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OFFICE OF BEHAVIORAL HEALTH, DISABILITY, AND AGING POLICY

ISSUE BRIEF

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RACIAL AND ETHNIC DIFFERENCES IN CHILDREN'S MENTAL HEALTH SERVICES IN MEDICAID BEFORE AND DURING THE COVID-19 PANDEMIC

KEY POINTS

- Average monthly mental health service use among children covered under Medicaid/Children's Health Insurance Program declined by 5% during the COVID-19 pandemic.
- The size of the decline varied by race and ethnicity and was larger for Black (-11%), Hispanic (-5%), and Asian (-3%) children than White children (-1%).
- During the pandemic, the amount of telemental health service use among children increased for all groups (Black 3580%; Hispanic 3311%; Asian 4117%; and White 2175%), but children of color still had fewer telemental health encounters than White children.
- Increased telemental health use during the pandemic was not enough to fully offset the reductions in in-person mental health services.

POLICY ISSUE

The COVID-19 pandemic prompted a surge in mental health treatment needs among children, with recent research documenting a more than 20% increase in the incidence of anxiety and depression in 2020.[1] In addition, the disproportionate impact of the pandemic for many people of color, including Asian American, Native Hawaiian, Pacific Islander; American Indian, Alaska Native (AIAN); Black; and Latino populations, has been documented across various age groups, including children.[2] Disparities in rates of access to mental health services among United States children have been a concern for decades,[3] and little is known about the extent to which the pandemic may have exacerbated unequal access for children in Medicaid. This is an important omission from the literature, as the pandemic not only increased the need for mental health services, but also resulted in a significant shift in the delivery of mental health care from in-person settings towards telehealth.[4] In addition, Medicaid plays a significant role in covering children of color, as over half of Black, Hispanic, and AIAN children in the United States are enrolled in Medicaid.[5] To address this gap, we used a national Medicaid claims database to compare mental health services use among children across treatment settings, examining outcomes by race and ethnicity before and during the pandemic. This analysis seeks to inform policy initiatives in targeting racial and ethnic disparities in pediatric access to mental health services in Medicaid and Children's Health Insurance Program (CHIP).

STUDY DESIGN

The data for the analysis were drawn from the 2019-2020 Centers for Medicare & Medicaid Services Transformed Medicaid Statistical Information System (T-MSIS) Analytic File. T-MSIS data are the most current and complete Medicaid and CHIP data resource available that captures health services use for the more than 73 million low-income Americans from all 50 states and Washington, DC, who are enrolled in Medicaid/CHIP. The study sample included all Medicaid beneficiaries between ages 3-17 who were enrolled for 6 consecutive

months in the year and used any mental health services in 2019 or 2020. Using a combination of Current Procedural Terminology and place-of-service codes, we examined the following outcome variables measuring service settings where Medicaid/CHIP-covered children received their mental health treatment -- telehealth, in-person outpatient, inpatient, intensive outpatient/partial hospitalization, residential, and emergency department. Psychotropic prescription medication (antidepressants, antipsychotics, anticonvulsants, antimanic, antiparkinsonian, anxiolytics-sedative, benzodiazepines-barbiturates, CNS, hypnotics, stimulants) use was also examined and was identified using National Drug Codes. Outcomes were expressed in terms of the number of encounters per 1,000 Medicaid/CHIP enrollees per month and were examined for the overall sample by service setting and within each of the following groups: non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian and non-Hispanic Other (AIAN, multi-race). For each group, March-December 2020 levels (COVID-19 period) of each outcome were compared to January 2019-February 2020 levels (pre-COVID period), showing monthly and average monthly rates, along with percentage change from the pre-pandemic period and the pandemic period for mental health services among children. Average monthly rates were calculated for the entire pre-COVID and COVID-19 periods respectively.

FINDINGS

The decline in mental health service use was higher among Black, Hispanic, and Asian children compared to White children (***Figure 1*** and ***Table 1***). Children across all racial and ethnic groups experienced modest declines in any mental health service use (i.e., whether in-person or via telehealth, and across all service settings) during the pandemic (-5%). The rate of decline varied across groups. There was a 1% decline in mental health service use during the pandemic among White children, while among Black children the decline was 11%, among Hispanic children the decline was 5%, and among Asian children the decline was 3%. While the decline in mental health service use was seen for all racial and ethnic groups, the higher reduction in service use among Black, Hispanic, and Asian children highlights the need for continued policy efforts to address disparities in access to mental health care for these populations.

Rates of telemental health use increased across all racial and ethnic groups during the pandemic, but were still lower for Black, Hispanic, and Asian children than for White children (***Figure 2***). Telemental health service use among White children increased from 3.4 encounters per 1,000 beneficiaries in the pre-COVID period to 76.7 encounters per 1,000 beneficiaries during COVID-19. Telemental heath service use among Black, Hispanic, and Asian-American children changed from 1.4 encounters per 1,000 beneficiaries to 53.0 encounters per 1,000 beneficiaries, 1.1 encounters per 1,000 beneficiaries to 39.0 encounters per 1,000 beneficiaries, and 0.4 encounters per 1,000 beneficiaries to 15.7 encounters per 1,000 beneficiaries, respectively. This shows that the rate of telemental health service use was lower for children of color during the pandemic compared to White children. This finding implies that while telehealth might help bridge the gap in differences in mental health service use between children of color and White children, more policy effort might be warranted. The literature has documented evidence of inequitable access to broadband infrastructure and Internet enabled devices among communities of color,[6] thus engaging with this modality of treatment might still be a challenge.

Reduction in psychotropic medication use was larger among Black, Hispanic, and Asian children compared to White children (***Table 2***). This finding is consistent with prior research that showed a decline in psychotropic medication use during the early period of the pandemic among patients aged 18 and younger.[7] Our finding that this decline in psychotropic medication use is more pronounced among children of color may indicate higher unmet need among Black, Hispanic and Asian children, particularly if children previously reliant on psychotropics are not receiving other care given the overall decline in mental health service use.

Mental health service use decreased across all in-person service settings (***Table 2*** and ***Table 3***). Inpatient, emergency department, intensive outpatient/partial hospitalization, and outpatient settings saw a decline among all racial and ethnic groups, but the decline was larger among Black, Hispanic, and Asian children

compared to White children. Black children experienced the largest decline in most service settings compared to children from other racial and ethnic backgrounds.

LIMITATIONS

A strength of this study is the use of a large, nationwide, Medicaid claims database that included 2 years of data from January 2019 through December 2020. However, as the mental health service delivery landscape continued to shift during the pandemic, it is possible that our data does not reflect the current state of mental health service use among children. Using more recent data and looking at racial and ethnic differences during the later period of the pandemic may be an important avenue for future studies to consider. Another limitation of the study is that it includes only children covered under Medicaid and CHIP, thus the findings cannot be generalizable to uninsured children or children covered under private insurance. Using a multi-payer claims data to investigate the changes in mental health service use among children by type of health insurance coverage will be an important contribution to the filed. Finally, the data used in the analysis has a large rate of missing information on race and ethnicity. While incomplete race/ethnicity data has been a longstanding challenge in T-MSIS[13] and beyond the scope of this analysis to address, high quality and complete data will be essential is understanding disparities in mental health treatment among children.

CONCLUSION

The COVID-19 pandemic has been linked to increasing prevalence of mental health conditions among children and adolescents.[8] At the same time, many children have not been able to access mental health services even if they could maintain their Medicaid and CHIP coverage.[9] The findings of the current analysis show that the pandemic was accompanied by a significant shift in the type and modality of mental service use from in-person to telehealth visits for both children and adolescents, consistent with findings from prior research on youth and adults.[3] The findings suggest that while the use of telemental health services during the pandemic could have a larger role in reducing disparities in accessing mental health services, telemental health alone might not be sufficient to make up for the overall decline in mental health service use that was observed during the pandemic.

While telehealth has often been hailed as a new way to improve access to care, the pandemic has also exposed longstanding issues with access to telehealth services for underserved populations such as reliable broadband Internet, technology costs, billing challenges, lack of buy-in among clinicians, among others.[5,9] Given the current findings, it is possible these challenges have potentially impeded use of telemental health services among racial and ethnic minority pediatric populations in Medicaid and CHIP.[10] This finding could be specific to behavioral health care, as behavioral health was one of the most common services that states allowed to be delivered via telehealth before and during the pandemic Given our large sample, the results could be indicative of the beneficial impact of the modified regulations and guidance that the Federal Government instituted in improving access to telehealth services overall and specifically for Medicaid populations. Increased flexibilities in removing geographic restrictions, expansion of providers eligible to bill for telehealth, reduction in cost sharing and removal of interstate licensing barriers could have been effective in improving access to telebehavioral services for pediatric populations in Medicaid and CHIP.[11]

The Federal Government has outlined an agenda to transform access to mental health services and to meet children where they live, study and play.[12] This agenda specifically aims to reduce disparities in pediatric mental health through investments in prevention and treatment in both community-based settings (such as schools) and clinical settings. The observed overall decline in mental health service use during the pandemic, in spite of a significant increase in telehealth, implies that a sustained investment in child mental health initiatives is warranted to improve how children and their families access and use mental health services.

Figure 1. Trends in Child Mental Health Service Use Covered Under Medicaid/CHIP by Race/Ethnicity

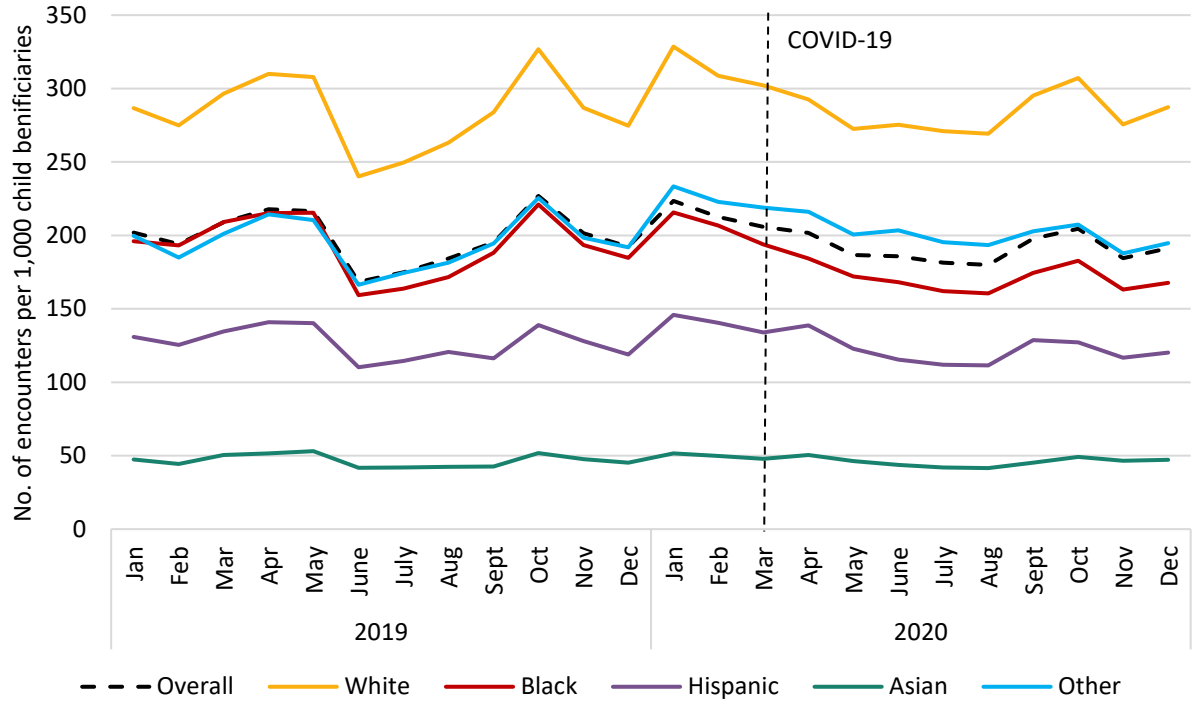

Table 1. Changes in Average Monthly Child Mental Health Service Use (encounters per 1,000) Covered Under Medicaid/CHIP from Before to During COVID-19

Group	Pre-COVID	COVID-19	Percent Change
Overall	201.3	192.0	-5%
Asian	47.3	46.0	-3%
Black	195.3	172.9	-11%
Hispanic	129.0	122.7	-5%
Other	200.0	202.0	1%
White	288.5	284.8	-1%

Notes: Average monthly service use (number of encounters per 1,000 child beneficiaries per month). Pre-COVID: January 2019-February 2020; COVID-19: March 2020-December 2021.

Figure 2. Trends in Telemental Health Service Use Covered Under Medicaid/CHIP

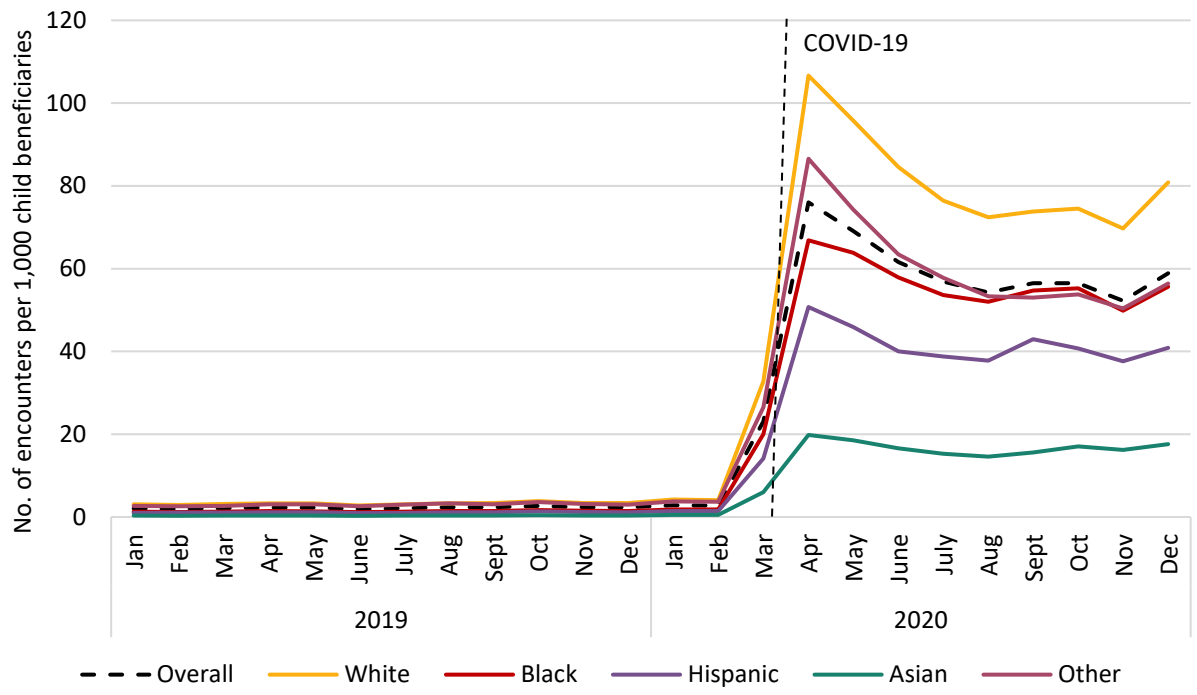

Table 2. Outpatient Mental Health Service Use (encounters per 1,000) among Children Covered Under Medicaid/CHIP by Race/Ethnicity

	Telehealth			In-Person Outpatient			Prescription Drugs		
	Pre-COVID	COVID-19	Percent Change	Pre-COVID	COVID-19	Percent Change	Pre-COVID	COVID-19	Percent Change
Overall	2.3	56.5	2336%	150.3	139.1	-7%	47.7	47.3	-1%
Asian	0.4	15.7	4117%	37.9	36.0	-5%	8.3	8.5	2%
Black	1.4	53.0	3580%	158.3	137.1	-13%	33.5	30.6	-9%
Hispanic	1.1	39.0	3311%	102.0	94.3	-8%	24.8	24.9	0%
Other	3.1	57.5	1762%	156.3	154.2	-1%	40.2	42.7	6%
White	3.4	76.7	2175%	204.3	195.5	-4%	79.7	82.2	3%

Notes: Average monthly service use (number of encounters per 1,000 people per month). Pre-COVID: January 2019-February 2020; COVID-19: March 2020-December 2021.

Table 3. Emergency Department and Inpatient Mental Health Service Use (encounters per 1,000) among Children Covered Under Medicaid/CHIP by Race/Ethnicity						
	Emergency Department			Inpatient		
	Pre-COVID	COVID-19	Percent Change	Pre-COVID	COVID-19	Percent Change
Overall	1.8	1.3	-26%	0.8	0.7	-16%
Asian	0.6	0.4	-30%	0.3	0.2	-18%
Black	1.7	1.2	-29%	0.8	0.7	-17%
Hispanic	1.2	0.9	-25%	0.6	0.5	-14%
Other	2.0	1.5	-24%	1.0	0.8	-17%
White	2.5	1.9	-23%	1.1	0.9	-11%
Notes: Average monthly service use (number of encounters per 1,000 people per month). Pre-COVID: January 2019-February 2020; COVID-19: March 2020-December 2021.						

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