



# Trends in Medicaid and CHIP Telehealth, 2019-2021

## Part I: Medicaid and CHIP Telehealth Utilization by Enrollee Characteristics

The COVID-19 pandemic dramatically increased the number of Medicaid and CHIP services delivered via telehealth to all enrollees, regardless of age or race and ethnicity.

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### KEY POINTS

- Approximately 4.9 million Medicaid and CHIP services in 2019, or 0.3 percent of all services, were delivered via telehealth. The share of services delivered via telehealth increased substantially to 7.1 percent (117 million services) in 2020 while total utilization decreased in early 2020.
- The number of services delivered via telehealth increased dramatically for all age groups in 2020, with the greatest increase seen among non-elderly adults ages 19-64 years with over 65 million telehealth services delivered in 2020, followed by children ages 0-18 years with over 42 million telehealth services delivered in 2020.
- The largest increase in the number of services delivered via telehealth occurred in Q2 2020; more than 23 million telehealth services were delivered to adults ages 19-64 years and more than 15 million telehealth services were delivered children ages 0-18 years during Q2 of 2020.
- The share of Medicaid and CHIP enrollees utilizing services delivered via telehealth increased the most for Black and Hispanic enrollees from 2019 to 2021 (by 2.5 and 6.6 percentage points respectively). White enrollees were overrepresented in telehealth utilization by race in 2019, making up over half of the population of Medicaid and CHIP enrollees ever utilizing telehealth despite making up 30 percent of the Medicaid and CHIP enrollee population. However, by 2021, utilization of services delivered via telehealth by race was more aligned with overall Medicaid enrollment by race, with White enrollees' share of telehealth services decreasing by 10.6 percentage points.
- All race and ethnic groups saw increased utilization of services delivered via telehealth from 2019 to 2020, with Black, Hispanic, Asian, and Hawaiian/Pacific Islander enrollees seeing the greatest percentage increase in number of these services.

### BACKGROUND

Telehealth is the use of telecommunications and information technology to provide access to health assessment, diagnosis, intervention, consultation, supervision, and information across distance.<sup>1</sup> Medicaid considers telehealth a mode of service delivery rather than a distinct service under federal law.<sup>2</sup> States have broad flexibility in designing the parameters of telehealth delivery methods to furnish services, including

options to determine whether to utilize telehealth, covered service types, where in the state it could be utilized, how it was implemented, what types of providers could deliver telehealth services, and reimbursement rates.<sup>3</sup>

During the COVID-19 Public Health Emergency (PHE), the Centers for Medicare & Medicaid Services (CMS) provided additional Medicaid telehealth flexibilities to ensure continued access to care during the pandemic. In addition to the telehealth flexibilities that are always available, states could also leverage flexibilities that were made available during the PHE, such as modifying the regulatory requirement in 42 C.F.R. §440.90 that clinic services be provided “by a facility that is not part of a hospital but is organized and operated to provide medical care to outpatients,” to permit services under 42 C.F.R. § 440.90 to be provided via telehealth when patients and clinic practitioners are in their respective homes or in another location.<sup>45</sup>

Previous studies have reported various trends in telehealth use by patient demographics, such as race and ethnicity, age, and coverage type. There was variation in findings for telehealth use for all demographic categories, with some studies reporting that patients older than 65 years had lowest odds of using telehealth when compared to other modalities, while others found that telehealth utilization rates for those over 65 were similar to their counterparts under 65 years.<sup>6,7</sup> Differences in findings were present in studies reporting telehealth utilization by race and ethnicity, with some reporting that Asian patients with Medicaid coverage had the lowest percentage of telehealth use when compared to Latino, Black, or White patients.<sup>8</sup> Some studies reported that there were statistically significant increases in the number of visits by Hispanic and Black patients,<sup>9</sup> while others found that Hispanics were less likely to have a telemedicine visit compared to non-Hispanics, as well as that White individuals were more likely to use telemedicine compared to their Black, Asian, American Indian/Alaska Native, and Pacific Islander counterparts.<sup>10</sup>

This is the first of three ASPE Issue Briefs on Medicaid and CHIP telehealth utilization trends before and during the COVID-19 PHE from 2019 to 2021. This series of issue briefs complements prior qualitative work ASPE has done examining changes in state coverage policies during the same time period.<sup>11,12</sup> This Issue Brief presents trends in utilization of Medicaid and CHIP service delivered via telehealth from 2019 to 2021 by enrollee race/ethnicity and age, to determine utilization patterns across demographic groups and provider types at the national and state levels. Examining patterns and changes in utilization by enrollee characteristics during this time period helps inform policymakers of the impacts of state Medicaid telehealth policy changes on enrollees’ access to and utilization of services.

## METHODS

We analyzed data from the Transformed Medicaid Statistical Information System (T-MSIS), which collects Medicaid and Children’s Health Insurance Program (CHIP) data from U.S. states, territories, and the District of Columbia into the largest national resource of beneficiary information.<sup>13</sup> The study period for this series of Medicaid Telehealth Issue Briefs was from calendar years 2019 to 2021 to document changes in telehealth utilization for Medicaid enrollees during the COVID-19 PHE, stratified by key enrollee- and provider-level characteristics.

The study population consisted of individuals of all ages (including dually-eligible enrollees) who had at least one month of valid Medicaid or CHIP enrollment, or at least one final, non-denied, non-void Medicaid or CHIP fee-for-service (FFS) or encounter claim. Enrollee characteristics were defined at the annual level. Total enrollment numbers presented in this Issue Brief may not match publicly available enrollment data reported by the Center for Medicaid and CHIP Services due to differences in who is counted, reporting period, and possible overcounting in the T-MSIS.

In this analysis, utilization captures unique services delivered via telehealth via claims, not unique visits. Therefore, our data tables may capture multiple services that took place during the same visit. Services were

categorized as being delivered via telehealth if it had at least one telehealth code, details of which can be found in Appendix B. Otherwise, the service was flagged as being provided in person. Other characteristics included in the analysis were sociodemographic characteristics of Medicaid enrollees such as age groups and race and ethnicity, to show differences in usage trends for various groups. In addition to these characteristics, this analysis also reports data on enrollee location, and provider characteristics.

We note that despite this analysis reporting various race and ethnic groups including Hispanics, non-Hispanic White, Black, Asian, American Indian and Alaska Natives, the lack of a multiracial race and ethnicity category is a limitation of this study, due to T-MSIS historically being structured to only allow one race value per record. Information on data specifications, construction of provider and service categories, categories for race and ethnicity, and additional limitations of data presented in this series of Medicaid telehealth reports can be found in Appendix B.

## FINDINGS

### Overall Trends in Medicaid and CHIP Services Delivered via Telehealth

Table 1 and Figure 1 show the number of total Medicaid and CHIP services delivered and the percentage of these services that were provided in person or by telehealth from Q1 2019 to Q4 2021. Prior to the pandemic, telehealth represented a very small share of total Medicaid services. In 2019, almost 1.8 billion Medicaid and CHIP services were delivered in person and via telehealth combined. Out of these services, only 4.9 million, or 0.3 percent, were delivered via telehealth, while the remaining services were delivered in person. While total utilization of Medicaid and CHIP services decreased in 2020 to under 1.7 billion, the share of services delivered via telehealth increased substantially to 7.1 percent (a 2,300 percent increase), or 117 million services. The largest increase in services delivered via telehealth occurred in Q2 2020 with the number of services increasing almost eightfold from Q1 2020 to make up 12.1 percent of all Medicaid and CHIP services delivered that quarter.

Total Medicaid and CHIP utilization was stable from Q1 of 2019 to Q1 2020, but dropped significantly in Q2 2020, coinciding with most states implementing stay at home policies in the same quarter following the declaration of a PHE on January 31, 2020 by the Secretary of Health and Human Services under section 319 of the Public Health Service Act (42 U.S.C. 247d).<sup>14</sup> The number of total services rebounded to near pre-pandemic levels by Q3 2020 and has continued to increase through the end of 2021. From Q1 2020 to Q2 2020, services delivered via telehealth increased by almost 37 million, while services delivered in person decreased by 134 million. The number of services delivered via telehealth delivered in 2021 remained similar to that of 2020 (117 million services), with a small year-to-year difference of 0.1 percent from 2020. Despite the large increase in number of services delivered via telehealth delivered from 2019 to 2020, it is noted that the majority of Medicaid and CHIP services were still delivered in person. Appendix A Table 1 has additional data on Medicaid and CHIP service utilization by state.

**Table 1. Number and Share of Medicaid and CHIP Services by Delivery Method (Q1 2019-Q4 2021)**

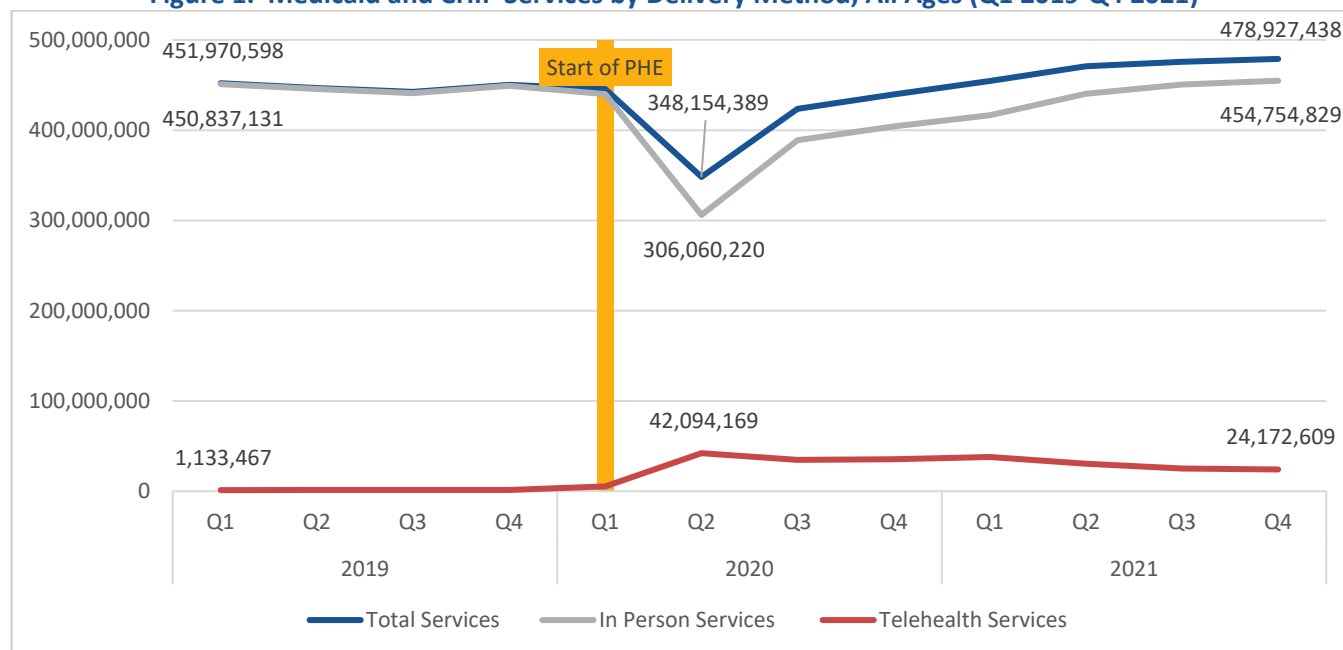
	Total Services	In-Person	Telehealth
<b>2019</b>	1,791,337,119	1,786,443,770 (99.7%)	4,893,349 (0.3%)
<b>Q1 2019</b>	451,970,598	450,837,131 (99.7%)	1,133,467 (0.3%)
<b>Q2 2019</b>	446,757,081	445,562,346 (99.7%)	1,194,735 (0.3%)
<b>Q3 2019</b>	442,243,588	441,001,838 (99.7%)	1,241,750 (0.3%)
<b>Q4 2019</b>	450,365,852	449,042,455	1,323,397

		(99.7%)	(0.3%)
<b>2020</b>	1,656,743,382	1,539,213,013 (92.9%)	117,530,369 (7.1%)
<b>Q1 2020</b>	445,500,621	440,100,935 (98.8%)	5,399,686 (1.2%)
<b>Q2 2020</b>	348,154,389	306,060,220 (87.9%)	42,094,169 (12.1%)
<b>Q3 2020</b>	423,562,391	389,027,989 (91.8%)	34,534,402 (8.2%)
<b>Q4 2020</b>	439,525,981	404,023,869 (91.9%)	35,502,112 (8.1%)
<b>2021</b>	1,879,655,142	1,762,019,128 (93.7%)	117,636,014 (6.3%)
<b>Q1 2021</b>	454,408,410	416,442,271 (91.6%)	37,966,139 (8.4%)
<b>Q2 2021</b>	470,732,827	440,375,284 (93.6%)	30,357,543 (6.4%)
<b>Q3 2021</b>	475,586,467	450,446,744 (94.7%)	25,139,723 (5.3%)
<b>Q4 2021</b>	478,927,438	454,754,829 (95.0%)	24,172,609 (5.0%)
<b>Change 2019-2020</b>	-134,593,737 -7.5%	-247,230,757 -13.8%	112,637,020 +2301.8%
<b>Change 2020-2021</b>	222,911,760 +13.5%	222,806,115 +14.5%	105,645 +0.1%

Source: ASPE analysis of T-MSIS claims, 2019-2021

Note: Table 1 reports utilization for all 50 states, DC, PR, and VI. The denominator used to calculate the percentages is the total number of Medicaid and CHIP services provided in that year.

**Figure 1. Medicaid and CHIP Services by Delivery Method, All Ages (Q1 2019-Q4 2021)**



Source: ASPE analysis of T-MSIS claims, 2019-2021

Note: Figure 1 reports counts of Medicaid and CHIP services for all 50 states, DC, PR, and VI.

Table 2 and Figure 2 show the number of Medicaid and CHIP services delivered via telehealth that were utilized by each age group from Q1 2019 to Q4 2021. From Q4 2019 to Q2 2020, the number of Medicaid and CHIP services delivered via telehealth increased 3,000 to 3,400 percent for the various age groups. All age groups minimally used services delivered via telehealth in 2019, with the number of services ranging from 100,000 to 650,000 by age group in Q1 2019. Usage began increasing by Q1 2020, as states began implementing stay at home orders in March 2020.<sup>15</sup> In Q2 2020, there was a large increase in the number of Medicaid and CHIP services delivered via telehealth for all age groups. The increase was greatest among adults ages 19-64 years, reaching over 23 million services. The increase in number of services delivered via telehealth for children ages 0-18 years increased to over 15 million services.\* In comparison to younger enrollees, those aged 65 and older increased use services delivered via telehealth to just 3.7 million. The relatively smaller increase in usage of Medicaid services delivered via telehealth for enrollees 65 years and older may be attributed to many beneficiaries in this study population being dually eligible for Medicare and Medicaid, with Medicare being the primary payer when receiving services covered by Medicare. A previous ASPE report found beneficiaries that were dually-eligible for both programs were among those with highest use of telehealth in 2021, despite a decline in usage when compared to 2020.<sup>16</sup>

**Table 2. Number And Percentage Change In Medicaid and CHIP Services Delivered From Previous Quarter, by Age Group (Q1 2019-Q4 2021)**

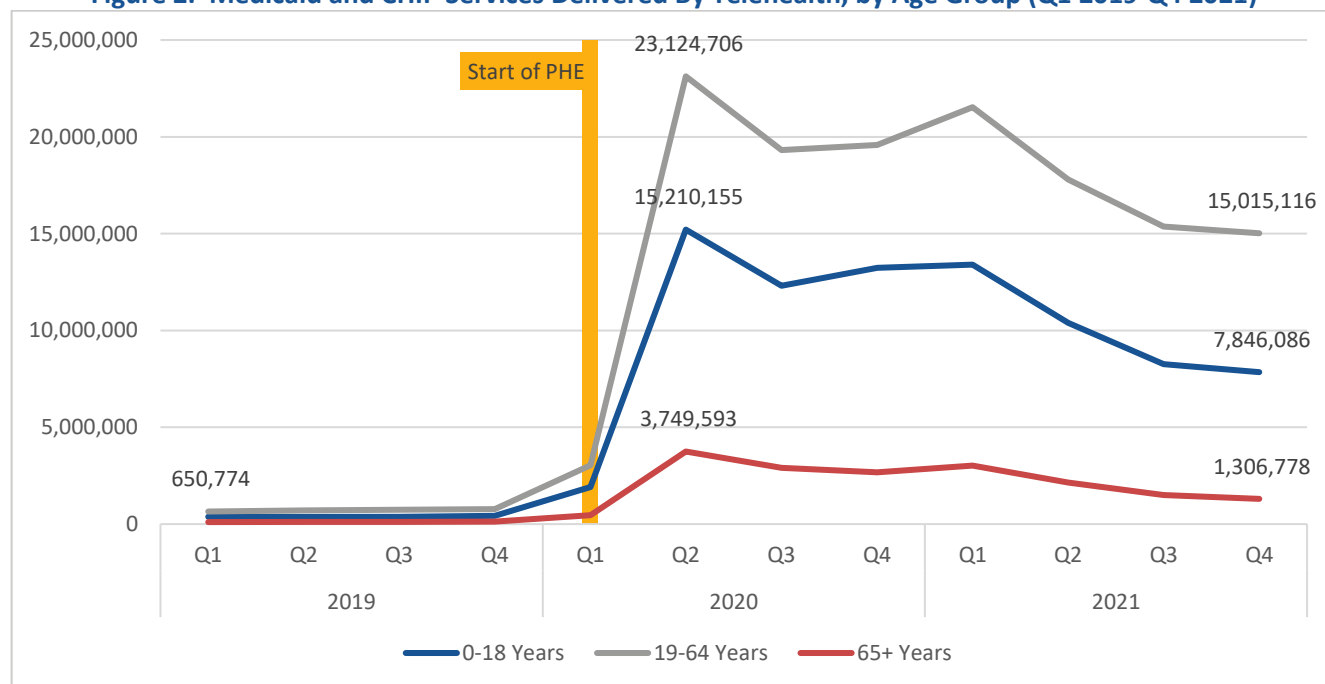
Quarter	0-18 Years		19-64 Years		65+ Years	
	Total	Telehealth	Total	Telehealth	Total	Telehealth
<b>Q1 2019</b>	128,516,564	377,388	250,908,852	650,774	72,341,230	105,048
	N/A	N/A	N/A	N/A	N/A	N/A
<b>Q2 2019</b>	119,028,220	373,906	254,490,511	705,335	73,052,486	115,245
	(-7.4%)	(-0.9%)	(1.4%)	(8.4%)	(1.0%)	(9.7%)
<b>Q3 2019</b>	115,474,495	380,752	253,135,447	741,760	73,434,141	118,951
	(-3.0%)	(1.8%)	(-0.5%)	(5.2%)	(0.5%)	(3.2%)
<b>Q4 2019</b>	131,937,435	434,341	245,661,290	766,770	72,569,830	122,009
	(14.3%)	(14.1%)	(-3.0%)	(3.4%)	(-1.2%)	(2.6%)
<b>Q1 2020</b>	123,014,773	1,907,107	246,124,216	3,038,477	76,186,120	452,901
	(-6.8%)	(339.1%)	(0.2%)	(296.3%)	(5.0%)	(271.2%)
<b>Q2 2020</b>	75,380,420	15,210,155	208,869,975	23,124,706	63,778,733	3,749,593
	(-38.7%)	(697.6%)	(-15.1%)	(661.1%)	(-16.3%)	(727.9%)
<b>Q3 2020</b>	98,419,960	12,305,249	252,211,338	19,312,475	72,762,896	2,908,379
	(30.6%)	(-19.1%)	(20.8%)	(-16.5%)	(14.1%)	(-22.4%)
<b>Q4 2020</b>	110,224,456	13,238,072	256,312,263	19,586,694	72,835,078	2,669,580
	(12.0%)	(7.6%)	(1.6%)	(1.4%)	(0.1%)	(-8.2%)
<b>Q1 2021</b>	110,007,325	13,403,598	265,175,701	21,534,465	79,072,485	3,020,557
	(-0.2%)	(1.3%)	(3.5%)	(9.9%)	(8.6%)	(13.1%)
<b>Q2 2021</b>	115,643,183	10,397,514	275,031,517	17,802,973	79,871,428	2,150,971
	(5.1%)	(-22.4%)	(3.7%)	(-17.3%)	(1.0%)	(-28.8%)
<b>Q3 2021</b>	123,169,800	8,262,608	274,734,924	15,366,716	77,507,617	1,505,816
	(6.5%)	(-20.5%)	(-0.1%)	(-13.7%)	(-3.0%)	(-30.0%)
<b>Q4 2021</b>	134,931,817	7,846,086	269,363,210	15,015,116	74,476,665	1,306,778
	(9.5%)	(-5.0%)	(-2.0%)	(-2.3%)	(-3.9%)	(-13.2%)

Source: ASPE analysis of T-MSIS claims, 2019-2021

Note: Table 2 reports utilization of Medicaid and CHIP services delivered via telehealth for all 50 states, DC, PR, and VI.

\* A subsequent ASPE Issue Brief will discuss pediatric Medicaid telehealth utilization trends in greater detail.

**Figure 2. Medicaid and CHIP Services Delivered By Telehealth, by Age Group (Q1 2019-Q4 2021)**



Source: ASPE analysis of T-MSIS claims, 2019-2021

Note: Figure 2 reports utilization of Medicaid and CHIP services by age group for all 50 states, DC, PR, and VI.

Table 3 shows the number of Medicaid and CHIP enrollees, services (total and by telehealth), and enrollees that ever utilized telehealth from Q1 2019 to Q4 2021. By Q4 2021, Medicaid and CHIP enrollee counts had increased by almost 14 million from Q1 2019, a 16.7 percent increase. This is unsurprising, as public coverage such as Medicaid absorbed much of the losses in employer sponsored coverage from increased unemployment during the PHE,<sup>17</sup> and as Medicaid enrollees stayed enrolled due to the continuous coverage provision of the Families First Coronavirus Response Act (FFCRA). Total Medicaid and CHIP services increased to over 478 million and services delivered via telehealth increased to over 24 million in Q4 2021. The number of enrollees ever utilizing telehealth increased from under 500,000 in Q1 2019 to almost 8.5 million in Q4 2021, indicating that telehealth usage dramatically increased in that time. However, it is noted that the 8.5 million enrollees ever utilizing telehealth is still a small percentage of the 97 million that were enrolled in Medicaid and CHIP in Q4 2021, suggesting that in-person Medicaid services remained the main method of provided services despite the proliferation of telehealth.

**Table 3. Counts of Telehealth Services and Medicaid and CHIP Enrollees, All Ages (Q1 2019-Q4 2021)**

Quarter	Medicaid and CHIP Enrollees	Total Medicaid and CHIP Services	Telehealth Services	Enrollees Ever Using Telehealth in Quarter	Share of Enrollees Using Telehealth Services
Q1 2019	83,400,767	451,970,598	1,133,467	494,160	0.6%
Q2 2019	83,152,587	446,757,081	1,194,735	517,661	0.6%
Q3 2019	83,163,685	442,243,588	1,241,750	550,811	0.7%
Q4 2019	83,058,858	450,365,852	1,323,397	576,928	0.7%
Q1 2020	83,242,372	445,500,621	5,399,686	3,247,202	3.9%
Q2 2020	84,253,836	348,154,389	42,094,169	13,017,947	15.5%
Q3 2020	87,137,152	423,562,391	34,534,402	10,764,057	12.4%
Q4 2020	89,982,173	439,525,981	35,502,112	11,237,170	12.5%
Q1 2021	91,985,309	454,408,410	37,966,139	11,524,915	12.5%
Q2 2021	93,693,126	470,732,827	30,357,543	9,559,719	10.2%
Q3 2021	95,584,359	475,586,467	25,139,723	8,669,102	9.1%
Q4 2021	97,341,595	478,927,438	24,172,609	8,457,726	8.7%

Source: ASPE analysis of T-MSIS claims, 2019-2021

Notes: Table 3 reports number of Medicaid and CHIP enrollees and utilization for all 50 states, DC, PR, and VI. We note that total enrollment numbers presented in this Issue Brief may not match publicly available enrollment data reported by the Center for Medicaid and CHIP Services due to differences in who is counted, reporting period, and possible overcounting in the T-MSIS.

### Telehealth Usage Trends by Race and Ethnicity

Table 4 shows that from 2019 to 2021, the distribution of Medicaid and CHIP enrollment by race and ethnicity has been consistent, with non-Hispanic Whites accounting for 37 percent of total enrollment followed by Hispanics (23 percent), Blacks (18 percent), Asians (4 percent), American Indians and Alaskan Natives (AI/AN) (1 percent) and Hawaiian/Pacific Islanders (<1 percent).

**Table 4. Number and Distribution of Medicaid and CHIP Enrollees by Race and Ethnicity (2019-2021)**

Race and Ethnicity	2019	2020	2021
All	94,112,484	94,784,176	101,018,800
White, non-Hispanic	35,003,387 (37.2%)	35,189,028 (37.1%)	37,165,946 (36.8%)
Hispanic, all races	21,712,114 (23.1%)	21,613,588 (22.8%)	22,734,206 (22.5%)
Black, non-Hispanic	17,307,168 (18.4%)	17,287,437 (18.2%)	18,229,053 (18.0%)
Asian, non-Hispanic	3,972,356 (4.2%)	3,974,924 (4.2%)	4,190,712 (4.1%)
American Indian and Alaska Native, non-Hispanic	1,317,679 (1.4%)	1,321,696 (1.4%)	1,426,923 (1.4%)
Hawaiian/Pacific Islander, non-Hispanic	675,107 (0.7%)	669,866 (0.7%)	719,290 (0.7%)
Unknown	14,124,673 (15.0%)	14,727,637 (15.5%)	16,552,670 (16.4%)

Source: ASPE analysis of T-MSIS claims, 2019-2021

Notes: Table 4 reports the number and distribution of Medicaid and CHIP enrollees by race and ethnicity for all 50 states, DC, PR, and VI. The denominator used to calculate the percentages is the total number of Medicaid and CHIP enrollees in that year.

Table 5 shows the share of Medicaid and CHIP enrollees of each race and ethnicity that ever utilized services delivered via telehealth within a given calendar year from 2019 to 2021. Non-Hispanic White enrollees had the greatest increase in the absolute number of those utilizing services delivered via telehealth (and made up the greatest proportion of Medicaid and CHIP enrollees, as seen above in Table 4). However, other racial and ethnic groups had a larger percentage increase in the number of enrollees using services delivered via



telehealth, including a 2,074 percent increase for Black enrollees, a 2,235 percent increase for Hispanic enrollees, a 3,035 percent increase for Asian enrollees, and a 3,056 percent increase for Hawaiian/Pacific Islander enrollees. The number of enrollees utilizing services delivered via telehealth decreased slightly for all race and ethnicities from 2020 to 2021, but were smallest for Hispanic, Asian, and Hawaiian/Pacific Islander enrollees, and largest for White enrollees.

**Table 5. Share of Medicaid and CHIP Enrollees by Race and Ethnicity Categories Utilizing Telehealth (2019-2021)**

Race and Ethnicity	2019	2020	2021	Change 2019-2020	Change 2020-2021
All	1.3%	23.0%	20.4%	1665.9%	-5.3%
White, non-Hispanic	1.8%	25.0%	22.0%	1318.2%	-6.9%
Hispanic, all races	1.0%	22.8%	21.5%	2234.6%	-0.8%
Black, non-Hispanic	0.9%	20.3%	17.7%	2074.4%	-8.2%
Asian, non-Hispanic	0.8%	24.1%	22.3%	3034.9%	-2.6%
American Indian and Alaska Native, non-Hispanic	2.5%	21.9%	19.1%	784.2%	-5.9%
Hawaiian/Pacific Islander, non-Hispanic	0.8%	24.1%	21.7%	3056.4%	-3.3%
Unknown	1.2%	21.2%	17.8%	1720.9%	-5.6%

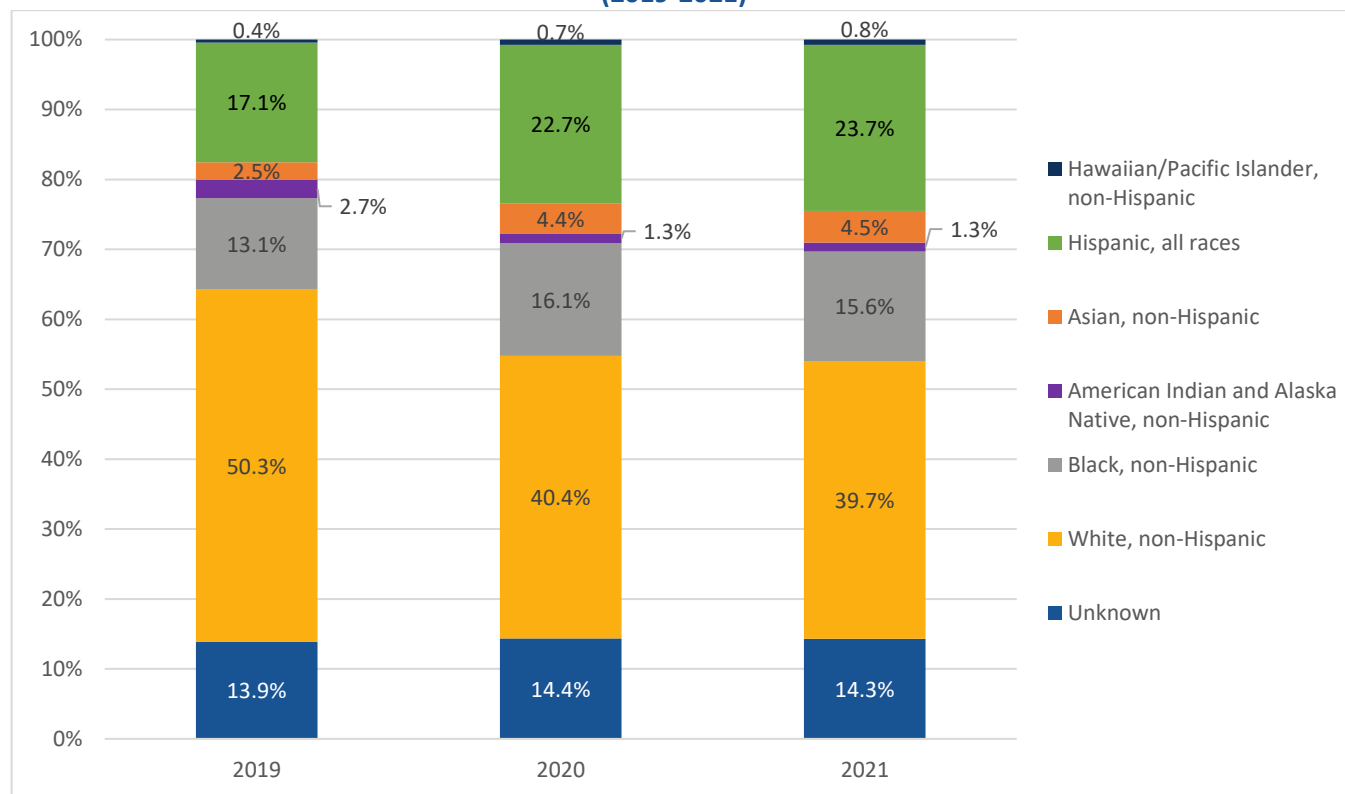
Source: ASPE analysis of T-MSIS claims, 2019-2021

Note: Table 5 reports the share of Medicaid and CHIP enrollees of each race and ethnicity ever utilizing services delivered via telehealth for all 50 states, DC, PR, and VI. The denominator used to calculate the shares is the total number of Medicaid and CHIP enrollees of each race and ethnicity category in that year.

Figure 3 shows the distribution of Medicaid and CHIP enrollees ever utilizing services delivered via telehealth by race and ethnicity from 2019 to 2021. Non-Hispanic White enrollees accounted for half of (50.3 percent) enrollees that ever utilized services delivered via telehealth in 2019, with Hispanic and Black enrollees and enrollees of unknown race and ethnicities following with 17.1, 13.1, and 13.9 percent respectively. Asian, American Indian and Alaska Native (AI/AN), and Hawaiian/Pacific Islander enrollees made up smaller shares of enrollees utilizing services delivered via telehealth with 2.5, 2.7, and 0.4 percent respectively. By 2020, Black, Hispanic, Asian, and Hawaiian/Pacific Islander enrollees increased non-Hispanic White enrollees' share of all Medicaid and CHIP enrollees utilizing services delivered via telehealth decreased to 40.4 percent. Hispanic and Black enrollees' shares increased to 22.7 percent and 16.1 percent respectively. Asian enrollees' share of all enrollees utilizing services delivered via telehealth increased to 4.4 percent, but AI/AN and Hawaiian/Pacific Islander enrollees' share stayed minimal and even decreased for AI/AN enrollees. There were fewer substantial differences from 2020 to 2021.



**Figure 3. Distribution of Medicaid and CHIP Enrollees Ever Utilizing Telehealth Services by Race and Ethnicity (2019-2021)**



Source: ASPE analysis of T-MSIS claims, 2019-2021

Notes: Figure 3 reports the distribution of Medicaid and CHIP enrollees by race and ethnicity for all 50 states, DC, PR, and VI. The denominator used to calculate the percentages is the total number of Medicaid and CHIP enrollees in that year.

“Unknown” category includes Medicaid enrollees with T-MSIS race codes of unknown, other, or blank, with an ethnicity code of non-Hispanic, unknown, or blank. The analysis does not include a Multiracial category.

## DISCUSSION

ASPE’s analysis of administrative claims data found that telehealth usage increased for all Medicaid and CHIP enrollees from 2019 to 2020, particularly from Q4 2019 to Q2 2020. This increase in telehealth service utilization coincides with the federal declaration of the COVID-19 PHE on January 31, 2020 and many states’ implementation of stay-at-home policies in Q2 2020, the latter of which may have contributed to the need for and subsequent large increase in usage of services delivered via telehealth in Q2 2020.

This increase in telehealth utilization also overlaps with changes in state Medicaid coverage policies regarding telehealth services. A number of states that allowed certain Medicaid services to be delivered via telehealth in May 2020 but did not in 2019 (prior to the PHE), still did so as of January 2022. Some states also made telehealth flexibilities permanent, with a July 2023 ASPE report finding that as of May 2022, 50 telehealth policies that 25 states made during the PHE became permanent. However, 27 policies in 15 states were rolled back.<sup>†,18</sup> The adoption of telehealth flexibilities contributed to states being able to more easily provide coverage and access to health services for all Medicaid enrollees during the pandemic.

We also note that the changes in shares of Medicaid enrollees ever utilizing telehealth services showed the increases for Hispanic and Black enrollees from 2019 to 2020 held steady in 2021, suggesting that the

<sup>†</sup> Examples of telehealth flexibilities made permanent are policies regarding coverage of different modalities, delivery requirement flexibilities (e.g., expanding originating sites to include patients’ homes). Examples of flexibilities most frequently rolled back were policies allowing usage of non-HIPAA-compliant platforms to deliver telehealth services, as this flexibility was pandemic-specific.

distribution of telehealth utilization by race and ethnicity may continue to be more reflective of enrollment by race and ethnicity. In 2019, White enrollees were overrepresented in telehealth utilization by race, accounting for 37 percent of enrollment but over half (50.3 percent) of all telehealth services utilized. By 2021, White enrollees' share of telehealth services decreased to 40 percent. Hispanic enrollees, who represented 23 percent of Medicaid and CHIP enrollment in 2021, accounted for 23 percent of telehealth utilization. Black enrollees, who represented 18 percent of enrollment in 2021, accounted for 16 percent of telehealth services utilization.

Previously ASPE found that prior to the COVID-19 PHE, behavioral health and primary care service categories were commonly provided via telehealth with 47 and 36 states respectively allowing these Medicaid services to be delivered via telehealth. However, despite the large number of states allowing telehealth coverage for these service categories, an earlier paper found from 2012 to 2017, there was still low overall telehealth use for behavioral health treatment, with particularly low use for substance use disorder services.<sup>19</sup> By May 2020, all 50 states and the District of Columbia allowed Medicaid behavioral health and primary care services to be delivered via telehealth.<sup>20</sup> States offering telehealth flexibilities for other Medicaid services and providers such as dental; physical, occupational, and speech therapy; and long-term services and supports also increased in May 2020 to 39, 49, and 41 states, respectively. Although four states rescinded telehealth flexibilities for physical, occupational, and speech therapy and five states did so for long-term services and supports by January 2022, many retained these flexibilities. As Medicaid telehealth flexibilities are not tied to the May 11, 2023 ending of the federal COVID-19 PHE, many states continue to use the telehealth flexibilities that are always available, with coverage continuing to vary by state.<sup>21,22</sup>

Future research by ASPE will continue to monitor Medicaid and CHIP telehealth trends, as well as introduce new variables of interest such as income and modality, as studies have shown disparate telehealth use along these lines. For example, research shows that individuals in low-income households have less access to internet services, which can hinder their usage of telehealth services, and video-enabled telehealth service rates are lower among underserved populations, such as those with lower incomes; Black, Hispanic, and Asian populations; and adults without a high school degree.<sup>23,24</sup>

## CONCLUSION

Telehealth played a large role in providing access to health care services to Medicaid and CHIP enrollees of all ages and race and ethnic groups during the COVID-19 PHE. While telehealth has long been a part of the Medicaid program, it represented a very small portion of total services prior to the COVID-19 pandemic. In response to the PHE, all states leveraged federal flexibilities to expand and enhance telehealth coverage for both services and providers, and many continue to do so. While Medicaid and CHIP telehealth utilization peaked mid-2020, it has remained above pre-pandemic levels through 2021. ASPE will continue to monitor Medicaid telehealth service utilization and its effects on access to care across enrollee and provider groups, updating our findings on enrollee demographics, telehealth modalities, enrollee locations, as well as the impact of policies on these trends as the health care system continues to recover from the pandemic. Subsequent reports in this Medicaid telehealth utilization series will report data on trends by beneficiary and provider geography, as well as trends for pediatric Medicaid enrollees.

## APPENDIX A

Appendix A Table 1. Total Medicaid and CHIP Services Delivered by Method and State (2019-2021)

State	Total Services Delivered Via					
	Telehealth & In Person			Telehealth		
	2019	2020	2021	2019	2020	2021
AI	1,791,337,119	1,656,743,382	1,879,655,142	4,893,349	117,530,369	117,636,014
AK	4,519,600	3,931,337	4,217,011	30,988	352,663	319,711
AL	16,054,677	14,228,530	15,668,583	29,437	803,882	574,295
AR	18,603,057	17,608,592	19,734,831	59,620	1,118,106	705,661
AZ	61,370,441	52,539,552	55,981,894	1,379,624	5,635,164	5,688,453
CA	204,297,407	187,958,129	207,995,069	574,630	18,183,027	20,723,192
CO	18,243,220	18,071,500	21,469,364	32,342	1,656,573	1,630,073
CT	23,218,784	21,078,663	23,479,121	1,559	2,715,920	2,328,830
DC	5,221,340	4,116,671	4,233,031	9,024	589,003	730,883
DE	4,933,873	4,372,325	4,723,958	22,133	443,197	416,560
FL	72,191,328	71,564,810	83,878,918	107,008	5,063,866	4,971,250
GA	31,734,885	28,147,421	31,818,228	93,030	2,268,220	2,286,447
HI	4,557,352	4,059,869	4,822,748	15,126	352,958	445,062
IA	13,831,094	11,972,433	14,218,117	113,856	955,170	719,654
ID*	7,732,458	8,029,850	9,001,842	8,634	761,330	687,359
IL	64,196,966	56,733,938	59,739,945	40,590	2,105,588	2,156,894
IN	25,413,609	27,802,935	33,983,096	54,776	2,787,329	1,981,768
KS	12,431,450	11,404,482	11,644,037	74,098	1,041,019	697,246
KY	32,325,901	29,601,495	34,071,192	86,096	2,777,116	2,710,542
LA	66,071,744	59,403,395	67,817,799	75,300	3,193,981	2,776,844
MA	91,214,189	84,800,325	95,918,703	11,486	7,046,552	7,219,009
MD	55,152,930	48,731,422	52,460,455	63,157	2,770,783	2,978,555
ME	9,208,608	8,105,418	9,217,926	36,207	980,481	940,235
MI	41,491,203	37,298,389	43,157,108	127,954	4,522,783	4,701,779
MN	31,354,757	28,405,377	33,604,709	95,199	3,020,552	2,948,136
MO*	29,051,605	27,932,746	31,257,981	82,811	1,025,690	717,979
MS	15,833,598	14,083,460	14,896,552	21,829	788,279	567,785
MT	4,934,144	4,750,527	5,300,962	55,659	426,605	363,433
NC	39,829,708	35,797,846	40,107,903	102,405	2,542,288	2,311,148
ND	1,710,413	1,742,876	2,819,647	14,774	116,448	95,138
NE*	4,575,768	4,476,022	7,068,544	11,078	360,753	331,602
NH	5,364,332	5,737,399	6,853,599	4,554	705,971	796,596
NJ	94,622,400	86,482,070	101,843,381	22,274	2,112,110	2,116,787
NM	13,538,233	12,861,827	14,581,624	101,504	1,372,655	1,466,066
NV	12,800,593	12,080,991	13,020,194	61,821	885,033	895,168
NY	166,716,954	145,222,714	168,195,409	32,128	5,338,428	5,361,716
OH	96,952,455	87,192,406	94,078,334	103,587	6,297,363	5,996,439
OK*	15,792,699	14,740,962	16,806,896	35,947	1,170,618	1,025,535
OR	21,580,173	18,884,055	20,356,314	97,387	2,373,523	2,607,952
PA	53,195,336	68,054,903	92,277,979	53,102	2,658,201	4,921,020
PR	10,020,610	9,514,648	12,358,091	5,874	1,239,074	1,035,979
RI	10,652,529	9,015,887	10,998,491	666	1,141,574	1,099,151
SC	22,421,093	19,440,121	22,075,767	28,058	801,527	575,160
SD	2,968,469	2,700,238	3,389,485	8,335	102,015	58,399
TN	32,064,566	29,466,754	31,287,706	52,049	1,720,780	1,389,533

<b>TX</b>	103,692,465	97,554,828	102,089,048	448,191	5,887,329	5,111,846
<b>UT*</b>	5,952,971	6,317,130	7,585,893	2,648	426,430	341,853
<b>VA</b>	32,169,467	29,030,315	33,250,284	80,310	2,059,749	2,115,729
<b>VI</b>	113,101	111,039	148,332	6	5,060	4,354
<b>VT</b>	4,928,470	4,407,524	5,332,896	6,127	95,460	88,335
<b>WA</b>	29,215,550	27,418,008	30,281,996	191,781	2,378,910	2,655,085
<b>WI</b>	31,851,696	28,896,625	34,363,293	79,541	1,519,714	1,487,498
<b>WV</b>	12,167,540	11,714,809	12,838,475	40,988	751,838	699,611
<b>WY</b>	1,249,308	1,147,794	1,332,381	6,041	81,681	60,679

Notes: \*Several states implemented Medicaid expansion during these time frames, which impacted the total number of services delivered. Idaho implemented Medicaid expansion January 1, 2020, with enrollment beginning November 1, 2019. Utah implemented Medicaid expansion on January 1, 2020, Nebraska on October 1, 2020, and Oklahoma on July 1, 2021. Missouri implemented Medicaid expansion, processing applications beginning October 1, 2021, with coverage retroactive to July 1, 2021.

## APPENDIX B

### *General Data Specifications*

This analysis utilized data from the Transformed Medicaid Statistical Information System (T-MSIS), which collects Medicaid and CHIP data from U.S. states, territories, and the District of Columbia into the largest national resource of beneficiary information. The study period for this analysis was Calendar Years (CY) 2019 to 2021, with telehealth utilization and enrollee counts broken down by year and quarter. All enrollee categorizations were defined at the annual level.

Individuals were included in this analysis if they had:

- at least one month of valid Medicaid or CHIP enrollment, or
- at least one final, non-denied, non-void Medicaid or CHIP FFS or encounter claim.

We note that the analysis included individuals with utilization regardless of enrollment status, as it was observed that some people with Medicaid utilization did not have valid enrollment in T-MSIS, likely due to data delays. We expect that people with Medicaid utilization are correctly enrolled in Medicaid, even if the T-MSIS enrollment data does not accurately reflect that.

To determine service categorizations, the analysis flagged a service as telehealth if it had at least one telehealth code. Otherwise, it was flagged as an in-person service. To be flagged as telehealth service, a claim must have met the following requirements:

- Some Current Procedural Terminology/Healthcare Common Procedure Coding System (CPT/HCPCS) codes are telehealth by definition. If a claim had at least one claim line with one of these procedure codes, the claim was flagged as telehealth.
- Additionally, some procedure code modifiers can be used to indicate telehealth services. Claims were also flagged as telehealth if they had at least one claim line that has either: i) place of service (POS) code = 02 (enrollee home); or ii) modifier code equal to 95, G0, GT, or GQ. Claims with these modifier codes were flagged as telehealth regardless of the specific procedure codes listed on the claim.

Other enrollee and service categories included in the analysis were sociodemographic characteristics (e.g., age group, sex, eligibility group, and race and ethnicity), dual status, provider and enrollee location (e.g., originating site), provider and enrollee residence (e.g., urban or rural), whether the enrollee resides in a Primary Case Health Professional Shortage Area, as well as service and provider type.

The Issue Brief additionally reports data on “unknown” enrollees when age groups are not specified, with the “unknown” value generally indicating missing data such that the enrollee or service could not be categorized. We note that missing Medicaid data on enrollee age is uncommon.<sup>25</sup>

### *Constructing Race and Ethnicity Categories*

A race and ethnicity crosswalk was used to construct categories to present the data in. Combinations of T-MSIS race and ethnicity codes were used to create the race and ethnicity categories of non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian and Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian/Pacific Islander, Hispanic, and unknown that are used in the series of ASPE reports. Individuals were categorized as unknown race and ethnicity if their T-MSIS race code was unspecified or blank, and if their T-MSIS ethnicity code was not of Hispanic, Latino/a, or Spanish origin, unspecified, or blank.

We note that this analysis did not include a multiracial category, due to T-MSIS historically being structured to only allow one race value per record. In cases where individuals had multiple records with differing values for

race, a single race was selected by taking the most recently submitted value as determined by sorting records based on reporting period, end date, effective date, and record number.

### *Limitations*

There are several limitations to this analysis. There is no multiracial option in the race and ethnicity categories (due to the dataset restrictions described above) or data on income groups that would provide more detailed insight for trends of Medicaid enrollees utilizing telehealth services.

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#### SUGGESTED CITATION

Lee A, Peters C, DeLew N, Buchmueller T. Trends in Medicaid and CHIP Telehealth, 2019-2021 Part I: Medicaid and CHIP Telehealth Utilization by Enrollee Characteristics (Issue Brief No. HP-2024-16). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. August 2024.

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