Investment Insights

Inflation Checkpoint: A Deep Dive Into Healthcare Services Inflation

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Elise Mordos
Investment Strategies Analyst

Highlights

- Healthcare spending is a sizable portion of household budgets, and costs — including insurance premiums, deductibles, and copayments — have been rising.
- Medical services costs are a key component of the Fed's preferred inflation measure, but because they are acyclical, they matter less from a monetary policy standpoint.
- In Bessemer's price index, healthcare represents a higher weighting than the base index, and this has been an upward driver of our measure until recently.

The impact of healthcare costs can be felt throughout our economy. Consumers worry about how the high cost of health insurance, prescription drugs, and trips to the doctor will impact their spending power — to the point that these costs can meaningfully influence employment decisions. Investors worry about how they impact health insurance companies and labor costs. Economists worry about public policy and consumer behavior implications.

In this *Investment Insights,* we discuss current trends in healthcare services costs, how they are impacting overall inflation, and gaps in inflation measures. We also describe how medical care services are captured in the Bessemer Price Index (BPI) and their resulting impact. Given the breadth and depth of the healthcare system, we are limiting this analysis to services like physician and hospital services. We also discuss health insurance as this is a key element to understanding service costs. Drug pricing is another important element of the system but a large enough topic to deserve its own analysis at a later date.

Structure of the U.S. Healthcare System and Its Rising Costs

Compared to most major developed nations, the U.S. has a unique healthcare system, consisting of a mix of private and public insurance providers. The majority of Americans do not meet the requirements to receive public health insurance, and many insure themselves and their immediate families through their employers (Exhibit 1). Medicare and Medicaid are the primary

Exhibit 1: Health Insurance Coverage for the U.S. Population Under the Age of 65 in 2018

Provider	Number Enrolled (millions)
Employment-based coverage	159.7
Medicaid and CHIP*	69.4
Purchased through a government sponsored healthcare exchange	9.7
Purchased outside of a government sponsored healthcare exchange	4.9
Basic Health Program**	0.8
Medicare	8.3
Other coverage	3.0
Uninsured	28.9

As of April 2019.

* CHIP stands for the Children's Health Insurance Program and provides low-cost health coverage to children in families who earn too much to qualify for Medicaid.

** Basic Health Program allows states to offer healthcare to individuals with income levels between 138% and 200% of the federal poverty guidelines and was established under the Affordable Care Act.

Source: Congressional Budget Office

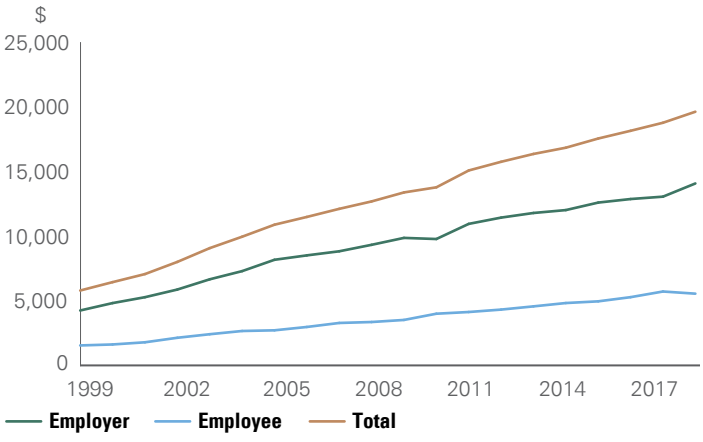
public insurers. Medicare chiefly serves the population aged 65+, while Medicaid serves low-income citizens, and both cover disabled people.

Beyond government and employer programs, other options for Americans include purchasing a plan as an individual directly with a health insurance provider, purchasing a plan through a healthcare exchange compliant with the Affordable Care Act (ACA), or simply going without insurance. There is effectively no requirement for Americans to have medical coverage as the ACA penalty for being uninsured was eliminated in 2019, though a penalty for not having health insurance has been implemented in a few states, such as Massachusetts and New Jersey.

For individuals with employment-based coverage, costs have been rising. Generally speaking, with this type of insurance, people pay a premium each month. In 2018, the average was $99 per month, or $1,188 for the year, for a single individual, while the average for families was $462 monthly, or $5,544 annually. The average premium for employer-sponsored health insurance has increased notably over the past two decades, far outpacing overall inflation (Exhibit 2).

Exhibit 2: Average Annual Premiums Paid for Family Coverage by Employer and Employee for Employee-Sponsored Health Insurance

Key Takeaway: Annual premiums have risen notably over the past two decades.

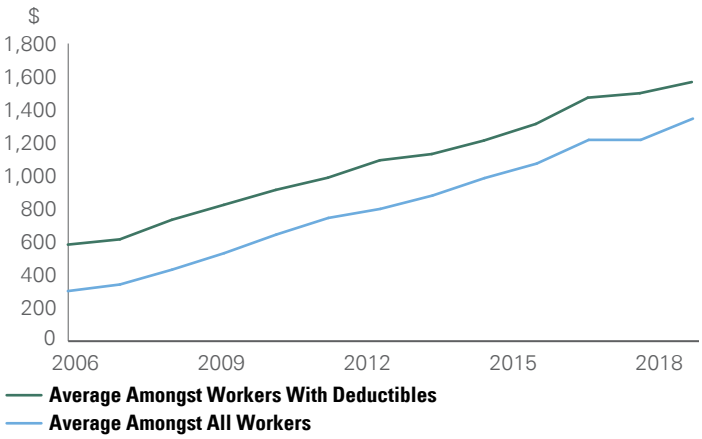


As of 2018.

Source: Kaiser Family Foundation

Exhibit 3: Average General Deductible for Single Coverage

Key Takeaway: Average deductibles are significantly higher than they were 10 years ago.



As of 2018.

Source: Kaiser Family Foundation

Compared with employment-based coverage, costs are generally much higher for private insurance plans purchased on a government-sponsored health exchange formed by the ACA. The average monthly premium for this type of plan for individuals averaged $594 in 2019, though variation is significant by state: Massachusetts has the lowest average at $392, while Wyoming has the highest at $943. Individuals who purchase these types of plans generally consist of people working for small firms, freelancers, the unemployed, and part-time and temporary workers.

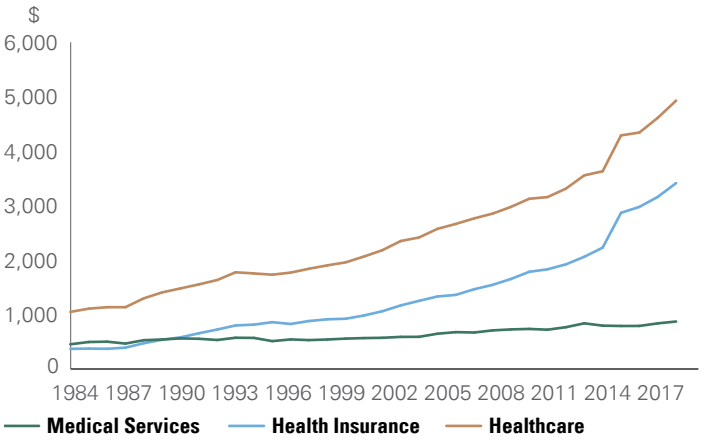
Like monthly premiums, deductibles are on the rise (Exhibit 3). A deductible refers to the amount that the insured individual or family is responsible for until the insurance company begins paying (85% of employee-sponsored plans come with deductibles today). Copayments, the amounts insured individuals are responsible for when visiting in-network physicians, have also increased over time. For instance, the average copayment was $18 for a primary care doctor visit and $23 for a specialist in 2006, and this increased to $25 and $40, respectively, in 2018 for individuals with employer-sponsored health insurance.

Though costs are rising, both the ACA and employer-sponsored plans do offer some protection to the insured in the form of maximum out-of-pocket costs. With the ACA, such costs are limited to no more than $7,900 for an individual and $15,800 for a family in 2019 for all non-grandfathered group health plans (does not include premiums).[1] With employer-sponsored plans, 99% of individuals covered have a maximum out-of-pocket amount averaging $3,875 for single coverage plans.

As these statistics make clear, healthcare is expensive in the U.S., and this impacts all households regardless of income level. In 2017, the top quintile of income earners spent an average of $7,857 on healthcare, and the bottom quintile spent $2,492, while the average household spent $4,928 (insurance alone amounted to an average of $3,414). The increase in health insurance costs has been a main driver in the increase in average health expenditure since 1984 (Exhibit 4). Total consumption expenditure per household averaged $60,060 in 2017, making healthcare a top portion of household budgets.

Exhibit 4: Average Annual Expenditure on Healthcare, Health Insurance, and Medical Services for U.S. Households

Key Takeaway: The price tag for health insurance has been a primary driver of overall health expenditure.



As of 2017. Healthcare includes both services, insurance, drugs, and medical supplies.

Source: U.S. Bureau of Labor Statistics Consumer Expenditure Survey

Healthcare Inflation Measures

To properly analyze healthcare inflation, it is necessary to understand how healthcare costs are captured in the two most important inflation measures, Personal Consumption Expenditure (PCE) and Consumer Price Index (CPI), as well as the Bessemer Price Index (BPI).

PCE and CPI capture different elements of healthcare service costs. PCE measures the total cost of medical services, including how much consumers spend on medical care services and how much insurance providers, employers, and the government pay on behalf of the consumer. For privately insured individuals, PCE captures how much the consumer and private insurance provider pay for the service. The direct cost of health insurance is not captured in PCE's medical care services index, so there is no perfect inflation measurement for the cost of monthly premiums or deductibles faced by consumers.

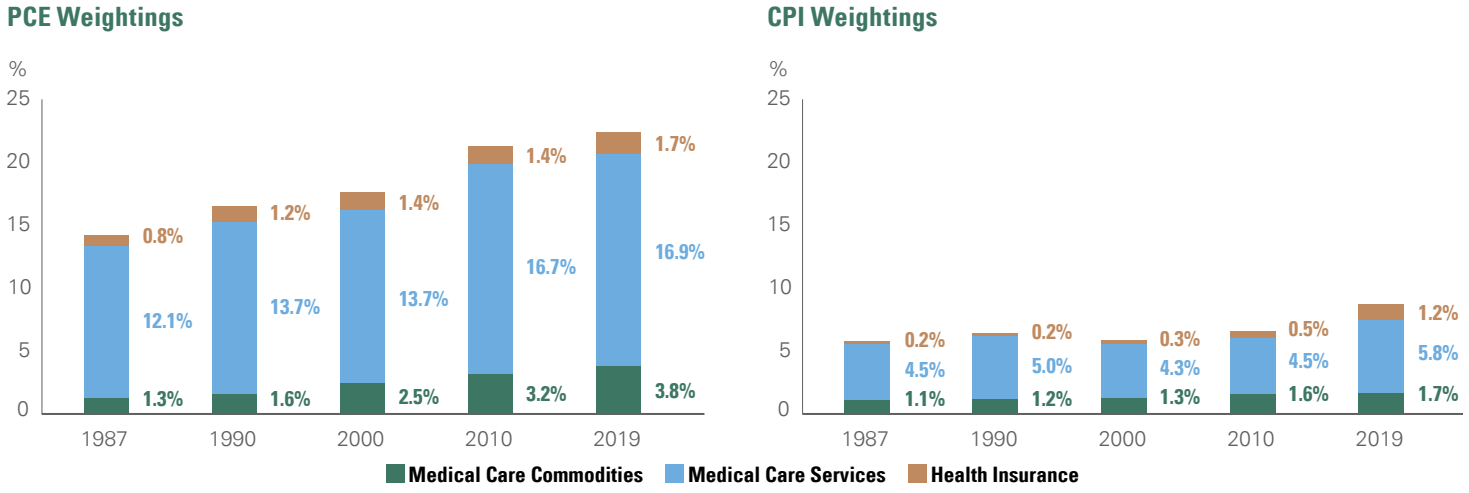
CPI limits its definition to the amount that consumers pay out-of-pocket for healthcare. This means that the insurance premium that the consumer pays would be captured, but not the amount that the employer pays on behalf of the recipient for privately insured individuals. The amounts that consumers pay directly for medical services, such as their copayment to visit a physician, are also captured in CPI's weighting of healthcare. Fully tax-funded medical care like Medicare Part A and Medicaid would not be captured since consumers do not pay to be enrolled in them.

The key distinctions between how CPI and PCE define medical care leads to a large difference in the relative importance of this line item in their overall and core metrics and medical inflation trends. Medical care services total 5.8% of CPI, and medical care goods like prescription drugs amount to 1.7% of CPI. Within PCE, medical care services and goods weights are 16.9% and 3.8%, respectively. Similarly, health insurance is a separate category within PCE, but it is included in the medical services group within CPI. Health insurance is 1.7% of PCE. The relative importance of medical care has increased in CPI and PCE over the past several decades (Exhibit 5).

[1] Grandfathered plans are health plans that were in place before March 23, 2010, when the Affordable Care Act was signed into law. These plans are allowed to offer the coverage they did before the Affordable Care Act.

Exhibit 5: Weightings of Healthcare Categories Within PCE and CPI

Key Takeaway: Medical services represent substantially different weightings within PCE and CPI.



As of July 31, 2019 for PCE and August 31, 2019 for CPI.

Source: Bloomberg, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics

The Impact of Healthcare Policies on Inflation

Given PCE's weighting and definition of medical services, recent policy changes affecting the cost paid for medical care have had a notable impact on this inflation measure. These same policy changes have not impacted out-of-pocket costs of healthcare services for consumers in the same way. This contrast is evident in PCE and CPI year-over-year trends (Exhibit 6).

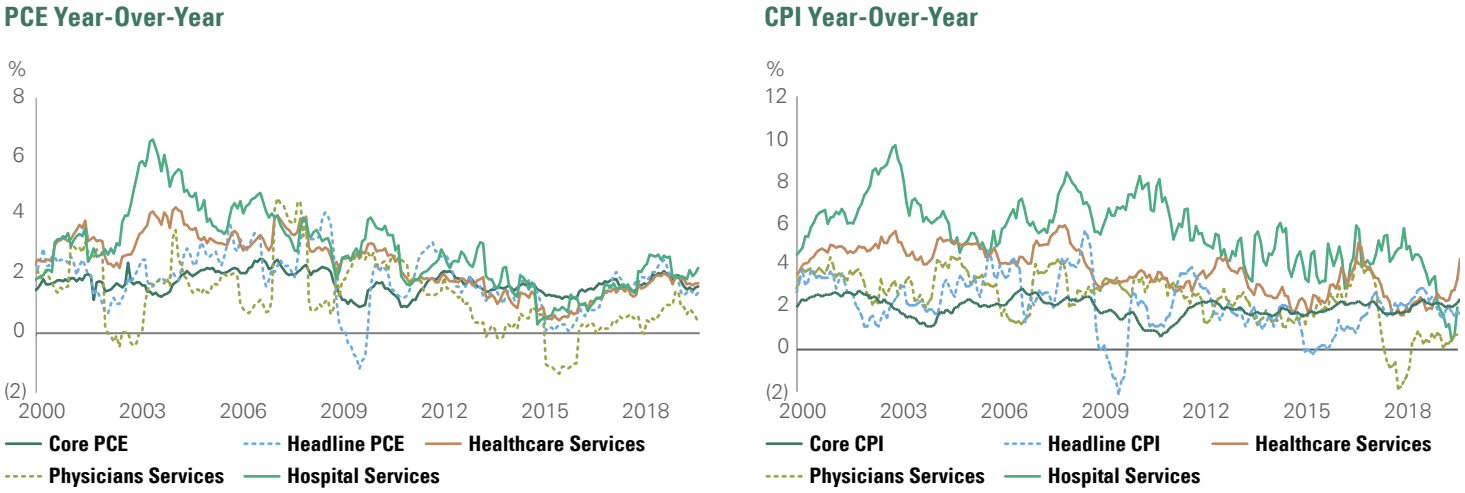
Generally speaking, insurance providers, mainly the government and private insurance companies, pay for a large share of medical services, and the beneficiary pays the rest. While private insurance providers tend to pay more than public ones, studies have shown that they tend to follow similar or identical price changing policies set by Medicare.

How are Medicare prices determined? The answer boils down to two main mechanisms. The first is inflation. The Centers for Medicare and Medicaid Services (CMS) uses price indices to determine the cost of providing medical services by type. For instance, it uses the Employment Cost Index (ECI) for hospital services to measure how much wages and benefits are increasing for hospital service workers; the ECI accounts for 70% of the total price index to adjust for hospital base payment rates. The second part is legislative. Policymakers make the final determination on how much prices will change based on the market basket determined by CMS. Sometimes, the difference between the market price adjustment and the final one is substantial.

Recently, the Affordable Care Act of 2010 and the Taxpayer Relief Act (ATRA) of 2012 included terms that resulted in a 1% increase in the payment made to hospitals versus the market basket-suggested update of around 3% from 2011 to 2019. More specifically, the ACA included cuts to hospital payments that went into effect in 2011. While parts of this cut will expire, the largest component will remain in place indefinitely under current law. One can see how this impacted PCE in Exhibit 6. The healthcare component of PCE started trending downward and was notably lower than the year-over-year price change trend the decade prior.

Exhibit 6: PCE and CPI Headline Core and Healthcare Services

Key Takeaway: Different weightings of healthcare costs cause variation in PCE and CPI trends.



As of July 31, 2019 for PCE and August 31, 2019 for CPI.

Source: Bloomberg, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics

On top of this, three other deflationary policy shocks have impacted PCE's healthcare service price index:

- The first is the Budget Control Act of 2011. The federal government failed to reach a bipartisan agreement on spending cuts, resulting in an automatic reduction in federal spending (sequestration). Medicare payments were all cut by 2%.
- The second is the 2014 Medicaid expansion. Enrollment subsequently increased by an average monthly rate of 13.2% in fiscal year 2015. It slowed to 2.7% in fiscal 2017. This is relevant from an inflationary standpoint because Medicaid payments tend to be lower and grow at a slower rate than those of other payers.
- The final transitory factor is the expiration of a Medicaid primary care rate increase in January 2015. A provision of the ACA required that states increase Medicaid payments to doctors to match that of Medicare for primary care services. This was in effect in 2013 and 2014. Many states substantially increased their payments to doctors but then returned to the lower rates after this provision expired. One can see this effect in the physician services inflation rate in Exhibit 6.

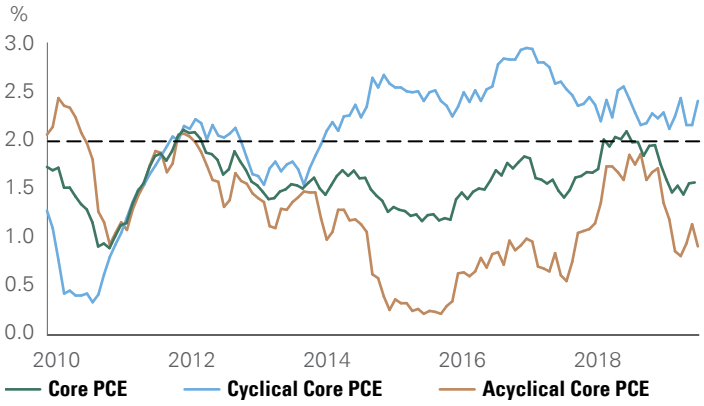
Combined, these three temporary factors put downward pressure on hospital and physician payments made by public insurance providers. Today, these effects have rolled off due to the base effect. In fact, healthcare services are now growing at a rate faster than overall and core inflation at 1.7% year-over-year in July versus 1.6% for core PCE and 1.4% for headline inflation.

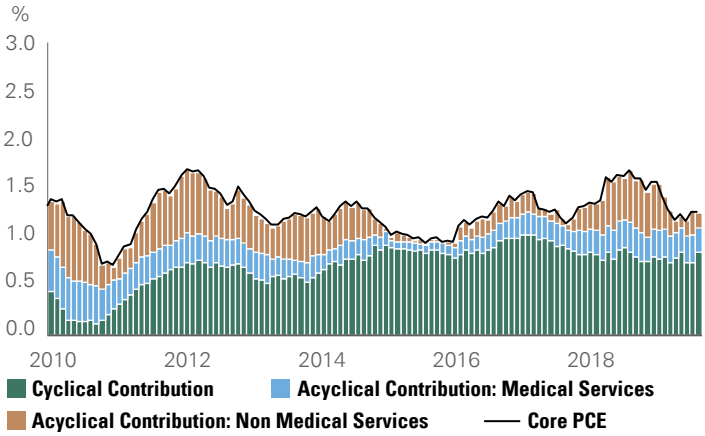
With these trends in mind, medical care services provide a great example of the importance of looking at cyclical versus acyclical factors within PCE. Medical care services are considered an acyclical component within PCE because they are influenced by factors outside of the state of the economy, such as the implementation of the ACA. Exhibit 7 provides a breakdown of the contribution of core PCE by cyclical and acyclical medical services and non-medical services. One can see the relatively sizable impact that acyclical inflation, particularly medical services, can have on overall core PCE.

Turning to CPI, the impact of healthcare policy changes is smaller on the overall and core indices but still affects elements of the health services component. As mentioned, CPI's relative weight is a function of out-of-pocket spending, but the price change is a function of the total reimbursement to the medical care providers by the

Exhibit 7: Core PCE by Cyclical and Acylical Component — Year-Over-Year

Key Takeaway: Medical services, an acyclical component of inflation, have had a considerable impact on core PCE.





As of July 31, 2019. The contribution bars sum up to core PCE.

Source: Bloomberg, Federal Reserve Bank of San Francisco

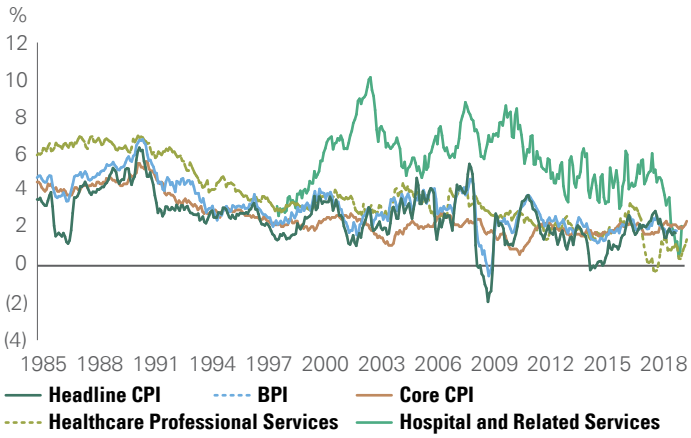
consumer, private insurance, and/or Medicare. For example, for CPI, the price to visit a physician includes both the $20 copayment and the $80 insurance payment. Medicaid and workers' compensation are not included in CPI since consumers do not pay for this service. This is why the transitory downward pressure from ACA and sequestration did not impact CPI in the same fashion, or at all (Medicaid is not included in CPI since there is no out-of-pocket cost for consumers). Additionally, out-of-pocket costs faced by consumers have been rising, as mentioned in the overview of the healthcare system. CPI better captures this trend than PCE because it measures how much consumers pay for healthcare services. This trend is evident in the medical care services components in Exhibit 6.

Healthcare Services and the BPI

Bessemer's Price Index (BPI) is a function of CPI, whereby we adjust the weightings to better reflect how our clients experience inflation. The weighting assigned to medical care is one of the biggest differences between CPI and BPI. Specifically, professional medical services — such as visits to a physician's office, dental care, eye care, and hospital and related services — sum to 11.2% of BPI versus 5.9% for CPI. Until recently, the higher weighting to medical care services had an upward impact on BPI relative to CPI. Lately, however, we have seen professional medical and hospital services trend below overall and core CPI (Exhibit 8). That said, BPI is still trending slightly higher than CPI, mostly due to tuition, childcare, and other school fees. The inflation rate for this category has been well above both headline and core CPI since August 2018, increasing by 2.6% year-over-year to 3.5% year-over-year every month. The BPI weighting for this index is 13% versus under 3% for the headline metric. Motor fuel has also played a role in BPI's higher trend than CPI recently because this consumer item has experienced negative year-over-year price changes every month since December with the exception of April's 3.1% reading; BPI's weighting to motor fuel is half that of CPI's. With that said, owners' equivalent of rent continues to play a material role in limiting BPI's ability to meaningfully outpace CPI. Specifically, this housing component has outpaced overall CPI since 2012, increasing by 3.4% year-over-year on average each month. CPI's weighting to this item is 25%, while BPI's is roughly half of that.

Exhibit 8: BPI versus CPI versus CPI for Medical Care Services — Year-Over-Year

Key Takeaway: In the BPI, healthcare has a higher weighting than in CPI, and this contributed to BPI's higher relative levels within the last decade.



As of August 31, 2019.

Source: Bloomberg, U.S. Bureau of Labor Statistics

Conclusion

As investors, we look closely at inflation and its components as inputs into our decision-making process. Healthcare services inflation is particularly important in the current environment, with healthcare a prominent topic going into the 2020 elections. While reported inflation measures (CPI and PCE) fall short of explicitly capturing the rising cost of health insurance and deductibles due to how health service costs are measured, they are important to analyze as an overall gauge of trends and their implications for monetary policy.

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