

December 23, 2021

New CMS data show near-record national health spending growth due to COVID-related federal expenditures

- ▲ New data from CMS indicate national health spending grew by 9.7% in 2020, the fastest rate since 2002, driven primarily by increases in federal government spending in response to the COVID-19 pandemic.
- ▲ Gross Domestic Product (GDP) fell by 2.2% in 2020, resulting in a health spending share of GDP of 19.7% for the year.
- ▲ Excluding these additional government expenditures, national health spending grew by 1.9%.
- ▲ Incorporating similar increases in government spending into our spending estimates for 2021 suggests that health spending in October 2021 grew by 4.4% since October 2020 and currently represents 19.5% of GDP.

National Health Spending and GDP*

	Oct 2019	Oct 2020	Sept 2021	Oct 2021
GDP	21.63	21.62	23.41	23.91
National Health Spending (HS)	3.84	4.48	4.65	4.67
HS Share of GDP	17.7%	20.7%	19.9%	19.5%
HS Share of PGDP	17.8%	20.1%	19.6%	19.6%
Growth from Prior 12 Months				
HS	5.6%	16.6%	5.0%	4.4%
GDP	3.9%	-0.1%	9.3%	10.6%
HS minus GDP	1.7%	16.7%	-4.3%	-6.2%
HS minus PGDP	2.0%	13.6%	-1.8%	-3.0%

Source: Altarum monthly health spending estimates (see Methods box below). Monthly GDP is from IHS Markit. 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 (SAAR).

Altarum is a nonprofit research and consulting organization that creates and implements solutions to advance health among at-risk and disenfranchised populations. Since 2011, Altarum has researched cost growth trends and key drivers of U.S. health spending and formulated policy strategies to help bend the cost growth curve. This work was made possible through generous support from the Robert Wood Johnson Foundation.

The Health Sector Economic IndicatorsSM reports are a monthly publication of Altarum and provide an analysis of health spending, employment, and prices. For more information, contact Ani Turner at ani.turner@altarum.org. George Miller, PhD (principal author), Ani Turner, Corwin Rhyan, and Matt Daly, PhD, contributed to this brief. We thank Paul Hughes-Cromwick, who originated the concept of these reports and provided inspired leadership of the work from its inception. Media Contact: press@altarum.org. For more information, visit <http://altarum.org/solution/health-sector-spending>.



DISCUSSION

On December 15, CMS released its [official annual accounting](#) of national health expenditures (NHE) for 2020. The reported 9.7% growth in spending was driven primarily by a significant increase in federal government spending in response to the COVID-19 pandemic. The new CMS data have resulted in major revisions to our Health Spending Economic Indicators spending estimates for 2020 and 2021. The following were the primary drivers of the revisions:

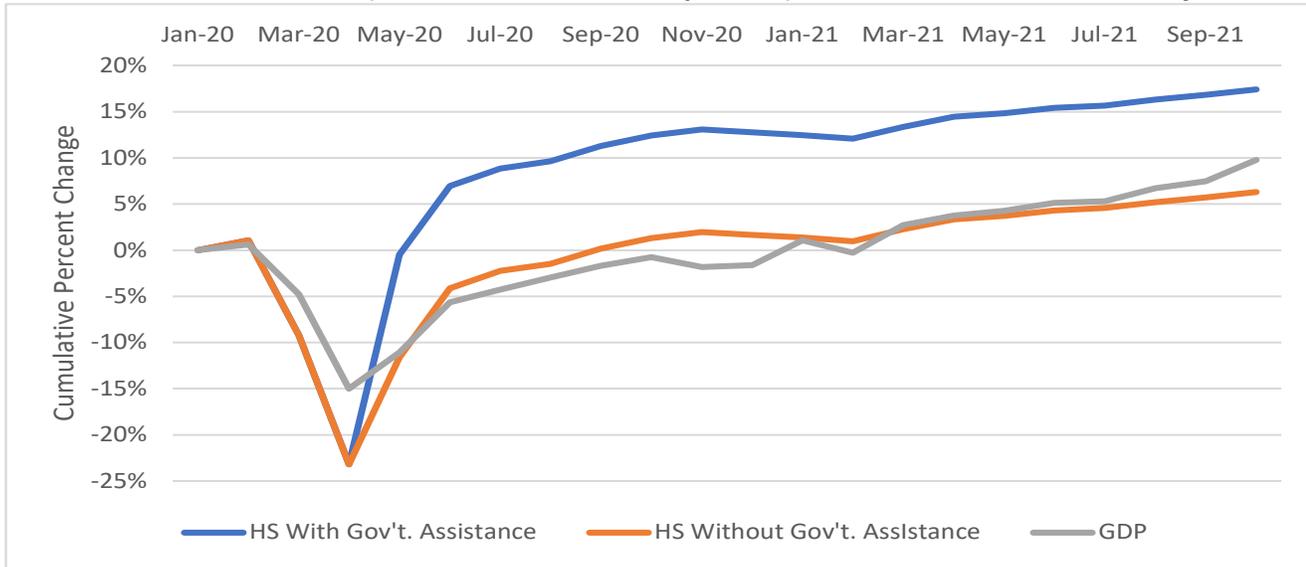
- Government support to healthcare providers through the Paycheck Protection Program and the Provider Relief Fund was not included in our estimates of spending for healthcare services. These estimates are based largely on Bureau of Economic Analysis (BEA) monthly estimates of Personal Consumption Expenditures, adjusted for historical differences from NHE. The BEA estimates do not include these government expenditures, whose large increases from historical values were not captured in our 2020 adjustments.
- A large increase in government support to public health programs was not included in our estimates of public health spending. Because public health spending is not captured by the BEA Personal Consumption Expenditures, we rely on the most recent CMS projection of spending in this category. The latest CMS data did not anticipate this COVID-related jump in public health spending.
- A large increase in the net cost of insurance was not included in our previous estimates. As with public health spending, we rely on the most recent CMS projection of spending in this category, which did not anticipate this increase. (We address the causes of this increase in cost of insurance in our just-published [blog](#) that discusses the 2020 expenditures.)
- In addition to the above factors, our estimate of spending growth from 2019 to 2020 was affected by CMS' downward adjustment to the estimate of 2019 health spending, which appears largely a revision to commercial and out of pocket drug spending.

Our spending estimates have been adjusted to match the CMS 2020 results. For 2020, we estimated the magnitude of the increased federal expenditures to be the amount by which 2020 federal spending on the CMS categories of “Other Federal Programs” and “Public Health Activity” exceeded the amount spent in 2019. (Our numbers therefore disagree slightly with those presented by CMS, which describes the total amounts spent in these categories in 2020.) We assumed that the increase in federal spending began in May and was spent uniformly across all months from May through December. For 2021, we assumed that the increased spending identified above has continued at 2020 rates. This assumption is subject to significant uncertainty but provides our best current estimate of 2021 spending. We will continue to consider how to address COVID-specific spending increases and might make further adjustments to our estimates in the future.

Exhibit 1 shows our estimate of the trajectory of growth in national health spending since the start of 2020 with and without the COVID-related government support to providers and public health activities. The exhibit illustrates the extent to which increased federal spending has contributed to spending growth since the spending nadir that occurred in April 2020. It also illustrates its impact on health spending's fraction of GDP. When the increased federal government assistance is included, health spending growth from January 2020 through October 2021 is 17.4%, and health spending growth exceeds GDP growth by 11.1 percentage points. When the increased federal assistance is excluded, spending growth tracks GDP growth more closely. By October 2021, spending growth since January 2020 is 6.3% without the increased federal spending, and GDP growth exceeds spending growth by 3.5 percentage points.

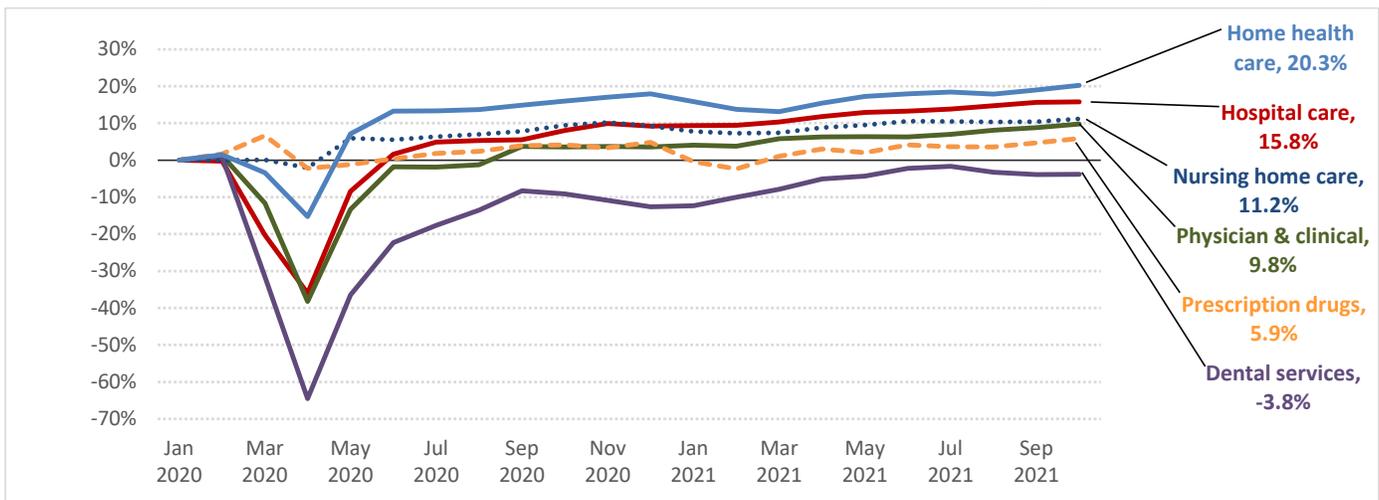


Exhibit 1. Percent Change in National Health Spending (HS) and GDP Since January 2020



As we have reported in the past, growth among the major spending categories since the beginning of 2020 remains variable, although monthly growth rates within each category have increased as a result of the increased federal spending (Exhibit 2). While spending on dental services remains well below pre-pandemic levels, spending on each of the other categories has increased to well above January 2020 levels by October 2021. Further discussion of 2020 spending in these categories can be found in our recent [blog](#).

Exhibit 2. Cumulative Spending Growth Since January 2020, by Major Categories (Percent Difference for October 2021 Shown in Data Labels)





DETAILED HEALTH SPENDING

Exhibit 3. Monthly National Spending Estimates by Detailed Category

Levels (in billions of dollars)	Oct 2018	Oct 2019	Oct 2020	Oct 2021
GDP	\$20,825.6	\$21,634.5	\$21,619.9	\$23,913.4
National Health Spending	\$3,633.1	\$3,837.1	\$4,475.4	\$4,673.5
Personal health care	\$3,052.7	\$3,221.3	\$3,615.8	\$3,827.0
Hospital care	\$1,129.6	\$1,208.0	\$1,396.0	\$1,496.1
Physician and clinical services	\$746.3	\$784.2	\$876.7	\$929.1
Other professional services	\$105.0	\$113.3	\$126.2	\$136.0
Dental services	\$140.0	\$145.5	\$159.5	\$168.7
Other personal health care	\$192.0	\$198.3	\$214.6	\$226.1
Home health care	\$108.6	\$113.9	\$132.8	\$137.7
Nursing home care	\$168.0	\$174.8	\$205.1	\$208.5
Prescription Drugs	\$329.9	\$344.1	\$355.2	\$361.1
Durable medical equipment	\$54.7	\$57.2	\$59.4	\$63.9
Nondurable medical products	\$78.4	\$81.9	\$90.3	\$99.9
Program administration and net cost of private health insurance	\$294.2	\$293.1	\$362.8	\$355.3
Government public health activities	\$95.3	\$127.8	\$303.5	\$284.7
Research	\$54.3	\$57.2	\$61.2	\$64.5
Structures and equipment	\$136.6	\$137.8	\$132.2	\$142.0
HS Share of GDP	17.4%	17.7%	20.7%	19.5%
HS Share of PGDP	17.4%	17.8%	20.1%	19.6%

Source: Altarum monthly national health spending estimates. The monthly GDP is from IHS Markit.

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

Exhibit 4. National Health Spending 12-Month Growth Rates by Detailed Category

Growth Rates	Oct 2019	Oct 2020	Oct 2021
GDP	3.9%	-0.1%	10.6%
National Health Spending	5.6%	16.6%	4.4%
Personal health care	5.5%	12.2%	5.8%
Hospital care	6.9%	15.6%	7.2%
Physician and clinical services	5.1%	11.8%	6.0%
Other professional services	7.9%	11.3%	7.8%
Dental services	3.9%	9.6%	5.8%
Other personal health care	3.3%	8.2%	5.3%
Home health care	4.9%	16.6%	3.7%
Nursing home care	4.1%	17.3%	1.6%
Prescription Drugs	4.3%	3.2%	1.7%
Durable medical equipment	4.5%	3.9%	7.5%
Nondurable medical products	4.4%	10.2%	10.6%
Program administration and net cost of private health insurance	-0.4%	23.8%	-2.1%
Government public health activities	34.1%	137.5%	-6.2%
Research	5.4%	6.9%	5.5%
Structures and equipment	0.9%	-4.1%	7.4%
HS Minus GDP	1.7%	16.7%	-6.2%
HS Minus PGDP	2.0%	13.6%	-3.0%

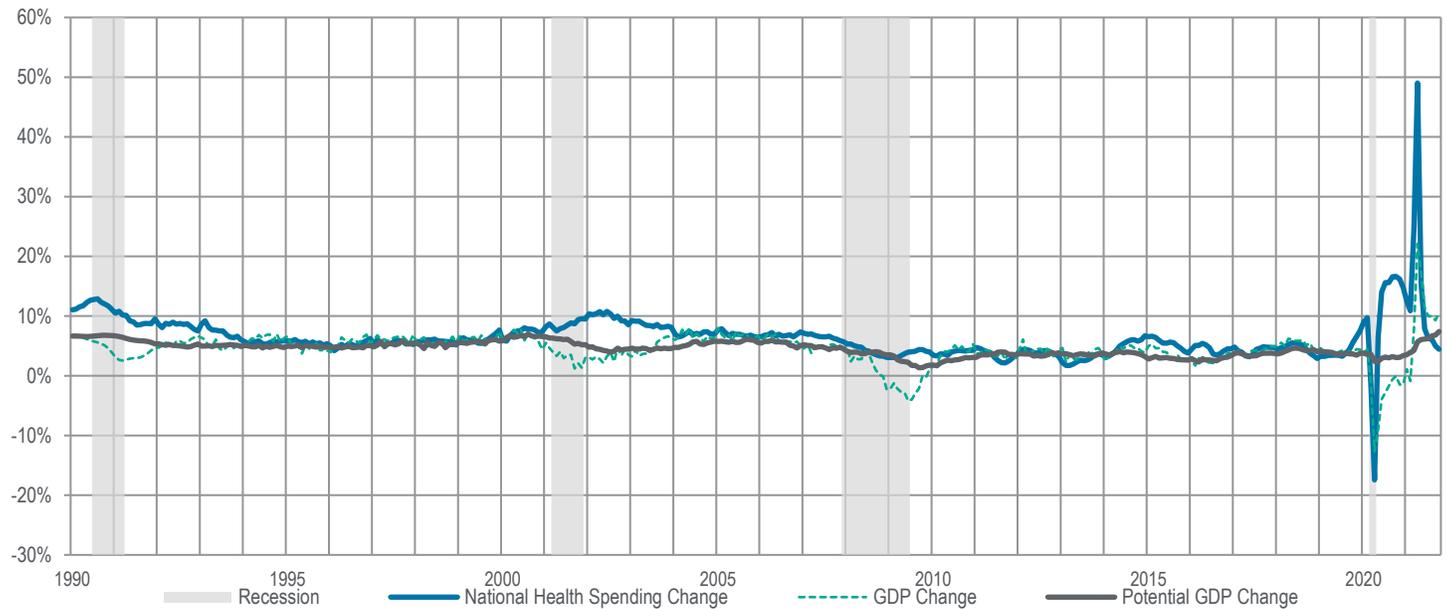
Source: Computed from Exhibit 2.

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



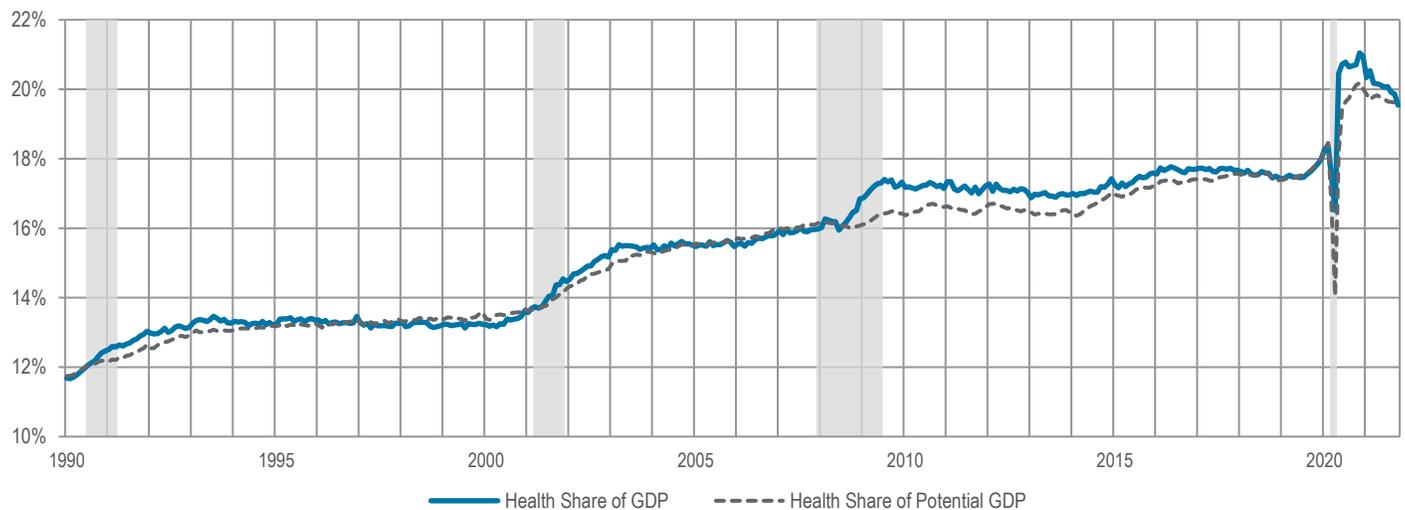
TIME SERIES TRACKER

Exhibit 5. Year-over-Year Percentage Change in Spending and GDP



Source: Altarum monthly national health spending estimates. The monthly GDP is from IHS Markit.
Note: Lightly shaded bars denote recession periods.

Exhibit 6. Monthly Health Spending as a Percentage of Monthly GDP



Source: Altarum monthly national health spending estimates. Monthly GDP is from IHS Markit. 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](#) and [CMS annual NHE estimates \(1990–2020\) and projections \(2021\)](#). 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 2020 are based on NHEA actuals and ensure that monthly estimates sum exactly to NHEA annual amounts. The 2020 ratios are used to adjust BEA spending for months in 2021.