

Accounting for Federal COVID Expenditures in the National Health Expenditure Accounts

The COVID-19 pandemic spread throughout the world in 2020 and caused major disruptions to the overall economy and to the health sector in the United States. In response to the public health emergency, the federal government implemented six different pieces of legislation to provide support to individuals, business, and state and local governments. The legislation was targeted to both provide direct support for the healthcare response to the pandemic, as well as address the economic impact that resulted from the pandemic. This paper will discuss the new flows of funding to the health sector that resulted from legislation passed in 2020 and 2021, and the data sources and methods used to estimate their impact on health care expenditures in the National Health Expenditure Accounts (NHEA).

Federal Recovery Legislation

The first piece of legislation, the ***Coronavirus Preparedness, and Response Supplemental Appropriations Act of 2020*** was signed into law on March 6, 2020. This act provided \$8.3 billion in funding for federal agencies to use in the response to the COVID-19 pandemic. Most of this funding was allocated directly for vaccine development, the stockpiling of equipment, and to help fund state and local government's response to the pandemic.

Shortly after on March 18, 2020, ***The Families First Coronavirus Response Act, 2020*** was enacted. Most of the \$192 billion of funding in this legislation went to small businesses and state and local governments to help provide them with more resources to fight the pandemic and provide relief to strained budgets. Small businesses received money to increase paid sick, family and medical leave. State and local governments received an increased Federal Matching Assistance Percentage for Medicaid and funding to support the Supplemental Nutrition Assistance Program and unemployment insurance programs. Additionally, Medicare, Medicaid and the Children's Health Insurance Program (CHIP) received funding to increase COVID-19 testing and some federal agencies received increased discretionary funding.

Less than 10 days later, on March 27, 2020, ***The Coronavirus Aid, Relief and Economic Security (CARES) Act of 2020*** was signed into law. The CARES Act provided the largest amount of funding, \$1.8 trillion, to combat both the healthcare crisis, as well as the ensuing economic fallout of the pandemic. It provided direct payments to individuals and grants to states, as well as the initial funding for the Provider Relief Fund and the Paycheck Protection Program. The Provider Relief Fund was established to provide healthcare providers with money to offset lost revenue, as well as help provide increased resources for the fight against the pandemic. The Paycheck Protection Program (PPP) provided small businesses with forgivable loans to prevent layoffs due to the economic crisis. Additionally, the CARES Act also provided funding for vaccines, supply stockpiles, and testing. Lastly, the CARES Act established several other non-healthcare related programs to combat the economic crisis.

The Paycheck Protection Program, and Provider Relief Fund, both established in the CARES Act, received increased funding from the ***Paycheck Protection Program and Healthcare Enhancement Act of 2020***, which went into effect on April 24, 2020. This provided \$484 billion in increased funding, mostly directed at these two programs. As with prior legislation, some funding also went to vaccine and treatment development, stockpiles, and testing. This act also authorized funding for Economic Injury and Disaster Loans, which had been used in the past to support small businesses that suffered losses due to natural disasters.

The final piece of Federal recovery legislation that passed in 2020 was the ***Coronavirus Response and Relief Supplemental Appropriations Act*** of 2020, which was signed into law on December 27, 2020. While this act was passed too late in 2020 to have an impact on 2020 health care expenditures, it provided \$900 billion in funding that impacted 2021 health care expenditures. The Paycheck Protection Program received \$284 billion, and was authorized to give the hardest hit small businesses a second forgivable loan. It also provided \$48 billion to help with vaccine distribution, as vaccinations began in the fourth quarter of 2020. Other parts of this legislation provided direct payments to individuals, increased unemployment insurance, and funding to help the education and transportation sectors, which suffered during the prior months due to the pandemic.

On March 11, 2021, the ***American Rescue Plan*** was passed, which provided \$1.9 trillion in additional stimulus funding, \$415 billion of which was allocated to public health for vaccine purchases, testing, contact tracing, research and development, and manufacturing of pandemic related medical supplies. There was also a small allocation to rural health care provider to help them fight the pandemic, which was administered through the Provider Relief Fund. Additionally, the Paycheck Protection Program received an additional \$7 billion, which provided access to non-profits and other organizations that had not already had access to the loans.

From these six pieces of legislation, the largest impacts on health care spending were associated with the Provider Relief Fund, the Paycheck Protection Program and the public health response through the funding vaccines and treatments, COVID testing, and strategic stockpiles of equipment.

Classification of Federal COVID-19 Funding

The new flows of federal funds that resulted from the federal recovery legislation were classified in the NHEA based in part on international recommendations from the United Nations Statistical Commission (working group on National Accounts) that were developed in consultation with an expert advisory group.¹ These recommendations reflected several important principles, including the idea that national accounts should reflect the nature of the transaction, their policy intent, and the real economic impacts of the new programs.² These broad principles were used to help inform the classification of Federal COVID supplemental funding in the NHEA.

Government subsidies to health care providers are classified as “Other Federal Programs” in the NHEA, and thus are reflected in the specific provider service categories in the NHEA (such as for hospital or physician services) to whom the subsidies were provided. The Provider Relief Fund provided direct federal subsidies to health care providers to assist with lost revenue and with the increased costs of providing care as a result of the pandemic, and as such is included in Other Federal Programs. Loans provided under the Paycheck Protection Program provided funding to businesses (including health care providers) to help pay for payroll and other eligible expenses. These loans were eligible to be forgiven if used to pay for eligible expenses and as such are considered to be federal subsidies in the NHEA if they are forgiven. To date, there has been a very high forgiveness rate, 99 percent, for loan forgiveness applications.^{3,4}

Government public health expenditures in the NHEA include the organization and delivery of publicly provided health services such as epidemiological surveillance, inoculations, immunization/vaccination services, disease prevention programs, the operation of public health laboratories, and other such functions. In 2020, federal public health expenditures increased dramatically in response to the pandemic as the federal government increased funding for the development of COVID vaccines through Operation Warp Speed⁵, stockpiles of drugs and vaccines, and health facility preparedness. Although government public health spending was less in 2021 than in 2020, it continued to be elevated compared to prior to the COVID-19 pandemic.

Exhibit 1. COVID Funding in the National Health Expenditure Accounts 2020 and 2021

Supplemental Funding	2020 & 2021 Outlays \$Billions	Legislation	Type of Exp	Agency
Other Federal Programs				
Paycheck Protection Loans	\$73.8	CARES Act & Paycheck Protection Program and Healthcare Enhancement Act	Forgivable loans to small businesses to help cover 2.5 months of payroll and other eligible expenses	SBA
Provider Relief Fund	\$142.5	CARES Act & Paycheck Protection Program and Healthcare Enhancement Act	Direct payments to providers to offset revenue and prepare for COVID 19 Response	HHS
American Rescue Plan (ARP) Rural Payments	\$7.5	America Rescue Plan	Direct payments to support rural communities COVID 19 Response	HHS
Public Health				
PHSSE Fund	\$176.7			HHS
Supplemental (P.L. 116-94)		Further Consolidated Appropriations Act, 2020		
Supplemental (P.L. 116-123)		Cornavirus Preparedness and Restonse Supplemental Appropriations Act	Grants to States and Vaccine Development and Stockpiles	
Supplemental (P.L. 116-127)		Families First Coronavirus Response Act	Government discretionary funding	
Supplemental (P.L. 116-136)		CARES Act	Vaccine, Testing, Grants to States and Stockpiles	
Supplemental (P.L. 116-139)		Paycheck Protection Program and Healthcare Enhancement Act	Vaccine, Testing, Grants to States and Stockpiles	
CDC	\$3.3	The Coronavirus Preparedness and Response Supplemental Appropriations Act and the Paycheck Protection Program and Health Care Enhancement Act	Testing, Surveillance, Viral Sequencing	CDC
COVID Funding Excluded from the NHEA				
Coronavirus Relief Fund ¹	\$149.5	CARES Act	Grants to state, local, and tribal governments to cover a variety of COVID needs in 2020, including to reimburse the costs of business interruption caused by required closures, the establishment of temporary public medical facilities (including construction), care expenses for the homeless population to mitigate COVIDs effects, and to cover unemployment insurance costs related to COVID. The intended beneficiaries for these funds were essential workers, households, small businesses, non-profits, governments, and the general public	Treasury
Notes:				
¹ We do not have the data and methods required to estimate the amount of this funding that was allocated to health care, therefore, we have excluded it from the NHE, but will continue to evaluate this for future NHEA estimates				

Methods for Estimating Federal COVID-19 Supplemental Funding

The Provider Relief Fund

The Provider Relief Fund was allocated \$178 billion in appropriations from the COVID-19 recovery legislation and the funds were intended to offset revenue that was lost by health care providers due to the pandemic. The funding was administered through Department of Health and Human Services (HHS), which distributed \$122 billion in funds during 2020 and another \$28 billion in 2021. The funding was distributed through various programs that HHS divided into 3 categories: general distributions, targeted distributions, and claims reimbursements. Each of these categories have several subcategories. The general distribution was distributed in 3 distinct phases, and with each phase it expanded who was eligible to receive funding. General distributions made up over half of the money provided by the Provider Relief Fund. Targeted distributions were split into several separate programs, designed to increase funding to health care providers that were targeted by HHS. This included hospitals treating a high number of COVID-19 patients, rural providers, safety net hospitals, skilled nursing facilities, hospitals with high Disproportionate Share payments, and the Indian Health Service. Finally, the claims reimbursement program was a way for HHS to reimburse providers for providing testing, treatment or vaccinations to the uninsured and underinsured. In 2021, the American Rescue Plan included an additional \$8.5 billion that went to rural healthcare providers. This funding, while separate from the Provider Relief Fund, was administered through the Provider Relief Fund portal, and was estimated with the Provider Relief Fund in “Other Federal Programs”.

Provider Relief Fund expenditures were estimated using data from HHS⁶ in conjunction with program eligibility guidelines that were used to estimate expenditures by type of provider.

General Distribution

The three phases of the general distribution of the Provider Relief funds were allocated to providers in the NHEA using different methods. The phase 1 general distribution payments were allocated based on the Medicare fee-for-service distribution, as these were the only providers that were eligible to receive payments during that phase 1. For phase 2 and phase 3, the overall service distributions in the NHEA were used to allocate the payments as eligibility expanded to include most service providers for these two phases.

Targeted Distributions

Most of the targeted distributions were directed to a specific type of service provider such as hospitals or skilled nursing facilities and were included in their respective provider categories in the NHEA. For distributions to tribal governments, payments to hospitals and physicians and clinics were allocated to the NHEA categories using data from the Indian Health Service.

Payments to rural health care providers were split into hospital and physician and clinical services using data from the Medicare Cost Reports.

Claims Reimbursements

Provider Relief Fund payments for COVID-19 testing and vaccinations for the uninsured and underinsured were allocated to physician and clinical services, while payments for the treatment of patients with COVID-19 was allocated to hospital services.

The Paycheck Protection Program

The Paycheck Protection Program issued over \$516 billion in forgivable loans in 2020 that were designed to assist small businesses with payroll and other qualifying expenses during the pandemic. While health care was not directly targeted by this legislation, many health care providers received these loans, which were estimated to totaled over \$53 billion. As of October 17, 2021, these loans have had a very high forgiveness rate of 99%.⁷ In 2021, an additional \$270 billion in loans were issued, with health care and social services receiving 10% of those loans. In total, \$786 billion in PPP loans have been given issued with roughly \$74 billion estimated to be retained by health care providers.

In order to estimate the amount of loans directed to health care providers, data from the Small Business Administration (SBA)⁸ was used to estimate the total amount of loans issued to each provider type in the NHEA. The loans were grouped together by NAICS code and mapped to each NHEA category. These totals were then adjusted down slightly to account for the amount of unforgiven loans based on forgiveness data from the SBA.⁹

Federal Public Health Funding

Increased COVID-19 related federal public health funding included a large variety of public health activities including vaccines and treatments, stockpiling equipment, and grants to state and local governments for testing and contact tracing. In 2020, this increased funding accounted for an additional \$121 billion in federal public health expenditures largely through increased funding for the Public Health and Social Services Emergency Fund. In 2021, an additional \$61.5 billion was given to federal public health agencies, with the Public Health and Social Services Emergency Fund again receiving the majority of the funding.

In order to estimate public health expenditures including the additional COVID-19 related funding, outlay data for federal government programs¹⁰ was used to estimate calendar year spending. The President's Budget as well as Congressional justifications for the CDC¹¹, FDA¹², HRSA¹³, Public Health and Social Services Emergency Fund¹⁴ (PHSSE), and other HHS agencies¹⁵ were also used to determine if the new COVID-19 related spending met the NHEA definition of public health spending. The programs that were included in NHEA include the Biomedical Advanced Research and Development Authority (BARDA) (used to finance Operation Warp Speed), funding for strategic national stockpiles of drugs and equipment, grants to state and local governments from the PHSSE, and increased funding to the CDC.

Grants to state and local governments from the COVID Relief Fund were not directly included in the NHEA as state and local governments had discretion on how these funds could be used and the funds were used for both health and non-health related purposes.

Federal COVID-19 Expenditures by Type of Provider

Estimating COVID-19 related health care expenditures by service category presented several challenges for the 2020 and 2021 estimates. While data from the SBA for the Paycheck Protection Program loans were available on a NAICS basis, funding for the various distributions of the Provider Relief Fund were not. Instead, the Provider Relief Fund expenditures were distributed to the service providers in the NHEA using program eligibility guidelines. Additionally, the data from the Census Bureau's Service Annual Survey that is used to estimate total health care spending for the service categories did not include federal COVID-19 supplemental funding for taxable firms and only included partial funding for tax-exempt firms.¹⁶ In order to account for this reporting, the NHEA spending levels by service are adjusted to include this supplemental funding.

Impact of Federal COVID Funding in 2020 and 2021

The legislation that the federal government enacted in 2020 and 2021 to combat the Covid-19 pandemic included a large amount of funding that went directly to fight the pandemic through the public health response and assistance to health care providers through the Provider Relief Fund and the Paycheck Protection Program. Other funding from the legislation that was directed to the DOD, VA, IHS and other health care programs in the NHEA are accounted for in those payers estimates. Other initiatives such as the increase in the Federal Medical Assistance Percentage for Medicaid reallocated funding from state payments to federal payments.

Exhibit 2 shows the detailed allocations of the Paycheck Protection Program loans and Provider Relief Fund payments by service category as well as the increased funding for federal public health activity. The largest recipients of federal COVID-19 funds through the Paycheck Protection Program loan program and the Provider Relief Fund were hospitals, physicians and clinics, and nursing homes. The largest increase in Federal Public Health expenditures was through the HHS Public Health and Social Services Emergency Fund.

Exhibit 2. PPP Loans, Provider Relief Fund, and Federal Public Health Expenditures, 2019 - 2021

Other Federal Program Expenditures by Type of Service				COVID-19 Federal Supplemental Funding								
	Total Other Federal Programs (sum)			Paycheck Protection Program (PPP) Loans			Provider Relief Fund ¹			Other Federal Programs*		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
(\$ in billions)												
Total Other Federal Program Expenditures	\$14.0	\$193.1	\$71.9	\$0.0	\$52.4	\$21.4	\$0.0	\$121.6	\$28.3	\$14.0	\$19.0	\$22.2
Hospital Care	1.9	86.6	19.4	-	3.5	0.5	-	80.8	16.8	1.9	2.3	2.1
Physician and Clinical Services	7.4	51.3	28.2	-	20.8	7.1	-	19.0	6.3	7.4	11.6	14.8
Dental Services	-	8.7	6.7	-	8.0	5.6	-	0.6	1.1	-	-	-
Other Professional Services	-	8.6	4.4	-	6.4	3.6	-	2.1	0.9	-	-	-
Other Health, Residential, and Personal Care	4.3	8.0	6.7	-	2.2	0.9	-	1.1	1.0	4.3	4.7	4.8
Home Health Care	-	9.6	3.1	-	5.1	2.2	-	4.5	0.9	-	-	-
Nursing Care Facilities and Continuing Care Retirement Communities	-	19.8	2.9	-	6.4	1.5	-	13.4	1.4	-	-	-
Prescription Drugs	-	-	-	-	-	-	-	-	-	-	-	-
Other Non-Durable Medical Products	-	-	-	-	-	-	-	-	-	-	-	-
Durable Medical Equipment	-	-	-	-	-	-	-	-	-	-	-	-
Government Administration	0.5	0.5	0.6	-	-	-	-	-	-	0.5	0.5	0.6
Public Health Activity												
	Total Public Health Activity Expenditures (sum)			HHS PHSS Emergency Fund			Centers for Disease Control			Other Public Health*		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
(\$ in billions)												
Total Public Health Activity	\$107.1	\$238.3	\$187.6		\$121.0	\$61.5		\$0.7	\$2.5	\$107.1	\$117.2	\$126.1
Federal Public Health Activity	13.3	135.8	78.8		121.0	61.5		0.7	2.5	13.3	14.7	17.4
State and Local Public Health Activity	93.8	102.5	108.8							93.8	102.5	108.8
<p>1. Includes American Rescue Plan Rural Payments that were administered through the Provider Relief Fund Portal</p> <p>*NOTE: Other Federal Expenditures without spending for PPP loans and the Provider Relief Fund include some COVID-related Health Resources and Services Administration (HRSA) funding. Other Public Health expenditures includes non-COVID-19 supplemental funding for the HHS PHSS Emergency Fund and Centers for Disease Control</p>												

Endnotes

¹ See COVID-19: How to Record Government Support to Employers, Self-employed and Households. Statistical Advice (ISWGNA) on the UNECE website for [Compilation of National Accounts in times of COVID-19](#)

<https://statswiki.unece.org/display/CCD2/Compilation%2Bof%2BNational%2BAccounts%2Bin%2Btimes%2Bof%2BCOVID-19?preview=/278038679/278039681/Recording%20of%20government%20support%20to%20employers%20and%20self-employed.pdf>

² Mandel, BA, Ludwick, MS. COVID-19 pandemic: federal recovery legislation and the NIPAs [Internet]. Washington (DC): Bureau of Economic Analysis; 2021 Apr [cited 2021 Oct 27]. Available from: <https://www.bea.gov/system/files/2020-06/COVID-19%20Pandemic-Federal%20Recovery%20Legislation%20and%20the%20NIPAs.pdf>

³ We estimated the amount of PPP loans given to health care providers using data from the Small Business Administration. We tabulated the data by the NAICS categories included in the NHEA and assumed a loan forgiveness rate of 98.6 percent.

⁴ U.S. Small Business Administration. PPP data: forgiveness data [Internet]. Washington (DC): SBA; data as of 2021 Oct 17 [cited 2021 Oct 17]. Available from: <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-data#section-header-8>

⁵ Operation Warp Speed reflected Biomedical Advanced Research Development Authority funding (federal) that was used to support the development of multiple COVID-19 vaccine candidates.

⁶ U.S. Department of Health and Human Services, Health Resources & Services Administration, Washington D.C., <https://www.hrsa.gov/provider-relief/data>

⁷ U.S. Small Business Administration, Washington D.C., https://www.sba.gov/sites/default/files/2021-11/2021.11.14_Weekly%20Forgiveness%20Report_Public-508.pdf

⁸ U.S. Small Business Administration, Washington D.C., <https://data.sba.gov/dataset/ppp-foia>

⁹ U.S. Small Business Administration, Washington D.C., <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-data#section-header-8>

¹⁰ Office of Management and Budget, Washington D.C., <https://www.whitehouse.gov/omb/historical-tables/>, <https://www.usaspending.gov/>

¹¹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Washington D.C., <https://www.cdc.gov/budget/fy2022/congressional-justification.html>

¹² U.S. Department of Health and Human Services, Food and Drug Administration, Washington D.C., <https://www.fda.gov/about-fda/reports/budgets>

¹³U.S. Department of Health and Human Services, Health Resources & Services Administration, Washington D.C., <https://www.hrsa.gov/about/budget/index.html>

¹⁴ U.S. Department of Health and Human Services, Washington D.C., <https://www.hhs.gov/about/budget/fy2022/index.html>

¹⁵ U.S. Department of Health and Human Services, Washington D.C., <https://www.hhs.gov/about/budget/fy2022/index.html>

¹⁶ U.S. Census Bureau. Department of Commerce. Service Annual Survey. Washington D.C. <https://www.census.gov/programs-surveys/sas/about/faq.html#PPP>