



## TELE-BEHAVIORAL HEALTH USE AMONG MEDICARE BENEFICIARIES DURING COVID-19

Tele-behavioral health met some of the demand for behavioral health services among Medicare beneficiaries during the COVID-19 public health emergency, but overall use of behavioral health services was lower in 2020 than 2019.

### KEY POINTS

- The overall percentage of Medicare fee-for-service beneficiaries receiving behavioral health services in any setting was slightly lower in 2020 (33.2%) than in 2019 (34.6%), despite known increases in persons experiencing symptoms of anxiety or depression and increases in substance use during this time.
- The number of Medicare beneficiaries receiving behavioral health care via telehealth (tele-behavioral health) increased dramatically during the COVID-19 public health emergency beginning in March and April 2020.
- Tele-behavioral health use differed across some subgroups of beneficiaries during this time period:
  - A similar percentage of beneficiaries with mental health conditions and substance use disorders used tele-behavioral health services.
  - The rate of tele-behavioral health service use was higher for women than men.
  - A similar percentage of beneficiaries who were Black, White, and Hispanic used tele-behavioral health services, while Asian beneficiaries had a lower percentage of tele-behavioral health service use than all other groups.
  - Prior to the public health emergency, a similar percentage of beneficiaries younger than 65 used tele-behavioral health services compared to beneficiaries aged 65 or older. In April 2020, the difference was 7.1%.
  - Compared to beneficiaries living in rural areas, a slightly higher percentage of beneficiaries living in urban areas used tele-behavioral health services during the study period.

### INTRODUCTION

The COVID-19 public health emergency (PHE) increased demand for behavioral health services and, at the same time, generated new barriers that may have prevented access to critical mental health and substance use disorder (SUD) services.<sup>1,2</sup> Access to behavioral health treatment was impacted by the suspension of site-based services, reduction of staff, and the closure of many behavioral health facilities and clinics that provide these services.<sup>3,4</sup> As a result of the COVID-19 PHE, the Federal Government implemented numerous policies to increase access to care through telehealth, including the provision of tele-behavioral health services.

Before the COVID-19 PHE, Medicare coverage of telehealth was limited, typically covering only services provided to rural patients in specific health care settings. Policies implemented during the PHE included

provisions to allow patients to receive telehealth services inside their homes, the waiver of penalties associated with the use of non-HIPAA compliant communication programs, the waiver of policies that require out-of-state providers to be licensed in the state in which they provide services, and policies that allow for the provision of some behavioral health services via audio-only telephone.<sup>5,6</sup> The short-term goal of enacting these policies was to maintain access to behavioral health services during the COVID-19 PHE in as safe a way as possible. Delivering behavioral health services via telehealth was successful in alleviating some health care access barriers.<sup>7</sup> From March 2020 to February 2021, 53% of Medicare beneficiaries used a telehealth service, and some evidence shows that much of the increase in telehealth was for behavioral health services.<sup>8</sup> Telehealth policies enacted during the PHE increased the availability of services, but access to technology, which varies across income levels, race, ethnicity and geography, can greatly impact a patient's ability to utilize available telehealth services.

To help inform future telehealth policy, it is vital to understand how tele-behavioral health was used during the COVID-19 PHE, whether tele-behavioral health was able to meet the demand for behavioral health care during the PHE, and whether these patterns differed by beneficiary characteristics. In addition, it is important to explore whether overall utilization of behavioral health services increased during this time. While need may have increased during the COVID-19 PHE, it is also possible that increased reliance on telehealth may result in overall higher rates of service use due to potential inappropriate use of tele-behavioral health services, lower quality services, or both.<sup>9</sup> If these or other potential inefficiencies of telehealth are not monitored and addressed, this could result in increased total costs of care, especially if telehealth continues to be reimbursed at parity with in-person care.<sup>10,11</sup> This brief provides descriptive results of Medicare claims data examining beneficiary use of behavioral health services and tele-behavioral health services during 2019 and 2020.

## METHODS

To examine the impact of the PHE on use of behavioral health and tele-behavioral health services, two metrics focusing on behavioral health service utilization were developed. The metrics were developed to be usable across payers and include a range of service types not covered by every payer. The two metrics were:

1. **Beneficiaries receiving behavioral health services, overall and by type of service.** This metric calculates a monthly count and percentage of all beneficiaries who use at least one behavioral health service, overall and by type of service (inpatient, emergency department, intensive outpatient, partial hospitalization, outpatient, medication-assisted treatment [MAT], residential services, and telehealth).
2. **Behavioral health service utilization, overall and by type of service.** This metric calculates a monthly count and rate of services (per 1,000 beneficiaries) for behavioral health services, overall and by type of service (inpatient, emergency department, intensive outpatient, partial hospitalization, outpatient, MAT, residential services, and telehealth).

Metrics were calculated using Medicare fee-for-service claims data. The following file types were used: inpatient, skilled nursing facility, home health, hospital outpatient, professional (carrier), and Part D enrollment (pharmacy data). These data were accessed through the Centers for Medicare & Medicaid Services (CMS) Virtual Research Data Center. Beneficiaries enrolled in Medicare Advantage plans were excluded due to lags in the availability of the encounter data. Data files from 2019 through 2020 were used to examine periods before and during the PHE.

To be eligible for our analytic population, we required beneficiaries to be enrolled in fee-for-service Medicare parts A, B, and D with no enrollment in a Medicare Advantage HMO, in addition to having six months of consecutive enrollment that spans either 2019 or 2020. To identify beneficiaries with a behavioral health condition, we required at least one inpatient claim for a specific behavioral health condition or at least two

outpatient claims for the same condition within the same calendar year or the year before.\* A value set of diagnosis, procedure, and national drug codes (NDCs) were used to identify mental health and SUD-related claims. The value set was based on Chronic Conditions Data Warehouse (CCW) algorithms,<sup>†</sup> and previous Mathematica project work, and was updated for this project.

Value sets were also used to identify the types of services. The service type value set used procedure, revenue, and NDC to identify services. It was based on prior work in this area and revised for this project, including the addition of codes from the CCW algorithms to identify MAT medications. MAT services were identified using a combination of NDC, procedure, and revenue codes. However, due to the structure of pharmacy claims data, it was not possible to verify the mode by which MAT claims were provided. It is possible that some claims identified as MAT were delivered via telehealth. For the purposes of this analysis, psychotropic medications other than MAT medications were not examined as a service type.

Telehealth services were identified using a value set that was based on CMS lists of telehealth codes<sup>‡</sup> and was augmented with procedure codes and modifiers used by Mathematica to generate the CMS Medicaid and Children's Health Insurance Program COVID-19 monitoring dashboard.

Metrics were specified to include stratifications by beneficiary characteristics and service types. Stratifications included type of behavioral health condition (mental health versus SUD), age group, gender, urbanicity, as well as race and ethnicity.

## RESULTS

The total number of original fee-for-service Medicare beneficiaries included in our analytic population was 24.7 million in 2019 and 23.8 million in 2020. Most of this population was:

- Non-Hispanic White (81.7% in 2019 and 82.1% in 2020).<sup>§</sup>
- Female (57.0% in 2019 and 56.8% in 2020).
- Older than age 65 (79.3% in 2019 and 82.1% in 2020).
- Living in urban areas (89.1% in 2019 and 2020).

The percentage of Medicare beneficiaries treated for a mental health condition (31.5% in both 2019 and 2020) was larger than those treated for a SUD (8.7% in 2019 and 8.2% in 2020).

### ***Metric 1: Beneficiaries Receiving Behavioral Health Services, Overall and by Type of Service***

To examine the number of beneficiaries receiving behavioral health services in each year, the monthly count and percentage of beneficiaries receiving behavioral health services were calculated, both overall and by type of service.

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\* We did not collapse facility claims into stays, therefore inpatient service counts may appear higher than other estimates.

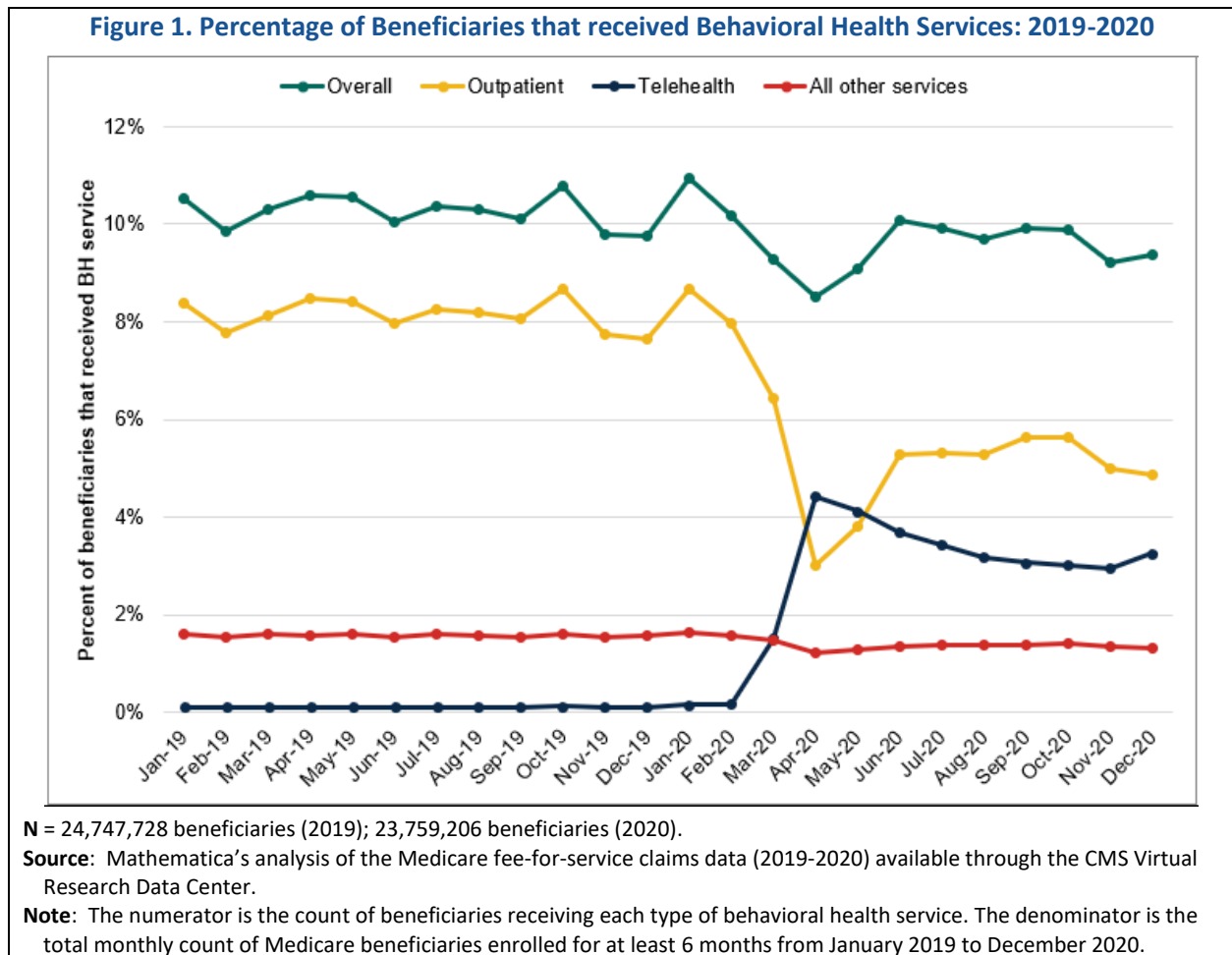
<sup>†</sup> The CCW provides a list of diagnostic and procedure codes used to identify common physical and behavioral health conditions. These code lists are known as the "CCW algorithms." For more information, see <https://www2.ccwdata.org/web/guest/home>.

<sup>‡</sup> The most current list of services payable under the Medicare Physician Fee Schedule when furnished via telehealth is available at <https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes>.

<sup>§</sup> Medicare data does not capture multiple race or ethnicity categories for a single beneficiary. Hispanic-White beneficiaries may be reported under either the "Hispanic" or "White" categories, and Hispanic-Black beneficiaries may be reported under either the "Hispanic" or "Black" categories. This is a limitation of the data.

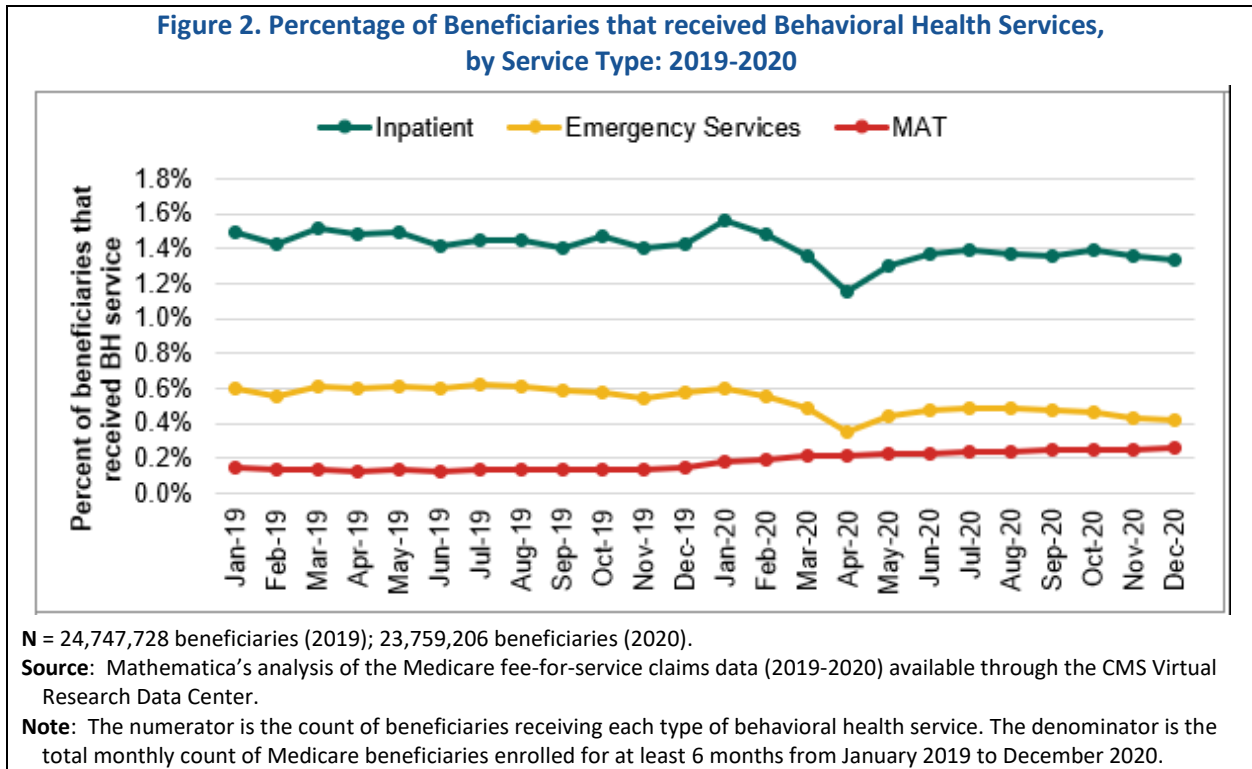
The percentage of Medicare beneficiaries who used at least one behavioral health service was 34.6% in 2019 (8,552,634 beneficiaries) and 33.2% in 2020 (7,887,880 beneficiaries) (**Figure 1**). The percentage of beneficiaries receiving behavioral health services each month decreased dramatically between March and April 2020 for most service types, with the biggest decrease seen in outpatient services (from 6.4% to 3.0%).

By contrast, the percentage of beneficiaries receiving behavioral health care via telehealth increased from 1.5% in March 2020 to 4.4% in April 2020. Although the percentage of beneficiaries receiving behavioral health services through telehealth during this period increased, the overall percentage of beneficiaries receiving any behavioral health services was lower in April 2020 (8.5%) than it was in March 2020 (9.3%) (**Figure 1**). For readability, **Figure 1** presents all remaining service types (inpatient, emergency services, MAT) collapsed into one category (percentage of beneficiaries that had any of those other service types) because utilization of these services was so low. **Figure 2** provides a more detailed view of these additional service types.



**Figure 2** presents results for the three less-used services represented by the red line (All other services) in **Figure 1**. Again, there was a decrease in the percentage of beneficiaries receiving behavioral health services between March and April 2020 for most service types. The percentage of beneficiaries receiving inpatient services decreased from 1.4% to 1.1%, and emergency services decreased from 0.5% to 0.4%. However, the percentage of beneficiaries receiving MAT services held steady at 0.2%. As described earlier, due to the structure of pharmacy claims, it was not possible to verify the mode by which services for all MAT claims were provided. It is likely that some services we identified as MAT should instead be attributed to the telehealth service category.

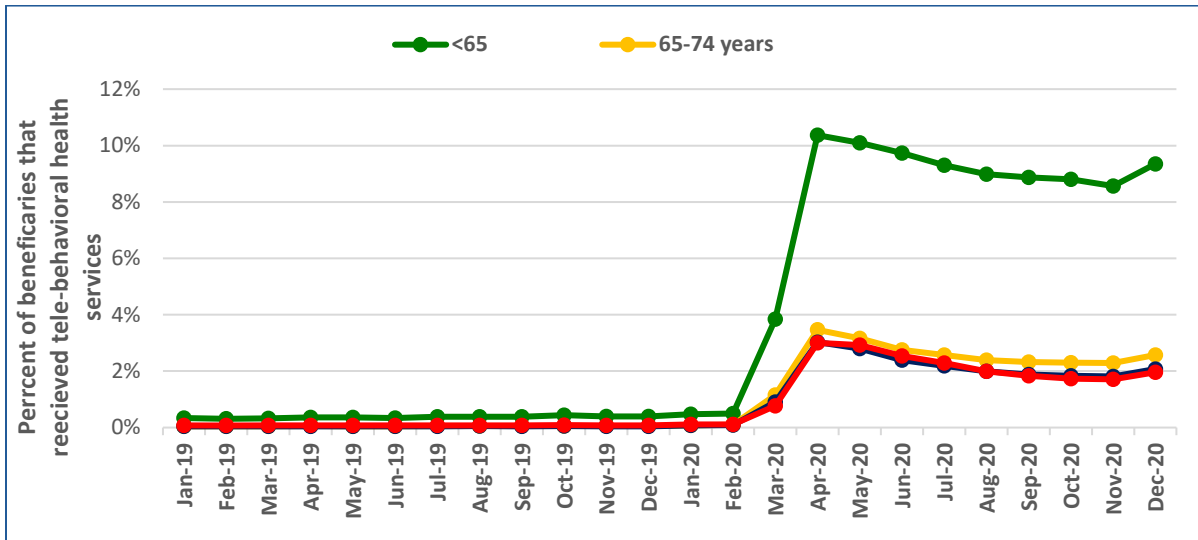
In order to be usable across payers, this metric was designed to also examine the use of intensive outpatient services, partial hospitalization services, and residential services. However, these services are not typically covered in traditional Medicare and were not included in this analysis.



Results of analyses examining tele-behavioral health service use were stratified by beneficiary gender, age, urbanicity, and race and ethnicity. The largest differences in tele-behavioral health service use were across age groups; a larger percentage of beneficiaries younger than 65 used tele-behavioral health services compared to beneficiaries aged 65 or older. This difference was most pronounced in April 2020, when 10.4% of beneficiaries under 65 years used tele-behavioral health services, compared to 3.5% of those aged 65-74 and 3.0% of those aged 75-84 years and those aged 85 years and older (**Figure 3**). These differences persisted through the rest of 2020.

These patterns are largely similar to patterns observed prior to the PHE for most age groups. A larger percentage of beneficiaries aged 65 and younger used any behavioral health service compared to beneficiaries aged 65 and older in every month during 2019 and 2020. In April 2019, 19.7% of beneficiaries younger than 65 used any behavioral health service, compared to 8.1% of beneficiaries aged 65-74, 8.4% of beneficiaries aged 75-84, and 10.4% of beneficiaries aged 85 and older. However, while a larger percentage of beneficiaries aged 85 and older used any behavioral health service compared to beneficiaries aged 65-84 throughout 2019 and 2020, their use of tele-behavioral health services was similar to or lower than other age groups after the start of the PHE.

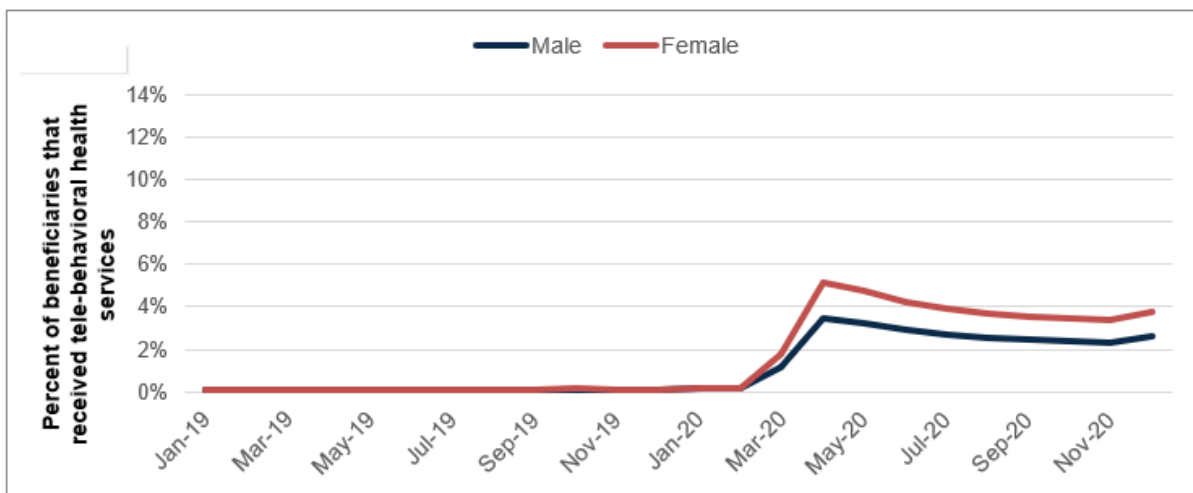
**Figure 3. Percentage of Beneficiaries that received a Tele-Behavioral Health Service, by Age Category: 2019-2020**



**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019-2020) available through the CMS Virtual Research Data Center.  
**Note:** The numerator is the monthly count of beneficiaries receiving tele-behavioral health services and the denominator is the monthly count of Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Results also demonstrated that a higher percentage of women used tele-behavioral health services during the early months of the PHE than did men. In April 2020, 5.1% of women used a tele-behavioral health service, compared to 3.5% of men (Figure 4). These differences also persisted through the end of 2020. These differences mirror use patterns for all types of behavioral health services provided during the same timeframe and prior to the PHE. Overall use of behavioral health services was higher for women than for men throughout 2019 and 2020.

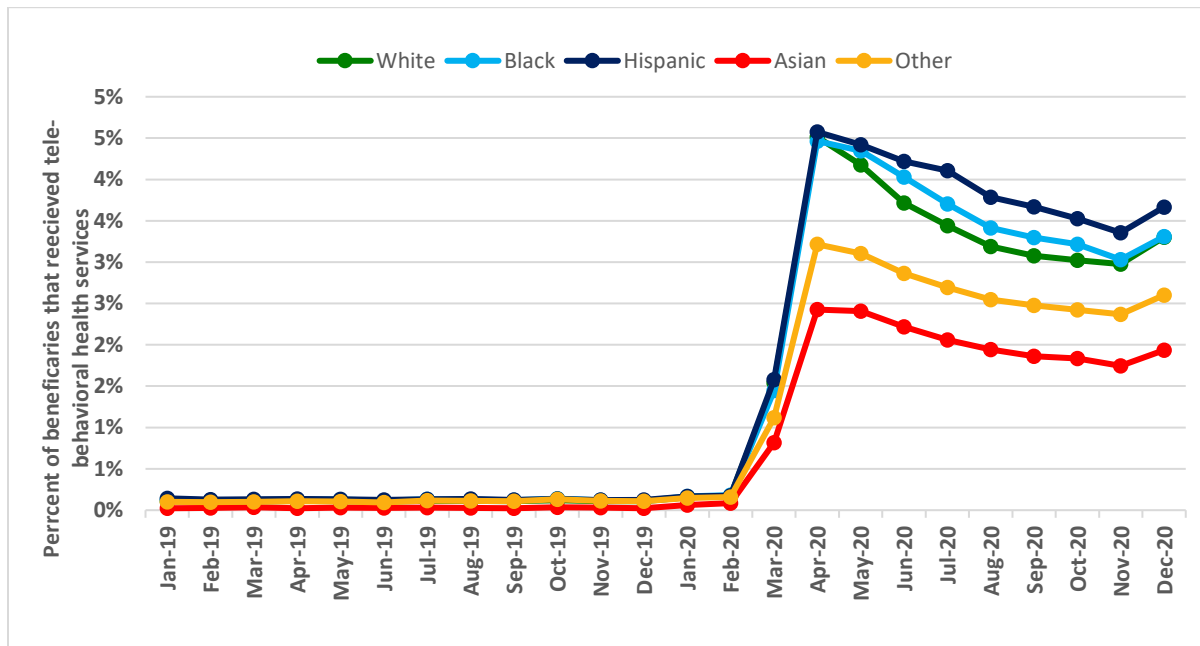
**Figure 4. Percentage of Beneficiaries that received a Tele-Behavioral Health Service, by Gender: 2019-2020**



**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019-2020) available through the CMS Virtual Research Data Center.  
**Note:** The numerator is the monthly count of beneficiaries receiving tele-behavioral health services and the denominator is the monthly count of Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Similar proportions of White, Black, and Hispanic beneficiaries used tele-behavioral health services, but a lower percentage of Asian beneficiaries used tele-behavioral health services (**Figure 5**). In April 2020, 2.4% of Asian beneficiaries used a tele-behavioral health service, compared to 4.5% of White and Black beneficiaries, and 4.6% of Hispanic beneficiaries. These findings mirror results of overall behavioral health use patterns prior to and during the pandemic, where Asian beneficiaries had lower rates of service use compared to other ethnic groups in every month during 2019 and 2020.

**Figure 5. Percentage of Beneficiaries that received a Tele-Behavioral Health Service, by Race and Ethnicity: 2019-2020**

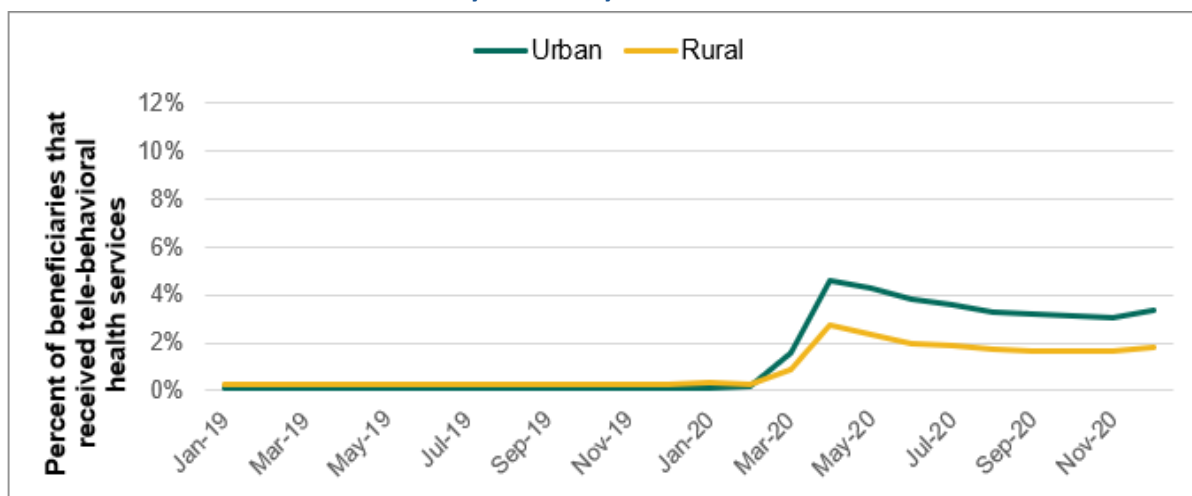


**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019-2020) available through the CMS Virtual Research Data Center.

**Note:** The numerator is the monthly count of beneficiaries receiving tele-behavioral health services and the denominator is the monthly count of Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Tele-behavioral health service use also varied by urbanicity. A higher percentage of beneficiaries living in rural areas used tele-behavioral health services prior to the COVID-19 PHE than beneficiaries living in urban locations (0.3% versus 0.1% in January 2020). However, by April 2020, this pattern had reversed, with the percentage of urban residents receiving tele-behavioral health services rising to 4.6% compared to 2.7% of rural beneficiaries.

**Figure 6. Percentage of Beneficiaries that received a Tele-Behavioral Health Service, by Urbanicity: 2019-2020**



**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019-2020) available through the CMS Virtual Research Data Center.

**Note:** The numerator is the monthly count of beneficiaries receiving tele-behavioral health services and the denominator is the denominator is the monthly count of Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Similar percentages of beneficiaries with mental health conditions or SUD used tele-behavioral health services. In April 2020, 13.3% of individuals with a SUD used a tele-behavioral health service, compared to 13.2% of beneficiaries with a mental health condition. This pattern persisted through the rest of 2020.

**Metric 2: Behavioral Health Service Utilization, Overall and by Type of Service**

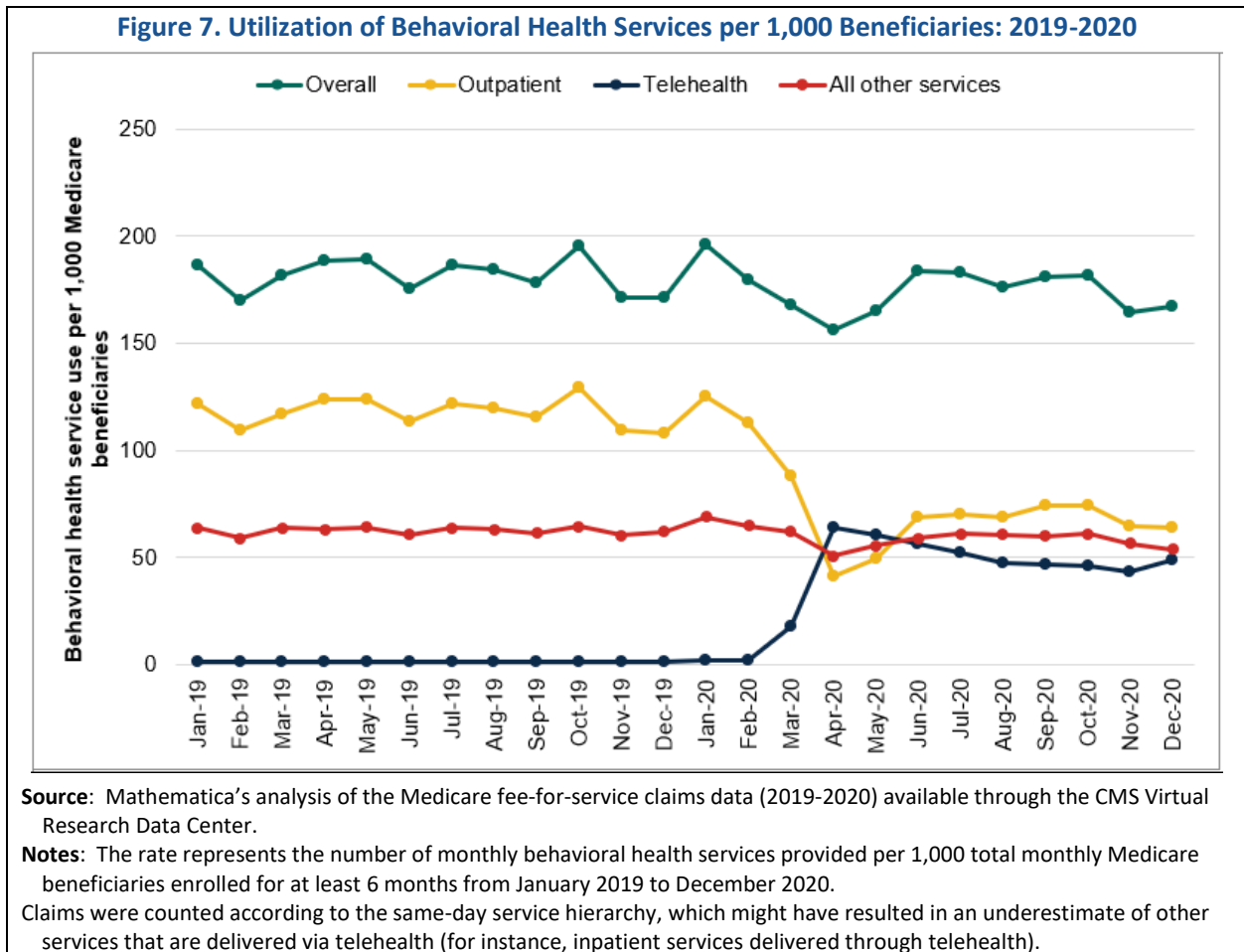
**Figure 7** presents the number of behavioral health services delivered per 1,000 Medicare beneficiaries in 2019 and 2020 by month. Services were counted according to a same-day service hierarchy if beneficiaries received services in multiple care settings on the same date and from the same billing provider.\*\* Application of this hierarchy might have resulted in an underestimate of other services that are delivered via telehealth (for instance, inpatient services delivered through telehealth).

Results were similar to the patterns that emerged in the first set of analyses focusing on beneficiaries (Metric 1). The rate of overall behavioral health service use began to decline in February 2020 and remained lower than 2019 rates until June 2020. Rates of overall service use then began to increase slightly and remained similar to 2019 rates for the remainder of 2020. Between March and April 2020, behavioral health service use decreased across most service types, with the biggest decrease seen in outpatient services. The rate of outpatient service use decreased from 88 visits per 1,000 beneficiaries in March 2020 to 41 visits per 1,000 beneficiaries in April 2020, and overall behavioral health service use decreased from 168 visits per 1,000 beneficiaries to 156 visits per 1,000 beneficiaries. During this same period, tele-behavioral service use increased from 18 visits per 1,000 beneficiaries to 64 visits per 1,000 beneficiaries (**Figure 7**). In April 2020, the

\*\* Flags were created for each service type and a hierarchy was applied to identify only one service type flag per claim line. The priority in which the service type flags were applied was as follows: telehealth services, inpatient services, intensive outpatient and partial hospitalizations, outpatient, emergency services, MAT, and residential services. After rolling the claim lines up to a single beneficiary-provider-date file, the hierarchy was reapplied to capture a single service type per service provided by a single provider on a single date. Claims were then separately rolled up to a single beneficiary-date file in which a record could be flagged for more than one service on a single day. This file was used to calculate this metric.



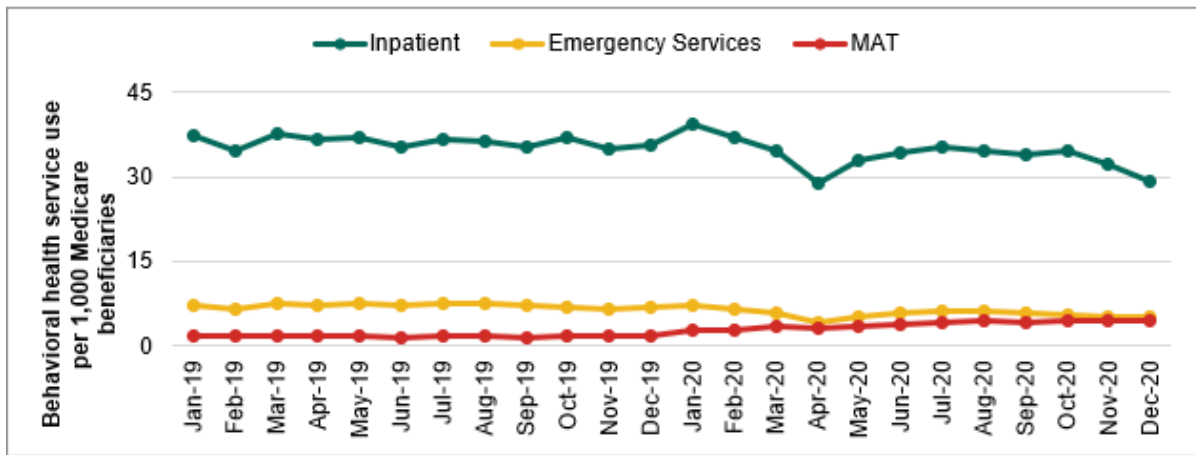
rate of tele-behavioral health services was higher than for any other service type examined. **Figure 7** does not display service types that had fewer than 20 services per 1,000 beneficiaries in any month (inpatient, emergency services and MAT); instead, the red line (All other services) in the figure indicates the total use of any of those other service types. **Figure 8** provides the results for each of those service types in more detail.



**Figure 8** presents the detailed results for inpatient, emergency services, and MAT services, represented by the red line (All other services) in **Figure 7**. Once more, from March to April 2020, service use decreased across most of these service types. Inpatient service use decreased from 38 visits to 35 visits per 1,000 beneficiaries. Emergency service use decreased from 6 visits to 4 visits per 1,000 beneficiaries. MAT again held steady at 3 visits per 1,000 beneficiaries.

The rate of tele-behavioral health service use increased across all races and ethnicities beginning in March 2020 (**Figure 9**). In February 2020, rates of tele-behavioral health use were between 1 and 2 visits per 1,000 beneficiaries across all races and ethnicities (**Figure 7**). The greatest increases in the rates of tele-behavioral health service use were among White beneficiaries: from 18 visits per 1,000 White beneficiaries in March 2020 to 66 visits per 1,000 White beneficiaries in April 2020. Rates of tele-behavioral health use among Hispanic beneficiaries also increased from 18 visits in March 2020 to 64 visits per 1,000 Hispanic beneficiaries in April 2020. Among Black beneficiaries, rates increased slightly less: from 17 visits in March 2020 to 62 visits per 1,000 Black beneficiaries in April 2020. Finally, among Asian beneficiaries there was the smallest increase in rates of tele-behavioral health use: from 8 visits in March 2020 to 23 visits per 1,000 Asian beneficiaries in April 2020. Rates of tele-behavioral health visits remained consistently highest among Hispanic beneficiaries for the remainder of 2020.

**Figure 8. Utilization of Certain Types of Behavioral Health Services, by Selected Services: 2019-2020**

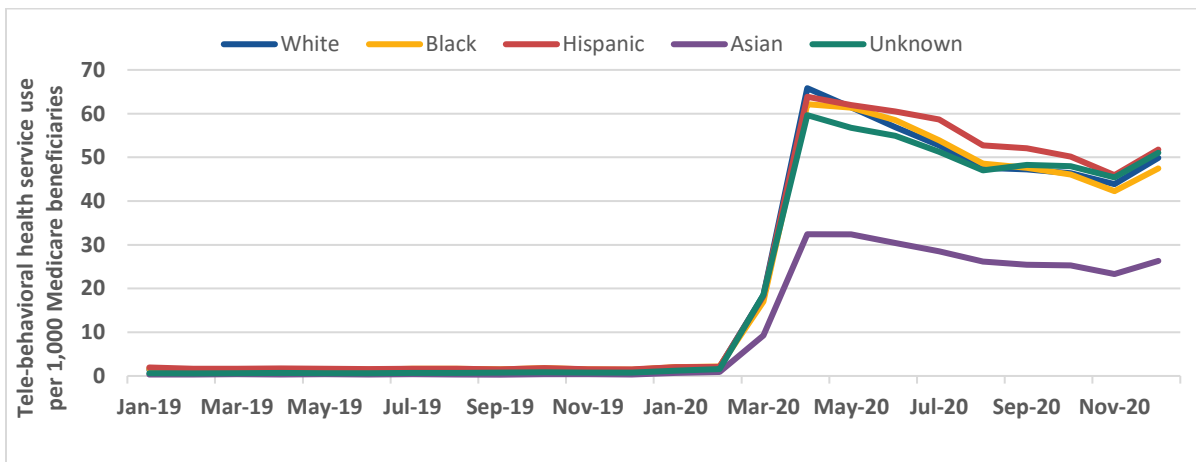


**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019-2020) available through the CMS Virtual Research Data Center.

**Note:** The rate represents the number of monthly behavioral health services provided per 1,000 total monthly Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Claims were counted according to the same-day service hierarchy, which might have resulted in an underestimate of other services that are delivered via telehealth (for instance, inpatient services delivered through telehealth).

**Figure 9. Utilization of Tele-Behavioral Health Services, by Race and Ethnicity, 2019-2020**

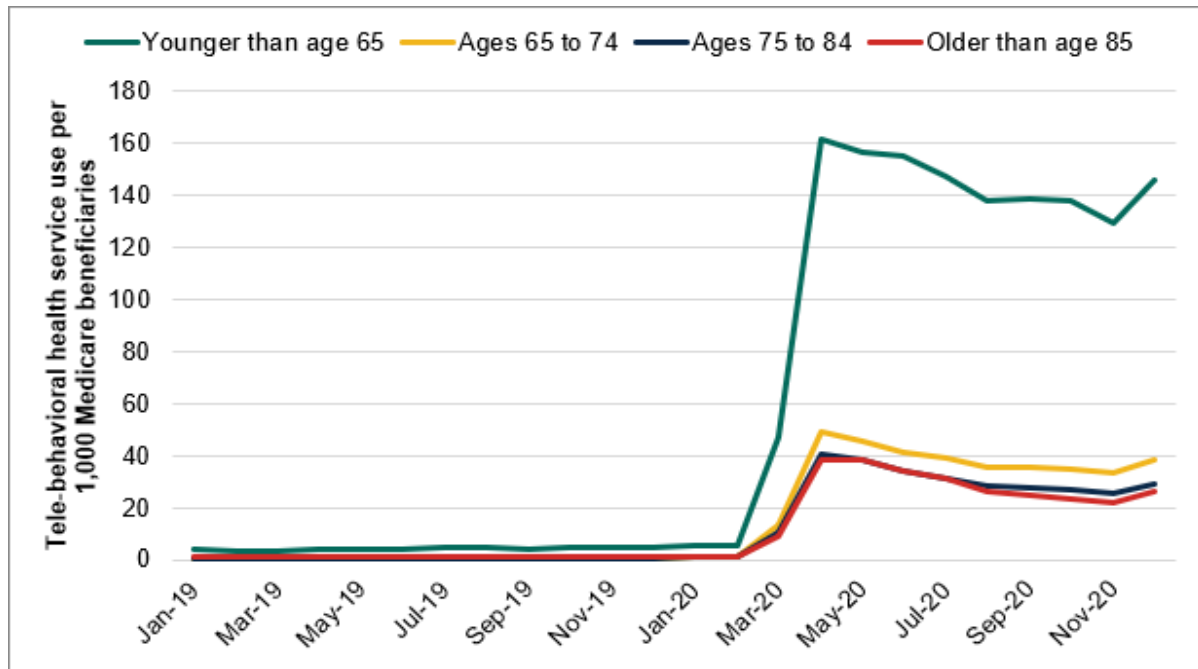


**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019–2020) available through the CMS Virtual Research Data Center.

**Note:** The rate represents the number of monthly tele-behavioral health services provided per 1,000 total monthly Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020. Data were not available for North American Natives.

**Figure 10** presents the rates of tele-behavioral health service use by age group. The rate of tele-behavioral health service use was highest among beneficiaries younger than 65, and lowest among beneficiaries age 85 and older. The rate of service use among beneficiaries younger than age 65 rose from 6 services per 1,000 beneficiaries aged 65 and younger in February 2020 to 47 services per 1,000 beneficiaries in March 2020, and 161 services per 1,000 beneficiaries in April 2020. Over the same time period, the rate of services use for beneficiaries age 85 and older rose from 2 services to 39 services per 1,000 beneficiaries aged 85 and older.

**Figure 10. Utilization of Tele-Behavioral Health Services, by Age Group: 2019-2020**



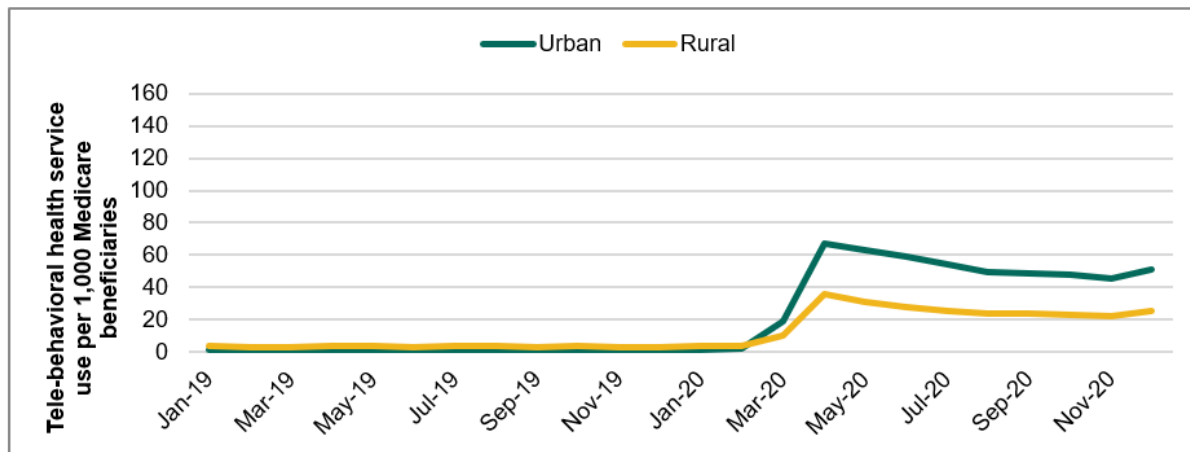
**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019–2020) available through the CMS Virtual Research Data Center.

**Note:** The rate represents the number of monthly tele-behavioral health services provided per 1,000 total monthly Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Additional stratifications of service use demonstrated that women had higher rates of tele-behavioral health service utilization than men prior to the COVID-19 PHE, and throughout 2020. In February 2020, the rates of tele-behavioral health service use were approximately 2 per 1,000 beneficiaries for both women and men. In April 2020, the rates had risen to 76 per 1,000 for women beneficiaries and 49 per 1,000 for men. The rates remained higher for women throughout the remainder of 2020.

**Figure 11** presents the rates of tele-behavioral health service use by urbanicity. While individuals residing in rural locations had slightly higher rates of tele-behavioral health utilization prior to the COVID-19 PHE, their service utilization was lower than beneficiaries residing in urban locations beginning in March 2020 and throughout the remainder of 2020. In February 2020, the rate of tele-behavioral health service utilization was 4 per 1,000 individuals residing in rural locations and 2 per 1,000 beneficiaries residing in urban locations. By April 2020, the rates had risen to 67 per 1,000 urban beneficiaries and 37 per 1,000 rural beneficiaries.

**Figure 11. Utilization of Tele-Behavioral Health Services, by Urbanicity: 2019-2020**



**Source:** Mathematica’s analysis of the Medicare fee-for-service claims data (2019–2020) available through the CMS Virtual Research Data Center.

**Note:** The rate represents the number of monthly tele-behavioral health services provided per 1,000 total monthly Medicare beneficiaries enrolled for at least 6 months from January 2019 to December 2020.

Again, there were no noticeable differences in the rates of tele-behavioral health service utilization among beneficiaries with mental health conditions and those with SUDs. In February 2020, the rate of tele-behavioral health utilization was 6 per 1,000 beneficiaries for both individuals with a mental health condition and those with an SUD. By April 2020, the rates had risen to 194 per 1,000 individuals with a mental health condition and 198 per 1,000 individuals with an SUD. Both groups continued to have similar rates of tele-behavioral health services use throughout the remainder of 2020.

## LIMITATIONS

The metrics reported in this brief were developed and calculated to provide information on beneficiary use of tele-behavioral health services during 2019 and 2020, and to explore whether the use of telehealth was sufficient to fill the gaps in behavioral health care created by the COVID-19 PHE. These metrics were adapted from existing metrics with stable value sets and were selected for adaptation due to their relatively low complexity. However, these metrics have limitations. First, the tele-behavioral health analyses presented in this brief all assume that claims identified as telehealth were accurately submitted by providers with appropriate telehealth codes or modifiers.

Additionally, there are no currently endorsed National Quality Forum claims-based measures of psychotherapy or specific behavioral health treatments because they are not reliably coded in claims, potentially leading to inaccurate comparisons. Identifying these services in claims remains challenging, making it difficult to identify some service types. Finally, due to the structure of pharmacy claims, it was not possible to verify the mode by which claims for MAT were provided. It is likely that some claims identified as MAT should instead be attributed to the telehealth category.

## CONCLUSION

Tele-behavioral health appears to be meeting some of the demand for behavioral health services that occurred during the PHE; however, both before and during the PHE, service use differed across some subgroups of beneficiaries. Although the number of beneficiaries receiving behavioral health care via telehealth and the tele-behavioral health service volume increased dramatically beginning in March and April 2020, the overall percentage of beneficiaries receiving any behavioral health service and the overall rate of behavioral health

services was lower in April 2020 than it was in March and earlier. That is, increased use of tele-behavioral health services was not sufficient to make up for the decrease of in-person services during the early months of the COVID-19 PHE. This trend was particularly evident for certain service types, especially for outpatient services. By the end of 2020, the rate of in-person outpatient behavioral health services provided to Medicare beneficiaries was approximately half the rate it was at the beginning of the year (64 per 1,000 beneficiaries in December 2020 versus 125 per 1,000 beneficiaries in January 2020). This pattern is consistent with other recent reports that Medicare beneficiaries with serious mental illness experienced large disruptions in care, which persisted even as the use of tele-behavioral health increased.<sup>12</sup>

Service use was not consistent across all beneficiaries. The percentage of beneficiaries receiving behavioral health services via telehealth was substantially higher for individuals residing in urban areas, those younger than age 65, and women. These findings largely mirror overall behavioral health utilization patterns in this data before and during the PHE.

Some of these findings are also similar to results reported in other analyses looking at general telehealth use in Medicare, which have shown higher uptake of telehealth among younger Medicare beneficiaries during the early months of the pandemic<sup>13</sup> and that telehealth comprised a greater percentage of Medicare FFS visits in urban counties than in rural counties during a similar time frame.<sup>14</sup> These findings merit further investigation to identify how disparities related to access and service use might be addressed.

Additionally, while rates of tele-behavioral health service use increased across all races and ethnicities, the increase was much lower among Asians compared to Whites, Hispanics, and Blacks. This finding is generally consistent with results from the National Survey of Drug Use and Health (NSDUH) showing that both Asian adults and Asian adolescents have lower overall mental health utilization than other groups,<sup>15</sup> and overall behavioral health service use patterns seen in our data. However, it is not consistent with previous telehealth research showing that Asian Medicare FFS beneficiaries had higher rates of overall telehealth utilization in 2020 compared to other racial and ethnic groups.<sup>16</sup>

In the longer term, patients, payers, providers, and policymakers will need to examine how best to use telehealth, assessing, for example, quality of care, patient outcomes, effectiveness, and which services are best provided in this format. For example, research could compare quality of care and patient outcomes for patients receiving care via telehealth versus in-person services. The 2022 Medicare Physician Fee Schedule<sup>17</sup> finalized the permanent extension of some tele-behavioral health flexibilities, such as the ability for homes to serve as the originating telehealth site and the availability of some audio-only tele-behavioral health services. In addition, the 2023 Consolidated Appropriations Act<sup>18</sup> extends some Medicare telehealth flexibilities through December 31, 2024, regardless of when the COVID-19 PHE ends. A better understanding of how these policies impacted beneficiaries with behavioral health conditions, and the most suitable uses of tele-behavioral health services is essential to determine which flexibilities should be adjusted, discontinued, or made permanent.

## REFERENCES

1. Warren, J.C., & Smalley, K.B. (2020). *The Long-Term Impact of COVID-19 on Mental Health*. Blog; Commonwealth Fund. <https://doi.org/10.26099/2vpb-v221>.
2. Panchal, N., Kamal, R., Orgera, K., Cox, C., Garfield, R., Hamel, L., & Chidambaram, P. (2021). The Implications of COVID-19 for Mental Health and Substance Use. Kaiser Family Foundation. <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>.
3. National Council for Behavioral Health. (2020). Behavioral Health Crisis in America Getting Worse as COVID-19 Forces Community Behavioral Health Care Organizations to Cut Back. <https://www.thenationalcouncil.org/press-releases/behavioral-health-crisis-in-america-getting-worse-as-covid-19-forces-community-behavioral-health-care-organizations-to-cut-back/>.
4. National Governors Association. (2020). *Supporting State Behavioral Health Systems during COVID-19 Response and Recovery*. <https://www.nga.org/center/publications/supporting-state-behavior-health-systems-covid-19/>.
5. U.S. Department of Health and Human Services. (2020). *Waiver or Modification of Requirements Under Section 1135 of the Social Security Act*. <https://www.phe.gov/emergency/news/healthactions/section1135/Pages/covid19-13March20.aspx>.
6. Centers for Medicare & Medicaid Services. (2020) *Fact Sheet: Medicare Telemedicine Health Care Provider*. <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>.
7. Lazur, B., Soblik, L., & King, V. (2020). *Tele-Behavioral Health: An Effective Alternative to In-Person Care*. Milbank Memorial Fund. [https://www.milbank.org/wp-content/uploads/2020/10/TeleBH\\_B\\_6.pdf](https://www.milbank.org/wp-content/uploads/2020/10/TeleBH_B_6.pdf).
8. Centers for Medicare & Medicaid Services. (2022). *Medicare Telemedicine Snapshot: Medicare Claims and Encounter Data: March 1, 2020 to February 28, 2021, Received by September 9, 2021*. <https://www.cms.gov/medicare-telemedicine-snapshot>.
9. Office of Inspector General. (2021). *Opportunities Exist to Strengthen Evaluation and Oversight of Telehealth for Behavioral Health in Medicaid*. <https://oig.hhs.gov/oei/reports/OEI-02-19-00401.pdf>.
10. Berenson, R.A. (2021). Charting a Payment Model for Telehealth Services. <https://www.urban.org/sites/default/files/publication/104246/charting-a-payment-model-for-telehealth-services-bob-berenson-testimony-before-the-us-committee-on-finance.pdf>.
11. Lin, L.A., Fernandez, A.C., & Bonar, E.E. (2020). Telehealth for substance-using populations in the age of Coronavirus disease 2019: Recommendations to enhance adoption. *JAMA Psychiatry*, 77(12), 1209-1210. doi:10.1001/jamapsychiatry.2020.1698.
12. Busch, A., Huskamp, H., Raja, P., Rose, S., & Mehrotra, A. (2022). Disruptions in care for Medicare beneficiaries with severe mental illness during the COVID-19 pandemic. *JAMA Network Open*, 5(1), e2145677. doi:10.1001/jamanetworkopen.2021.45677.
13. Koma, W., Cubanski, J., & Neuman, T. (2021). *Medicare and Telehealth: Coverage and Use During the COVID-19 Pandemic and Options for the Future*. Kaiser Family Foundation. <https://www.kff.org/medicare/issue-brief/medicare-and-telehealth-coverage-and-use-during-the-covid-19-pandemic-and-options-for-the-future/>.
14. Bosworth, A., Ruhter, J., Samson, L.W., Sheingold, S., Taplin, C., Tarazi, W., & Zuckerman, R. (2020). *Medicare Beneficiary Use of Telehealth Visits: Early Data from the Start of COVID-19 Pandemic*. Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. <https://aspe.hhs.gov/reports/medicare-beneficiary-use-telehealth-visits-early-data-start-covid-19-pandemic>.

15. Center for Behavioral Health Statistics and Quality. (2021). *Racial/Ethnic Differences in Mental Health Service Use Among Adults and Adolescents (2015-2019)*. Rockville, MD: Substance Abuse and Mental Health Services Administration (Publication No. PEP21-07-01-002).  
<https://www.samhsa.gov/data/report/raciaethnic-differences-mental-health-service-use>.
16. Samson, L.W., Couture, S.J., Jacobus-Kantor, L., Creedon, T.B, Sheingold, S. (2023). *Updated Medicare FFS Telehealth Trends by Beneficiary Characteristics, Visit Specialty and State, 2019-2021*. Issue Brief No. HP-2023-18. Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. <https://aspe.hhs.gov/reports/updated-medicare-ffs-telehealth-trends>.
17. Centers for Medicare & Medicaid Services. (2022). *Physician Fee Schedule*.  
<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched>.
18. U.S. Congress. (2022). *H.R. 2617 Consolidated Appropriations Act, 2023*.  
<https://www.congress.gov/bill/117th-congress/house-bill/2617/text>.

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