/NationalHealthExpendData/Downloads/NHEA2016.pdf) actual expenditures by source of funds through year 2016 and then incorporated with the [Altarum Health Sector Economic Indicator data](https://www.altarum.org/). Medicare data are rescaled by adjusting each month of the smoothed treasury data by the ratio of the annual NHEA Medicare total to the annual treasury statement data totals. For the Federal Component of Medicaid spending, a similar process is used. Further, to estimate the state component of Medicaid spending, we use the treasury data rescaled to the NHEA state data totals for all years prior to 2016. Data for 2017 and 2018 will not be adjusted until December 2018 and the next release of the NHEA data. This is consistent with the treatment of the NHEA data in the Altarum Health Sector Economic Indicators. Because data for 2017 and 2018 cannot be rescaled, we instead use the monthly year-over-year growth rates to estimate the total spending for each component in these months. This process is consistent with the computation of the HSEI national health spending estimates.

Spending from “Other” payment sources, including other public insurance programs like the Veterans Health Administration, Indian Health Service, other payers and public health programs, investment, and out-of-pocket payments are estimated using data from the NHEA and [NHEA projections](https://www.cms.hhs.gov/NationalHealthExpendData/Downloads/NHEAProjections2016.pdf), last released in February 2018, by using the projected percentage of total health spending attributable to these sources and multiplying that percentage by the monthly total national health spending estimate from the Altarum HSEI. The estimates of spending for Private Insurance are calculated as the remainder of the NHEA total spending estimates after subtracting Medicare, Medicaid, and Other sources. Because each of these three sources is benchmarked against the NHEA totals, the resulting private insurance spending totals also match the NHEA annual totals for annual spending by Private Insurance through 2016.

Enrollment data are collected from the NHEA Health Insurance Enrollment, Uninsured, and Enrollment Growth data. We use both the actual and projection data, and then fit a cubic spline through the annual enrollment estimates in order to compute a monthly series. The NHEA Enrollment data use a “person-year” approach, which estimates a total counting partial-year enrollees as a fraction of the number of months they were enrolled, the annual NHEA enrollment totals are best approximated as occurring during the month of July, not December, before being fitted with the spline. These enrollment totals are not mutually exclusive and therefore are not adjusted for dual-eligibles.

Data on Medicare, Medicaid, and private insurance price trends are collected from the Bureau of Labor Statistics [Producer Price Index data](https://www.bls.gov/ppi/). These data series are combined to compute a health services price index by Medicare, Medicaid, and private insurance patients. The computation of utilization matches the methodology employed in the HSEI [price brief](https://www.altarum.org/research/health-sector-economic-indicators), subtracting price growth and enrollment growth from total spending growth to reach a combined estimate of changes in utilization and intensity.