

# Access in Brief: Effects of COVID-19 on Medicaid Beneficiaries' Health and Health Care Utilization

Since the emergence of the COVID-19 virus, there have been over 100 million confirmed cases in the United States, and it is estimated that children account for about 18 percent of cases (WHO 2023, AAP 2023). More than 10 million adults and nearly 4 million children covered by Medicaid and the State Children's Health Insurance Program (CHIP) were treated for COVID-19 by April 2022 (CMS 2022). Although nearly 30 percent of the U.S. population is covered by Medicaid or CHIP, there is limited research about the effect of the COVID-19 pandemic on the health and health care utilization of Medicaid and CHIP beneficiaries (MACPAC 2022).

While the severity of illness from COVID-19 varies from person to person, research suggests that risk factors, such as underlying medical conditions or lower socioeconomic status may increase the likelihood of more severe COVID-19 symptoms (Tai et al. 2021, Lopez et al. 2021, Zhang et al. 2021). Similarly, racial and ethnic minorities are at higher risk for both contracting COVID-19 and developing more severe symptoms, requiring higher levels of care which highlight the disparities that minorities face in the U.S. health care system (Lopez et al. 2021). For example, individuals who are Black or Hispanic are at greater risk for infection, are four times more likely to be hospitalized, and are 1.6 and 1.7 times more likely to die due to COVID-19 (Hill et al. 2023, Lopez et al. 2021, Benitez et al. 2020). Among Medicaid and CHIP beneficiaries, 54 percent of adults and 66 percent of children identify as Black, Hispanic, Asian American, American Indian or Alaska Native (AIAN), or multi-racial (MACPAC 2023).

In addition to the effect that COVID-19 had on the health of Americans, the pandemic also affected how individuals interact with the health care system. At the start of the pandemic, health care utilization decreased. For example, Medicaid beneficiaries experienced a decrease in the probability of having a primary care, dental, or emergency department visit because of the COVID-19 pandemic (Wright et al. 2021). Privately insured adults experienced decreased health care utilization by more than 50 percent across all services immediately upon the onset of the pandemic (Whaley et al 2020). Similarly, children's health care utilization decreased, specifically sick child visits, during the first 12 months of the pandemic (Schroeder et al. 2022).

In this issue brief, we analyze data from the 2020 and 2021 National Health Interview Survey (NHIS). This survey includes questions about adults' (age 19-years-old and older) and children's (age 0—18 years old) experiences with testing for and diagnosis of COVID-19, as well as the severity of their symptoms and how the pandemic affected their health care utilization. Adults and children covered by Medicaid were less likely to get tested for COVID-19, and were more likely to delay or forgo medical care because of the pandemic than their privately insured peers. While there were racial and ethnic differences within the Medicaid population, there was no consistent pattern to these findings. These analyses are descriptive and do not adjust for socioeconomic or other factors that may also be associated with differences, or attempt to establish the reasons for these differences.

## COVID-19 Diagnosis and Severity

In the analysis below, we compare Medicaid beneficiaries' experience with the diagnosis and severity of COVID-19 to the experience of privately insured and uninsured individuals (Table 1). Within Medicaid, we analyze the experience of beneficiaries by race and ethnicity (Table 2). These data are followed by the demographics of



adults and children covered by Medicaid who tested positive for COVID-19 or were told they had or likely had COVID-19 (Table 3).

## Insurance coverage

Adult Medicaid beneficiaries were less likely than privately insured adults and more likely than uninsured adults, to be tested for COVID-19. In addition, Medicaid beneficiaries were less likely to test positive for COVID-19 than uninsured adults. Further, adult Medicaid beneficiaries were more likely to describe experiencing severe COVID-19 symptoms, when symptoms were at their worst, compared with privately insured adults.

Similar to adults, children covered by Medicaid were less likely to be tested for COVID-19 than privately insured children but more likely than uninsured children. In addition, children covered by Medicaid were more likely to test positive for COVID-19 than privately insured children. Further, children who are covered by Medicaid were more likely to experience no symptoms and less likely to experience mild symptoms than children covered by private insurance.

**TABLE 1.** COVID-19 Diagnosis and Severity of Adults (19 or older) and Children (0–18) by Insurance Payer, 2020-2021

COVID-19 diagnosis and severity	Adults (19 or older)			Children (0–18)		
	Medicaid	Private	Uninsured	Medicaid	Private	Uninsured
Has a doctor or other health professional ever told you that you had or likely had COVID-19?	11.8%	11.8%	12.2%	7.5%	6.7%	5.0%
Have you ever been tested for COVID-19?	52.3	55.4*	43.3*	32.0	35.8*	26.5*
Did the test find that you had COVID-19?	20.8	19.3	26.9*	20.0	16.1*	16.7
<b>How would you describe your COVID-19 symptoms when they were at their worst?</b>						
No Symptoms	8.4	8.2	10.8	28.5	18.9*	–
Mild Symptoms	34.0	37.0	36.6	49.3	60.8*	–
Moderate Symptoms	34.3	38.8	32.6	18.5	16.8	–
Severe Symptoms	23.4	16.0*	20.0	–	–	–

### Notes:

\* Difference from Medicaid is statistically significant at the 0.05 level.

– Estimate not reported due to small sample size or unreliable data with a relative standard error greater than or equal to 30 percent.

**Source:** MACPAC, 2023, analysis of the National Health Interview Survey, 2020-2021

## Race and ethnicity

Hispanic adult Medicaid beneficiaries were more likely to be told by a health care professional that they had or likely had COVID-19 compared to white, non-Hispanic beneficiaries. Black, non-Hispanic adult beneficiaries were more likely to have been tested for COVID-19 than white, non-Hispanic beneficiaries. However, Hispanic beneficiaries were more likely to have tested positive than white, non-Hispanic beneficiaries.

Hispanic children who were covered by Medicaid were more likely to have tested positive for COVID-19 than white, non-Hispanic child beneficiaries. Also, Hispanic children were less likely to experience mild symptoms, when their COVID-19 symptoms were at their worst, compared to white, non-Hispanic child beneficiaries.



**TABLE 2.** COVID-19 Diagnosis and Severity of Medicaid-covered Adults (19 or older) and Children (0–18) by Race and Ethnicity, 2020-2021

COVID-19 diagnosis and severity	Adults (19 or older)			Children (0–18)		
	White, non-Hispanic	Black, non-Hispanic	Hispanic	White, non-Hispanic	Black, non-Hispanic	Hispanic
Has a doctor or other health professional ever told you that you had or likely had COVID-19?	10.4%	10.2%	16.1%*	7.4%	5.1%	9.4%
Have you ever been tested for COVID-19?	49.3	57.4*	54.6	31.6	30.1	33.7
Did the test find that you had COVID-19?	17.6	17.3	29.2*	16.0	14.6	26.4*
<b>How would you describe your COVID-19 symptoms when they were at their worst?</b>						
No Symptoms	8.3	–	–	19.5	–	31.8
Mild Symptoms	29.3	39.5	31.1	63.2	–	43.6*
Moderate Symptoms	33.7	25.0	39.8	14.5	–	20.9
Severe Symptoms	28.8	22.5	21.6	–	–	–

**Notes:**

\* Difference from white, non-Hispanic is statistically significant at the 0.05 level.

– Estimate not reported due to small sample size or unreliable data with a relative standard error greater than or equal to 30 percent.

**Source:** MACPAC, 2023, analysis of the National Health Interview Survey, 2020-2021

## Medicaid beneficiaries

Among Medicaid beneficiaries who had or likely had COVID-19, adult Medicaid beneficiaries were most likely to be ages 26–44. Adult females were more likely to have COVID-19 than males. Additionally, these beneficiaries were more likely to be white, non-Hispanic than all other races and ethnicities. Further, these individuals were more likely to report their current health status as excellent or very good rather than good, fair, or poor.

Medicaid-covered children who had or likely had COVID-19 were more likely to be Hispanic than white, non-Hispanic. Similar to adult beneficiaries, Medicaid-covered children who had or likely had COVID-19, were more likely to report their current health status as excellent or very good rather than good, fair, or poor.

**TABLE 3.** Demographics of Adult (19 or older) and Children (0–18) Medicaid Beneficiaries who Tested Positive for or had a Health Professional Tell Them They Had or Likely Had COVID-19, 2020-2021

Demographics	Adults (19 or older)	Children (0–18)
<b>Total</b>	<b>23.6%</b>	<b>24.2%</b>
<b>Age</b>		
0–5 <sup>1</sup>	–	34.1
6–11	–	30.9*
12–18	–	35.1
19–25 <sup>1</sup>	21.4	–



Demographics	Adults (19 or older)	Children (0–18)
26–44	46.6*	–
45–54	16.4*	–
55–64	15.7*	–
<b>Gender</b>		
Male <sup>1</sup>	38.9	51.3
Female	61.1*	48.7
<b>Race and Ethnicity</b>		
White, Non-Hispanic <sup>1</sup>	43.3	33.3
Black, Non-Hispanic	19.9*	19.6*
Hispanic	25.2*	37.8*
Asian, Non-Hispanic	6.8*	3.1*
Other	2.8*	5.3*
<b>Current Health Status</b>		
Excellent or very good <sup>1</sup>	46.3	81.5
Good	31.8*	15.0*
Fair or poor	21.9*	3.5*

**Notes:** This table only represents the subset of the Medicaid population that reported that they had tested positive for or were told they had or likely had COVID-19. American Indian or Alaska Native, Non-Hispanic was not reported due to too small of a sample size or is unreliable because it has a relative standard error greater than or equal to 30 percent.

<sup>1</sup> Indicates comparison group for determining statistical significance at the 0.05 confidence level.

\* Difference from the comparison group is statistically significant at the 0.05 level.

– Estimate not reported due to small sample size or unreliable data with a relative standard error greater than or equal to 30 percent.

**Source:** MACPAC, 2023, analysis of the National Health Interview Survey, 2020-2021

## Delayed or Foregone Care

During 2020 and 2021, the COVID-19 pandemic was one reason people delayed or did not seek medical care (McGough et al. 2023). The data below focus on the experiences of adults and children with delaying or forgoing care in 2020 and 2021 because of the COVID-19 pandemic. We compare experiences among coverage categories, as well as the experiences of Medicaid beneficiaries by race and ethnicity (Tables 4 and 5).

### Insurance coverage

In 2021, adults covered by Medicaid were less likely to delay or forgo care because of the pandemic than privately insured adults. During 2020 and 2021 adult Medicaid beneficiaries were more likely to delay or forgo care than uninsured adults. Additionally, adult Medicaid beneficiaries in 2021 were less likely to delay or forgo care than Medicaid beneficiaries in 2020.

Similar to adults, in 2021, children with Medicaid were less likely to delay or forgo care due to the pandemic than children covered by private insurance. Child Medicaid beneficiaries were less likely to have delayed or forgone care in 2021 compared to 2020.



**TABLE 4.** Delayed or Forgone Care Because of the Pandemic for Adults (19 or older) and Children (0–18) by Insurance Payer 2020-2021

Delayed or forgone care	2020			2021		
	Medicaid	Private	Uninsured	Medicaid	Private	Uninsured
<b>Adults (19 or older)</b>						
<b>COVID-19 related effect on care</b>						
Was there any time when you delayed or did not get medical care because of the pandemic?	29.7%	27.5%	16.3%*	20.0%*	22.3%†	15.5%†
<b>COVID-19 vaccinations</b>						
Have you had a COVID-19 vaccination?	–	–	–	51.5	74.5	47.7
<b>Children (0–18)</b>						
<b>COVID-19 related effect on care</b>						
Was there any time when you delayed or did not get medical care because of the pandemic?	13.0	17.1	–	8.8*	10.5†	9.0

**Notes:** Statistical testing was not performed on the question “Have you ever had a COVID-19 vaccination?”

\*Difference from Medicaid 2020 is statistically significant at the 0.05 level.

†Difference from Medicaid 2021 is statistically significant at the 0.05 level. – – Estimate not reported due to small sample size or unreliable data with a relative standard error greater than or equal to 30 percent.

**Source:** MACPAC, 2023, analysis of the National Health Interview Survey, 2020-2021

## Race and ethnicity

During 2020, Hispanic Medicaid beneficiaries were less likely to delay or forgo care than white, non-Hispanic beneficiaries. In 2021, Black, non-Hispanic, and Hispanic beneficiaries were also less likely to have delayed or forgone medical care because of the pandemic compared to white, non-Hispanic Medicaid beneficiaries.

**TABLE 5.** Delayed or Forgone Care Because of the Pandemic for Medicaid-covered Adults (19 or older) and Children (0–18) by Race and Ethnicity, 2020-2021

Delayed or forgone care	2020			2021		
	White, non-Hispanic	Black, non-Hispanic	Hispanic	White, non-Hispanic	Black, non-Hispanic	Hispanic
<b>Adults (19 or older)</b>						
<b>COVID-19 related effect on care</b>						
Was there any time when you delayed or did not get medical care because of the pandemic?	33.4%	29.3%	21.4%*	23.0%	16.1%*	16.2%*
<b>COVID-19 vaccinations</b>						
Have you had a COVID-19 vaccination?	–	–	–	46.0	46.8	55.6*

Delayed or forgone care	2020			2021		
	White, non-Hispanic	Black, non-Hispanic	Hispanic	White, non-Hispanic	Black, non-Hispanic	Hispanic
<b>Children (0–18)</b>						
<b>COVID-19 related effect on care</b>						
Was there any time when you delayed or did not get medical care because of the pandemic?	15.3	–	14.0	9.1	7.2	9.8

**Notes:** Statistical testing was not performed on the question “Have you had a COVID-19 vaccination?”

\* Difference from white, non-Hispanic of the same year is statistically significant at the 0.05 level.

– Estimate not reported due to small sample size or unreliable data with a relative standard error greater than or equal to 30 percent.

**Source:** MACPAC, 2023, analysis of the National Health Interview Survey, 2020-2021

## Data and Methods

Data for this brief come from the 2020 and 2021 NHIS. The data have been collected continuously since 1957 for the Centers for Disease Control and Prevention’s (CDC) National Center for Health Statistics (NCHS) by the U.S. Census Bureau. The NHIS collects information about the health and health care of the U.S. civilian, non-institutionalized population. Until 2020, interviews were conducted at respondents’ homes, and follow-up interviews were conducted by phone. However, due to the COVID-19 pandemic, all interviews were conducted by phone from March to June 2020. From July 2020 through April 2021, in-person visits were an option, but most interviews were conducted by phone. In May 2021 interviewers were instructed to resume normal interview procedures. In addition, in July 2020, the NCHS added questions pertaining to COVID-19 to the survey, and in 2021, questions about COVID-19 vaccinations.

In 2020, due to the concerns around loss of coverage and lower response rates that come with telephone interviews, the NHIS replaced about half of the sample for the last five months of 2020 with individuals who completed the 2019 NHIS Sample Adult interview.

All differences discussed in this brief were computed using Z-tests and are significant at the 0.05 level.

## Insurance coverage

Coverage source is defined at the time of the survey interview. Because an individual may have multiple coverage sources and because sources of coverage may change over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this brief. The following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, or uninsured for the past 12 months. Not separately shown are the estimates for those covered by any type of military health plan or other government-sponsored program. Private health insurance coverage excludes plans that cover only one type of service, such as accident or dental insurance. The Medicaid category also includes persons covered by other state-sponsored health plans. Individuals are defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan during the past year. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had a private plan that paid for one type of service, such as accident or dental coverage only.



## Race and ethnicity

NHIS survey respondents self-identify their race and ethnicity separately, but are reported as a combination of their responses. Individuals reporting only one race are categorized as follows: white-only, non-Hispanic; Black-only, non-Hispanic; Asian-only, non-Hispanic; American Indian and Alaska Native, non-Hispanic. Individuals reporting a different race or multiple races are categorized as other single and multiple races, non-Hispanic. Given the small sample and data confidentiality rules, Native Hawaiian and Pacific Islander cannot be identified in publicly available data. Individuals of Hispanic origin can be of any race.

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