



Bipartisan Policy Center

# **Medicare Telehealth Utilization and Spending Impacts 2019-2021**

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## HEALTH PROJECT

Under the leadership of former Senate Majority Leaders Tom Daschle and Bill Frist, M.D., BPC's Health Program develops bipartisan policy recommendations that will improve health care quality, lower costs, and enhance coverage and delivery. The project focuses on coverage and access to care, delivery system reform, cost containment, chronic and long-term care, rural health, behavioral health, and digital health.

## ACKNOWLEDGMENTS

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## DISCLAIMER

The findings and recommendations expressed herein do not necessarily represent the views or opinions of BPC's founders, its funders, its board of directors, or the members of its Digital Health Advisory Group.

# Table of Contents

---

**4 INTRODUCTION**

---

**4 METHODS**

---

**9 LIMITATIONS**

---

**11 FINDINGS**

---

**26 SPENDING IMPACT TOOL –  
ILLUSTRATIVE SCENARIOS**

---

**28 APPENDIX**

---

**37 ENDNOTES**

# Introduction

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The COVID-19 public health emergency (PHE) caused immense disruptions in health care, but it also ushered in expanded flexibilities in telehealth service coverage that have improved Medicare beneficiaries' access to care in the short term.<sup>1,2</sup> The Bipartisan Policy Center (BPC) sought to develop recommendations for Medicare telehealth coverage after the PHE ends. To inform our effort, BPC undertook a longitudinal, descriptive analysis of Medicare telehealth utilization, pre- and post-declaration of the PHE.<sup>3</sup> The analysis examines quarterly and annual telehealth utilization among fee-for-service Medicare beneficiaries overall and across a range of telehealth services and modalities, as well as by beneficiary and other characteristics. In addition, this study analyzes potential spending impacts to the Medicare program if certain telehealth flexibilities are extended once the PHE ends.

## Methods

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The analysis utilized 100% Medicare outpatient and physician carrier claims and Medicare Beneficiary Summary Files from 2019 through the third quarter of 2021 (the most recently available data at the time of the analysis) to obtain utilization and provider data, as well as beneficiary enrollment, coverage, and demographic information.<sup>4</sup> From these data, the research team defined the study population for each year (or partial year for 2021) to include Medicare fee-for-service (FFS) beneficiaries ages 18 years or older; residing in the 50 states or the District of Columbia; and continuously enrolled in Medicare Parts A and B for a full 12 months of a given calendar year (or partial year for 2021), with no months of Medicare Advantage enrollment.

Two other public data sources supplemented the analytic file: the National Center for Health Statistics' (NCHS) Urban/Rural Classification Scheme, and the Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index (SVI).<sup>5</sup> NCHS county-level classifications include six levels based on 2010 Office of Management and Budget (OMB) standards for defining metropolitan and micropolitan statistical areas; this allowed us to compare telehealth across and within varying levels of urbanicity.<sup>6</sup> The CDC data were used to calculate SVI quartiles using overall ranking by county, a ranking that includes 15 social factors, such as poverty, minority status and language, lack of vehicle access, and crowded housing, to construct a geography-based relative indicator of social vulnerability by beneficiary.<sup>7</sup>

## DEFINING TELEHEALTH AND NON-TELEHEALTH VISITS

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This descriptive analysis assessed telehealth utilization and spending associated with outpatient visits—either in-person or via telehealth—that were authorized by the Centers for Medicare and Medicaid Services (CMS). We define these codes as “telehealth-eligible” services and use this term throughout the report. Focusing on outpatient visits in physician offices and facilities that can be observed through claims, the study combined multiple sources to first identify the range of billing codes that capture the relevant universe of telehealth-eligible services. The scope of the study included only these telehealth-eligible services and not all outpatient visits. These sources included a CMS-designated list of telehealth-eligible by Healthcare Common Procedure Coding System (HCPCS) codes<sup>8</sup>, as well as additional codes derived from the literature<sup>9,10</sup> and recommended by experts who were members of BPC’s Digital Health Advisory Group; the resultant list of telehealth-eligible codes used in the study are presented in the Appendix.

The study next identified all visits associated with these codes. It designated a visit as a telehealth visit if the code was accompanied by a telehealth modifier, place of service indicating a remote visit, or was, by definition, a visit delivered through a telehealth modality (e.g., audio-only visit). Asynchronous “e-consults” and virtual check-ins, identified by HCPCS code and/or ‘GQ’ modifier, are often brief and commonly used to determine whether an office visit or other service is necessary; due to their specific and limited nature, these visit types were excluded from our analysis.

Given the considerable number of telehealth-eligible codes, the study classified codes into the following categories:

- Telehealth Visits
  - Defined by procedure code modifier
    - ‘GT’, ‘GO’ or ‘95’
- OR**
- Place of service code
  - ‘02’ (telehealth provided other than in the patient’s home)
  - ‘10’ (telehealth provided in the patient’s home)
- Audio-Only Visits
  - Defined by procedure code
    - 99441-99443; 98966-98968; G2551-G2552
- In-Person Visits
  - Non-telehealth/non-audio-only study visits

- Primary Care, Behavioral Health and Other Specialty Visits, defined by:
  - Rendering provider’s specialty and, when specialty was not available, by HCPCS procedure code description; the majority of non-institutional claims included rendering provider specialty, but more than 95% of institutional (Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), etc.) claims did not.

## OTHER MEASURE DEFINITIONS

The study examined both overall patterns in telehealth spending and utilization, as well as underlying variation in these patterns, to identify characteristics associated with this variation. The study included stratification analysis by provider, beneficiary population, and area-level factors. Table 1 summarizes the utilization, spending, and stratification measures.

**Table 1. Study Measures**

Measure	Definition	Data Source
<b>Office Visit</b>	A unique encounter for a beneficiary, by provider and date of service	Claims, at both beneficiary and provider levels
<b>Visit Rate</b>	Visits per 1,000 beneficiaries, both by overall study population and within strata	Claims for study visits and beneficiary enrollment-Medicare Beneficiary Summary Files (MBSF)
<b>Spending</b>	Beneficiary out-of-pocket and Medicare spending reported separately and summed up together. We calculated both total dollar amounts and per beneficiary, per month spending. As a result of CMS’s outpatient prospective payment system (OPPS) for institutional claims reimbursement, spending calculated based on these claims relies on revenue codes and is an approximation.	Claims, at both beneficiary and CMS level
<b>Rural/Urban</b>	Based on NCHS’ Urban/Rural Classification Scheme, 6 classifications	Beneficiary level, by ZIP code
<b>SVI</b>	Social Vulnerability Index (U.S. Census Bureau-based)	Beneficiary level, by ZIP code
<b>Race</b>	RTI Race Code	Beneficiary, based on enrollment data (MBSF)
<b>Gender</b>	Male, female as reported upon enrollment	Beneficiary, based on enrollment data (MBSF)
<b>Age</b>	Age at end of calendar year (of study)	Beneficiary, based on enrollment data (MBSF)
<b>Dual Eligibility</b>	Medicare + Medicaid eligible at any point in study year	Beneficiary, based on enrollment data (MBSF)
<b>Medicare Entitlement</b>	Original reason for Medicare entitlement (aged-in, disabled, ESRD and disabled)	Beneficiary, based on enrollment data (MBSF)
<b>Chronic Conditions</b>	CMS defined chronic conditions per the chronic condition warehouse (CCW) <sup>11</sup>	Beneficiary level, MBSF, Chronic Condition annual files
<b>New vs. Established Patients</b>	As indicated by HCPCS code description. When not indicated, new patient visits are defined as a beneficiary’s first visit with a specific provider during a calendar year; after first visit with the same provider, patient is considered established	Claims, at both beneficiary and provider level
<b>Institutional Analysis</b>	Includes service provided by facility-based providers such as FQHC, RHC, Community Mental Health Centers (CMHCs)	Outpatient Institutional claims

# SPENDING IMPACT ANALYSIS

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## Data Sources and Selection

Our analysis of the spending impact relied on the study population, claims, and analytic files that were generated for the descriptive analysis described above. By compiling data within and across populations, we constructed a tool to model estimated beneficiary out-of-pocket and Medicare FFS spending associated with varying levels of telehealth utilization, telehealth modality, beneficiary population characteristics, and Medicare payment parity with in-person visits. The tool enables the user to compare spending based on different scenarios and a specified set of parameters; applying annual health care inflation rates, we then developed spending estimates on a per-beneficiary, per-year level.

Details related to specific model parameters are described below.

- **Projected utilization:** To determine expected telehealth utilization for the spending impact tool, we calculated the median overall visit rate and median telehealth visit rate across the 11 quarters of data in our study<sup>1</sup>; this provided a telehealth utilization estimate of approximately 5.3% of total visits and a median visit rate of 17.5 visits per beneficiary annually. Assuming the median visit rate represents the expected level of overall service utilization moving forward, we calculated the expected level of telehealth utilization (5.3% of total) to be 0.93 ( $.053 \times 17.5 = 0.93$ ) visits per beneficiary annually. The lower and higher than expected telehealth utilization values included in the model are 0.76 and 1.11 visits per beneficiary annually, with telehealth representing 4.3% and 6.3% of the total visits, respectively.
- **Enrollment:** The estimated spending produced by the tool is based on a total population size of 28,212,465 beneficiaries. This figure represents the 2021 enrollment number for our study population.
- **Unit cost:** The tool uses two per unit spending measures, a “Medicare cost per service” and a “beneficiary cost per service,” representing the average spending for telehealth visits to the Medicare program and to the beneficiary in 2021. In Q1-Q3 2021, based on our study population and study parameters, Medicare spent a total of \$2,934,355,819 on 25,249,283 telehealth visits, for a per visit Medicare cost of \$116.22. In that same period, beneficiaries spent a total of \$60,333,268 across those 25,249,283 visits, for a per visit beneficiary cost of \$2.39.

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<sup>1</sup> We chose the median due to the high degree of pandemic related variability in utilization.

- **Beneficiary selection (chronic condition levels):** Based on CMS’s 27 chronic condition (CC) categories,<sup>12</sup> we totaled the number of CCs for each study beneficiary in each year, which enabled us to determine the distribution of CCs within the population. The spending model allows users to select groups of patients with 0, 1+, 5+, and 9+ identified CCs; the cost estimator tool multiplies the per beneficiary telehealth visit rate by the corresponding share of telehealth visits that were made up by the selected group of beneficiaries (averaged across 2020 and Q1-Q3 2021).
- **Payment rate (percent of parity):** We assume that payments for telehealth services in 2021 were made at parity (equal to) the in-person payment rates for these services in the same period. The tool allows setting payment rates below parity as well.
- **Service and provider type:** Flexibilities offered by the model include estimates specifically for primary care, behavioral health, and other specialty visits; spending estimates for facility-based services can be calculated separately as well, with categories including FQHC, RHC, and CMHC.
- **Modality:** The model allows selection of all telehealth, audio-and-video, and audio-only visits, according to general study definitions.
- **New vs. established patients:** The model offers a selection of new, established, or all patients, as defined in Table 1. Similar to other model calculations, the per beneficiary telehealth visit rate is adjusted by the proportion of telehealth visits that were made up by the selected group of beneficiaries, averaged across 2020 and Q1-Q3 2021. For example, approximately 77.8% of telehealth visits were for established patients in 2020 and Q1-Q3 2021. Selecting the “Established” option on the “New vs. Established Patients” lever thus multiplies the per beneficiary telehealth visit rate by 0.778.
- **Inflation adjustment:** To adjust 2021 spending to projected spending estimates for 2022-2025, we applied a medical price inflation rate of 2.4% per year, consistent with CMS’s use of the Personal Health Care (PHC) deflator to adjust for inflation in medical spending in its National Health Expenditure projections.<sup>13</sup> This index projects that the price of medical goods and services will increase by an average of 2.4% per year between 2019 and 2028.<sup>14</sup>



# Limitations

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The analysis could potentially undercount the number of actual telehealth visits to an extent that may be difficult to quantify. Although most of the codes used in the analysis are not new, the expanded flexibilities and the evolving CMS guidance during the study period increase the likelihood that providers may not be using them correctly or consistently. It is possible that these inconsistencies are not randomly distributed, and thus may disproportionately affect data for particular providers or settings, or for particular visit types. Further, because of payment parity, providers do not have a strong incentive to distinguish between in-person and virtual services on their claims.

Given that our access to Medicare FFS data was limited to the first three quarters of 2021, it is not possible to compare 2021 to prior complete years, but this information is presented along with full calendar year data in descriptive tables.

The costs associated with visits occurring in a hospital outpatient department or clinic are found on outpatient claims and are close approximations of true Medicare payments. This is a result of CMS's reimbursement policy for institutional providers under the Outpatient Prospective Payment System (OPPS), which is based on a combination of clinical indicators, an OPPS conversion factor, and adjustments for the geographic location of a facility. Additionally, there are exceptions to the application of the OPPS, but these instances are not transparent in claims data. For these reasons, we rely on the Medicare and beneficiary spending reported on outpatient institutional claims, keeping in mind that these amounts may not reflect true spending levels. But we assume that they allow us to compare relative spending between types of visits and beneficiary groups as approximations of the true amounts. For these reasons, we present a separate subset of our analysis for institutional providers only, in addition to the combined analysis.

We posit that our analysis potentially overcounts the number of established patient visits relative to the number of new patient visits due to a specific data limitation: audio-only telehealth codes available during the study period specifically state that they should be used for established patients. However, in March 2020, CMS relaxed billing restrictions to allow these audio-only codes to be used for both new and established patients. To ensure consistency, we based our new and established categories on HCPCS code descriptions; when visits were billed under HCPCS codes that do not specify new or established patients in their descriptions, we looked at the sequence of beneficiary visits to each provider seen in the calendar year and defined a new visit as a patient's first visit of the year with a specific provider. The HCPCS definition of established patients is based on a three-year lookback period for most services. Given the

constraints imposed by data availability, we were unable to use this lookback period, and this possibly also led to an undercount of established patient visits in total and, in particular, for audio-only visits. We were also unable to identify cases when different providers in the same practice saw patients.

Our analysis may not necessarily be generalizable outside of the PHE context. The nationwide implementation of telehealth coverage flexibilities during the pandemic undermines the ability to articulate a strong counterfactual – that is, it is difficult to empirically structure a scenario using traditional comparison groups in which one can observe what would have happened without the telehealth policy changes. The national picture of telehealth usage could also obscure substantial variation across geographic health care markets shaped by provider supply and practice patterns; beneficiaries' access to broadband; the timing and severity of COVID waves; and other factors. However, with nearly two years of PHE-era data, and the ability to examine patterns by quarter, the results indicate that pandemic effects may be leveling out. These data also offer a glimpse into general patterns, even if the magnitudes may not precisely reflect patterns post-PHE.

Finally, this analysis does not include beneficiaries enrolled in Medicare Advantage and therefore does not provide a complete picture of telehealth utilization in the Medicare program.

In addition to the different payment mechanisms for facility- versus non-facility-based providers described earlier in this report, the development of the Telehealth Spending Estimator model confronted challenges related to timing and data availability. The model relies on 11 months of Medicare FFS cost and utilization data during a period with fluctuating levels of PHE contagion, illness, and resource burden, as well as changing telehealth policy. Given the uncertainty of the future health care landscape, including pandemic-related health care needs and ongoing patient/provider take-up of remote care, the model gives us the flexibility to assess a range of options related to model parameters, such as payment parity and certain types of visits – new versus established patient visits. An important limitation is that the model does not account for any downstream cost savings from the use of telehealth, such as avoidance of emergency room visits. Similarly, it does not include potential downstream increases in telehealth-induced utilization.

# Findings

The research team calculated a range of descriptive statistics to examine quarterly and annual telehealth utilization patterns. Table 2 presents the overall beneficiary study population, a subset of which had at least one telehealth-eligible visit, and overall trends in telehealth visits. Across the study period, and noting that 2021 comprises only three quarters, the number of telehealth users and telehealth visits increased dramatically from 2019 to 2020: Approximately 44% of the beneficiary population had at least one telehealth visit in 2020, and telehealth visits represented nearly 10% of all telehealth-eligible visits. However, the shares of telehealth users and visits appeared to decrease notably in the first three quarters of 2021, although they remained higher than the 2019 pre-PHE levels.

**Table 2. Study Population and Trends in Telehealth Use**

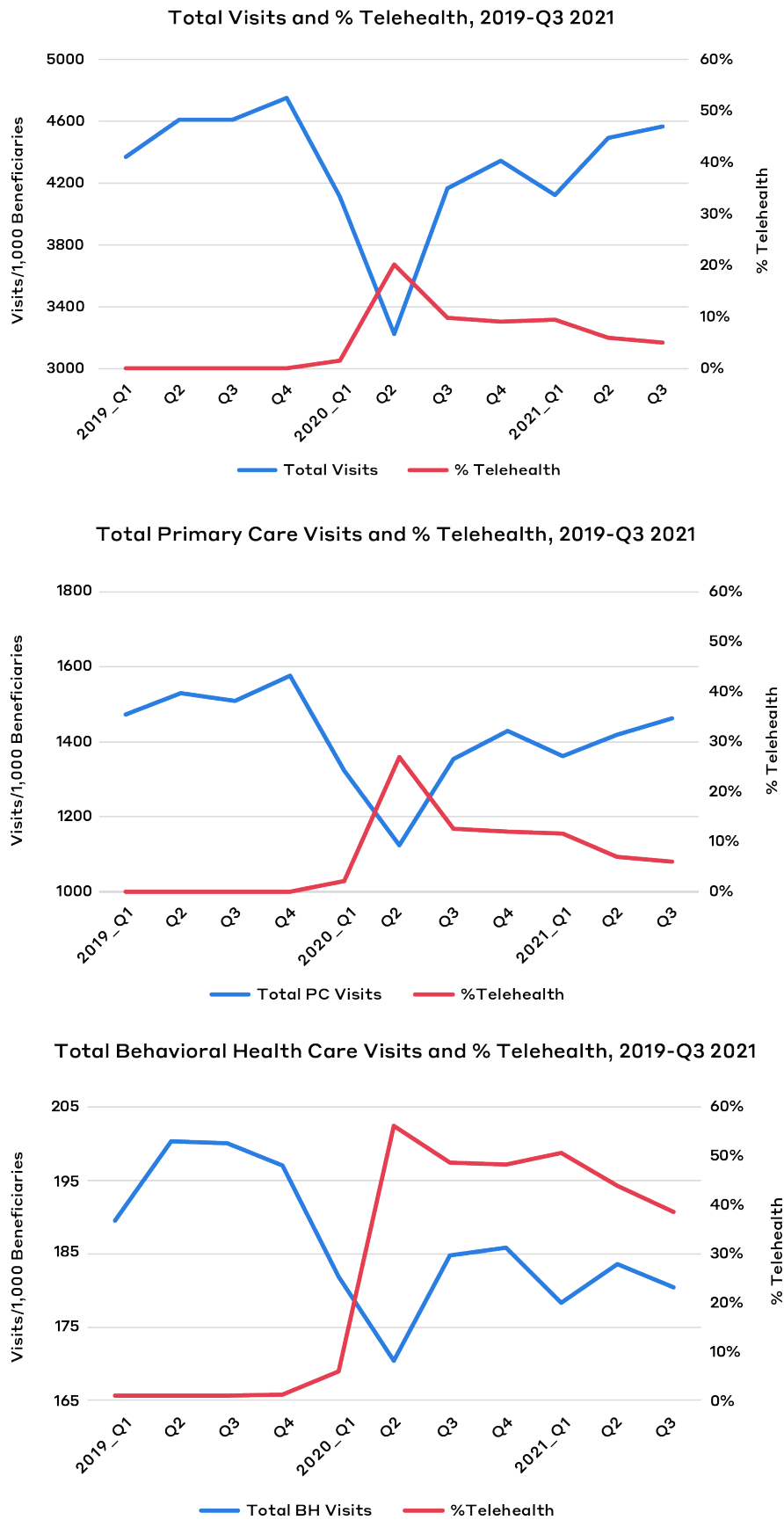
	2019	2020	2021 Q1-Q3
<b>Study population</b>	30,339,433	29,550,125	28,212,465
<b>Telehealth users*</b>	205,914	12,988,415	7,931,506
<b>Telehealth users as a percent of study population</b>	1%	44%	28%
<b>Total telehealth visits</b>	645,195	45,035,087	25,249,283
<b>Telehealth visits as a percent of all visits included in study</b>	0.12%	9.61%	6.79%

\*Beneficiaries in the study who had at least one telehealth (and/or audio-only) visit during the study period.

## TYPES OF TELEHEALTH SERVICES USED

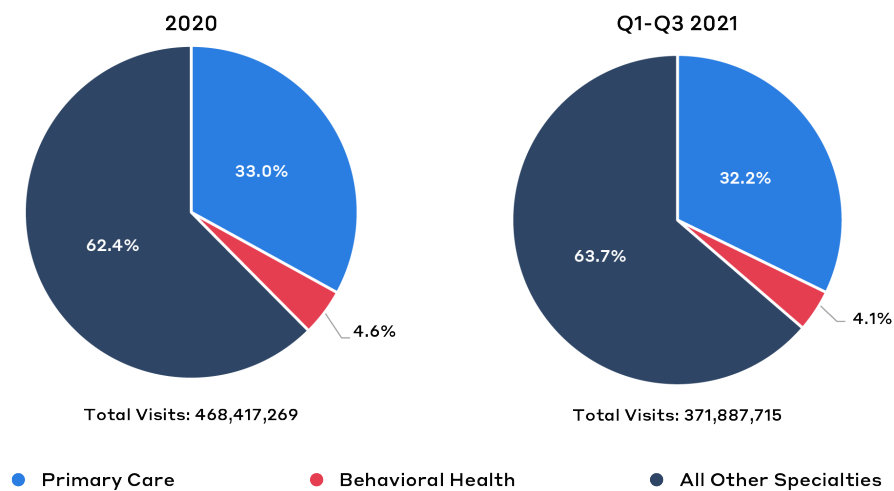
The line graphs below in Figure 1 illustrate the quarterly variation in total telehealth-eligible visits, the shares of these visits attributed to telehealth overall, and telehealth visits by specialty.

**Figure 1. Telehealth Eligible Visits Overall and by Specialty**



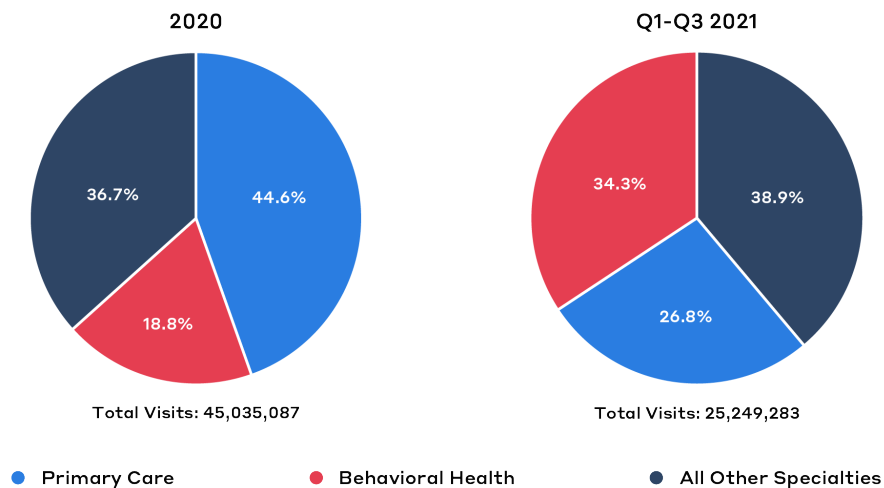
Figures 2 and 3 show the distribution of all telehealth-eligible services by specialty and of all services delivered via telehealth by specialty. In both time periods, primary care services made up the highest share of telehealth visits, followed by behavioral health, and all other specialties as a group. Of note is that while behavioral health visits accounted for only 4% of all study visits (Figure 2), they represented approximately 27% of telehealth visits in Q1-Q3 2021 (Figure 3), up from 19% in 2020. In Q1-Q3 2021, approximately 44.3% of behavioral health visits occurred via telehealth. Proportionally, behavioral health telehealth utilization was highest in 2019, but not highlighted here, as all-specialty telehealth utilization accounted for less than 1% of all study visits in 2019.

**Figure 2. Total Visits by Specialty, 2020 and 2021**



\*Total Visits refers to only those visit codes included in this study and not all Medicare visits

**Figure 3. Total Telehealth Visits by Specialty, 2020 and 2021**



In addition to primary care and behavioral health, we also examined telehealth visits among other specialties—see Table 3. The specialties included in the analysis were selected based on a combination of specialties associated with the treatment of the top ten chronic conditions among Medicare FFS beneficiaries and the highest volume of overall Part B non-institutional claims. We found concordance across these two approaches. Although specialties’ proportions of all study visits remained consistent across years, the proportions of those visits provided as telehealth varied within some groups. In particular, rates of telehealth use for cardiology increased from 0.02% in 2019, to 11.7% in 2020, and fell to 5.4% in Q1-Q3 2021.

**Table 3. Telehealth Use Among Other Specialties**

Clinical Specialty	Specialty % All Study Visits 2019	% TH in Specialty 2019	Specialty % All Study Visits 2020	% TH in Specialty 2020	Specialty % All Study Visits 2021 (Q1-Q3)	% TH in Specialty 2021 (Q1-Q3)
<b>Neurology</b>	1.6%	0.23%	1.6%	18.4%	1.5%	13.6%
<b>Hematology</b>	1.3%	0.06%	1.4%	10.4%	1.3%	7.3%
<b>Cardiology</b>	4.5%	0.02%	4.6%	11.7%	4.4%	5.4%
<b>Orthopedics</b>	2.0%	0.01%	2.0%	2.9%	2.0%	1.4%
<b>All Other</b>	50.8%	0.06%	50.5%	4.1%	52.1%	2.8%

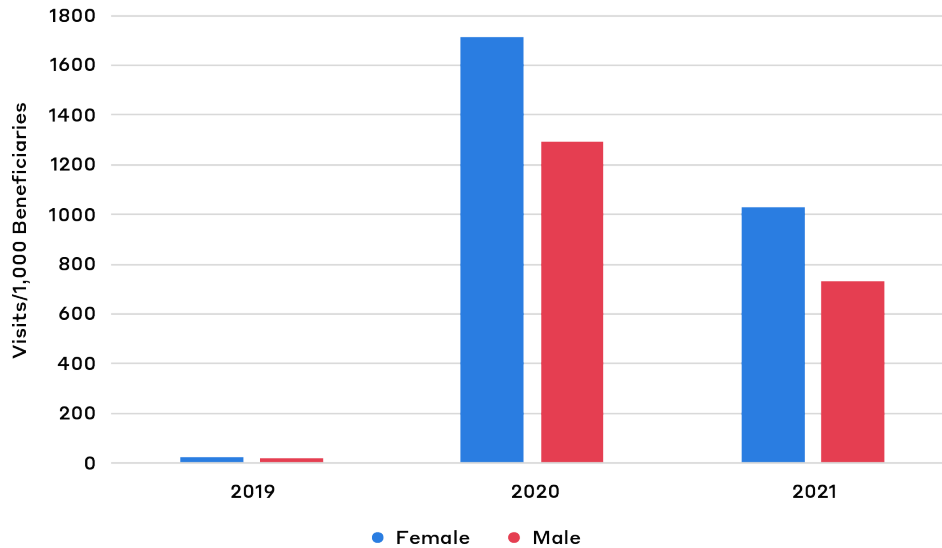
## CHARACTERISTICS OF TELEHEALTH USERS AND INTENSITY OF USE

In this section, we examine telehealth utilization by beneficiary and other characteristics using the parameters outlined in Table 1. Our focus here is on telehealth use across beneficiary groups that may be at particular risk of limited care access, either due to the complexity of patients’ health care needs or due to resource and other constraints that might affect access. Specifically, we characterize telehealth use in two ways: by total number and percent of study population, and by the rate of use (visits per 1,000) within the study stratum.

### Telehealth Use by Gender

In all three years, women represented 55% of beneficiaries in the study population (see Figure 4). Female beneficiaries utilized disproportionately more office visits (58%) and telehealth visits (59%-63%) than men in all study years. The difference in telehealth use between females and males is most pronounced in behavioral health utilization. In 2020 and 2021 Q1-Q3, 67%-68% of behavioral telehealth visits were for female beneficiaries.

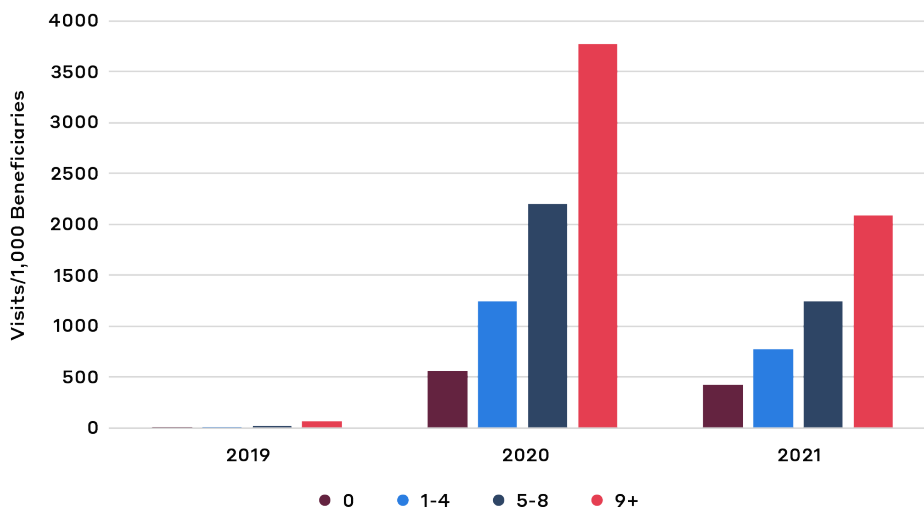
**Figure 4. Telehealth Use by Gender**



### Telehealth Use Among Beneficiaries with Chronic Conditions

Our analyses showed that the vast majority of the study population (more than 90%) had at least one chronic condition, and beneficiaries with multiple chronic conditions represented a disproportionate share of telehealth users. Beneficiaries with five or more chronic conditions represented approximately 38% of all study beneficiaries who had an in-person or telehealth visit, as determined by having one or more services billed under one of the study's HCPCS codes (codes authorized for telehealth services), and they represented 50% of study telehealth users. As shown in Figure 5, we also found that visit rates increased with the number of chronic conditions.

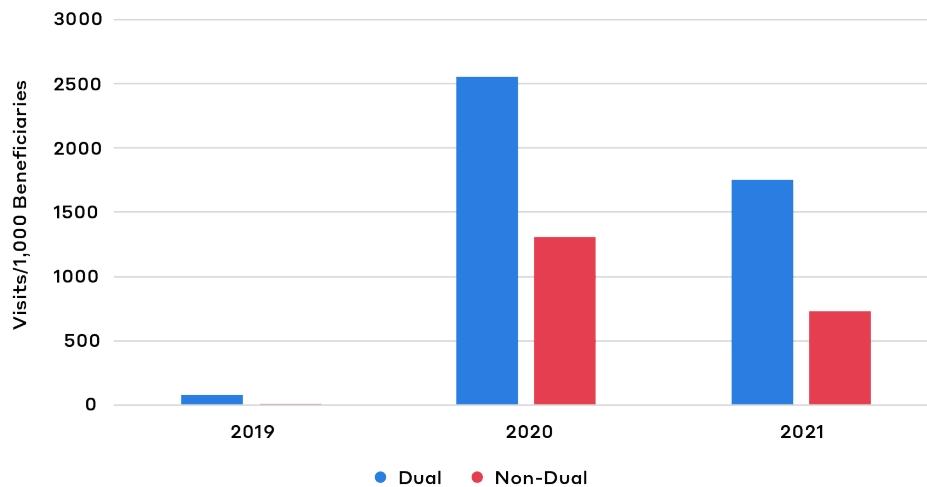
**Figure 5. Telehealth Use by Number of Beneficiary Chronic Conditions**



## Telehealth Use Among Dual-Eligible Beneficiaries

Figure 6 shows that beneficiaries who qualified for both Medicare and Medicaid based on income (dual-eligible beneficiaries), and who often face complex medical and psychosocial needs, had telehealth visit rates that were higher than non-dual-eligible beneficiaries. We also observed that although dual-eligible beneficiaries represented less than 20% of the overall study population, they were overrepresented as telehealth users (53%, 21%, and 23%, in 2019, 2020, and Q1-Q3 2021, respectively).

**Figure 6. Telehealth Use by Dual Eligibility Status**

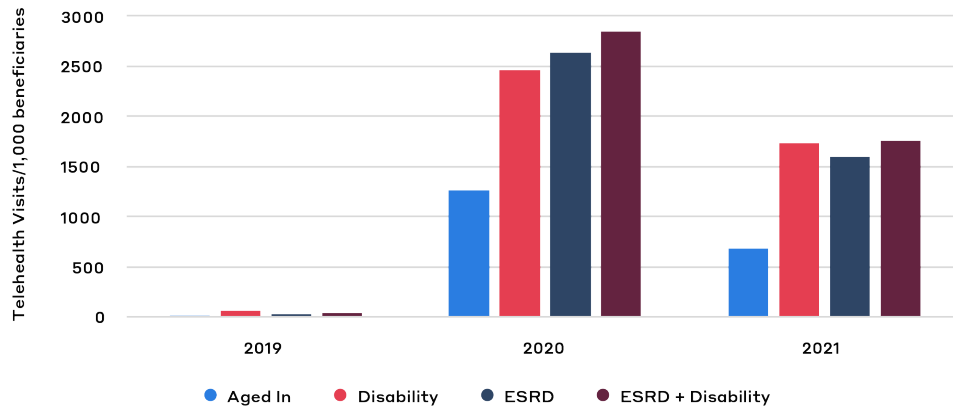


## Telehealth Use by Original Reason for Medicare Entitlement

Examining rates of telehealth use by Medicare entitlement indicates that beneficiaries who qualified for Medicare based on disability, end-stage renal disease (ESRD), or ESRD + disability represented a disproportionate share of telehealth users: a combined 22% of the overall study population, but 56%, 25%, and 28% of telehealth users in 2019, 2020, and Q1-Q3 2021, respectively. Similarly, we also found that during the study period, telehealth visits per 1,000 were highest among beneficiaries who qualified for Medicare based on ESRD + disability (see Figure 7); visit rates among beneficiaries qualifying for Medicare for reasons other than age were more than twice the rate for those who aged into Medicare in 2020 and 2021.



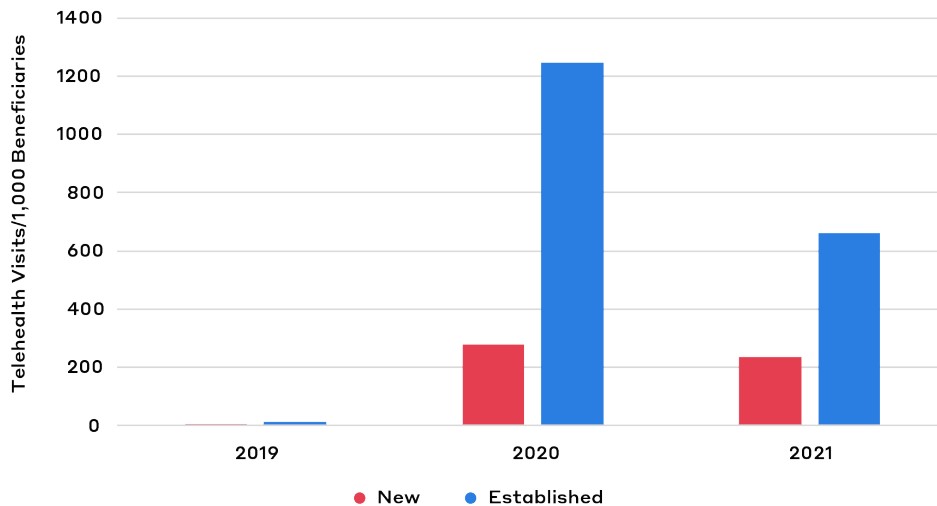
**Figure 7. Telehealth Use by Original Reason for Medicare Entitlement**



## TELEHEALTH USE AMONG NEW AND ESTABLISHED PATIENTS

In 2020 and the first three quarters of 2021, the majority (approximately 74%-82%) of all telehealth visits were among established patients. There was variation by type of specialty, with 95%-96% of primary care visits provided to established patients and only 35-36% of tele-behavioral health visits provided to established patients (see Figure 8). However, as described in the Limitations section of this report, there are several reasons for the potential misclassification of new and established patient relationships in our analysis.

**Figure 8. Telehealth Use by New and Established Patients**



\***Established** Patient Visits defined by CPT code description or if two or more visits with the same provider in the same year.

## TELEHEALTH UTILIZATION BY MODALITY

Telehealth services can be rendered through a variety of modalities spanning audio-only and audio-and-video technologies. Audio-only access to visits represents an avenue for expanding access to beneficiaries who may not have high levels of digital literacy or access to broadband or devices. As shown in Table 4 below, audio-only visits represented 23.54% of overall telehealth visits in 2020.

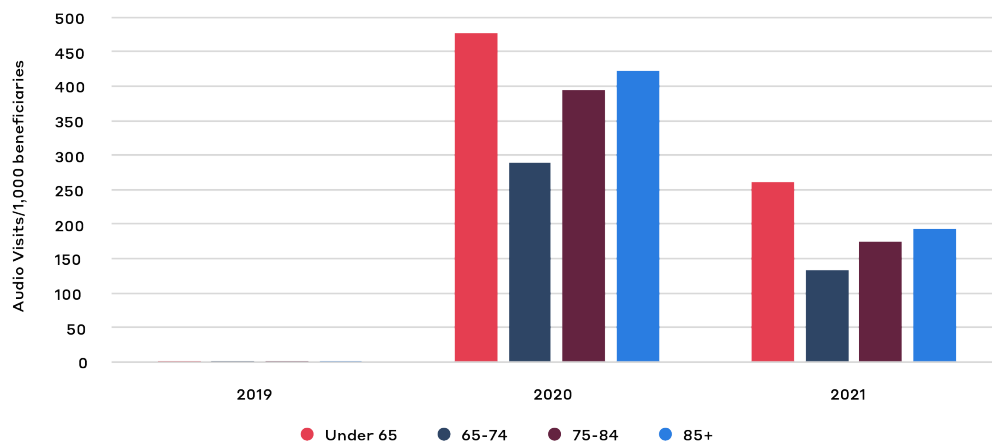
**Table 4. Audio-Only Telehealth Use**

	2019	2020	2021 Q1-Q3
<b>Study population</b>	30,339,433	29,550,125	28,212,465
<b>Telehealth users*</b>	205,914	12,988,415	7,931,506
<b>Audio-only users as a percent of study population</b>	0.1%	19.1%	9.8%
<b>Audio-only visits</b>	37,658	10,602,807	4,743,868
<b>Audio visits as a percent of telehealth visits</b>	5.84%	23.54%	18.79%

\*Beneficiaries in the study who had at least one telehealth (and/or audio-only) visit during the study period.

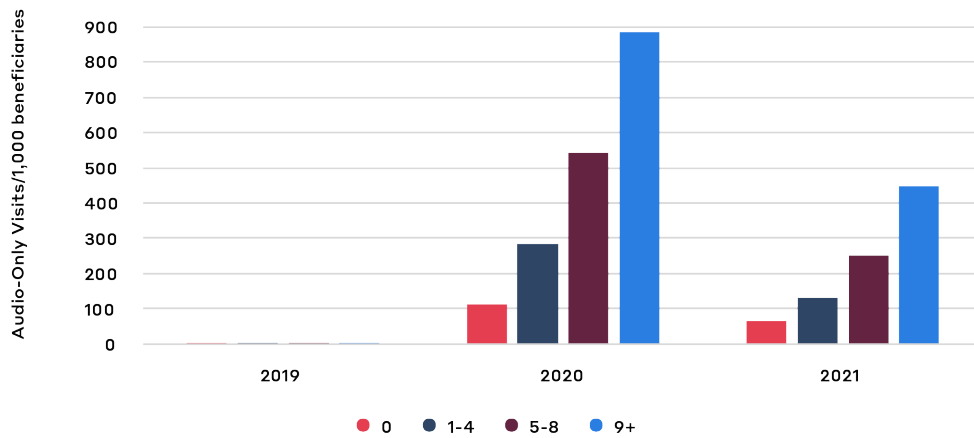
Figure 9 shows that in 2020 and 2021 Q1-Q3, beneficiaries under age 65 and those over age 75 represented a disproportionately high share of audio-only TH users, compared with their underlying distribution in the study population. In all three study years, beneficiaries under age 65 had the highest rates of telehealth utilization overall. In 2019, more telehealth visits were for beneficiaries under 65 than for any other age group. However, in 2020 and 2021 Q1-Q3, beneficiaries ages 65 to 74 accounted for the greatest share of telehealth visits by volume. The timing of the growth in telehealth use by these groups coincided with the expansion of telehealth use in the Medicare fee-for-service population overall.

**Figure 9. Audio-Only Telehealth Use by Age Category**



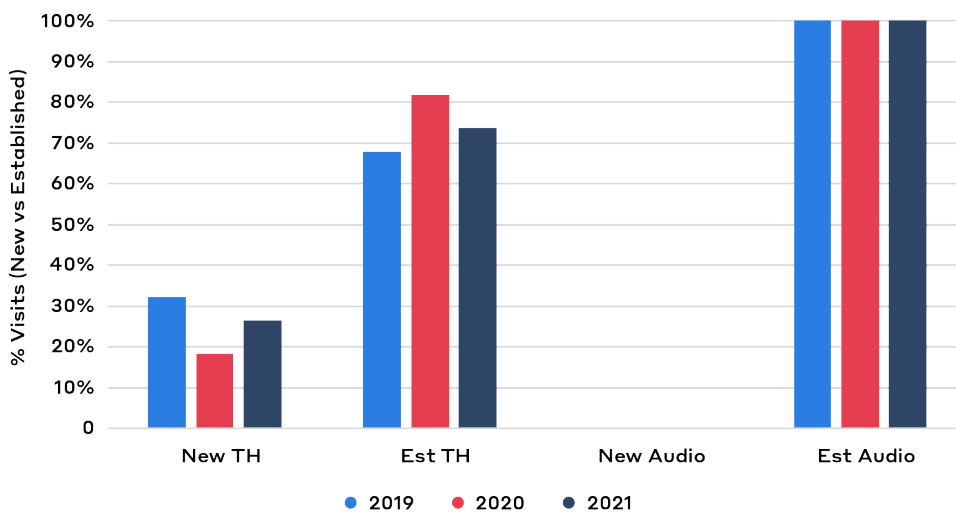
Similar to overall telehealth visit rates, audio-only visit rates increased for beneficiaries with more chronic conditions as shown in Figure 10. Compared with their distribution in the study population, beneficiaries with five or more chronic conditions were disproportionately overrepresented among audio-only users.

**Figure 10. Audio-Only Telehealth Use by Number of Beneficiary Chronic Conditions**



All audio-only visits were attributed to established patients in this study due to the specifications of audio-only HCPCS codes, which restrict their use to established patients only. However, this finding is likely overstated, as CMS in March 2020 relaxed billing restrictions to allow these codes to be billed for new as well as established patients.

**Figure 11. Telehealth and Audio-Only Telehealth Use by New and Established Patients**



A small percentage (0.1%) of the study population had at least one audio-only visit in 2019. In 2020 and 2021 Q1-Q3, 19% and 10% of the study population had at least one audio-only visit, respectively. Rates of audio-only visits per 1,000 beneficiaries followed similar trends, increasing from 0.3 in 2019 to 169.5 in Q2 2020, and decreasing to 40.2 by Q3 2021. In general, audio-only telehealth users were predominantly female (60%), ages 65-74 (40%), non-Hispanic White (68%-80%), aged-in to Medicare (64%-74%) and living in large and medium metropolitan areas (72%-81%). Figure 11 illustrates the share of new and established patient visits by year and type for all telehealth users.

## TELEHEALTH AND HEALTH EQUITY

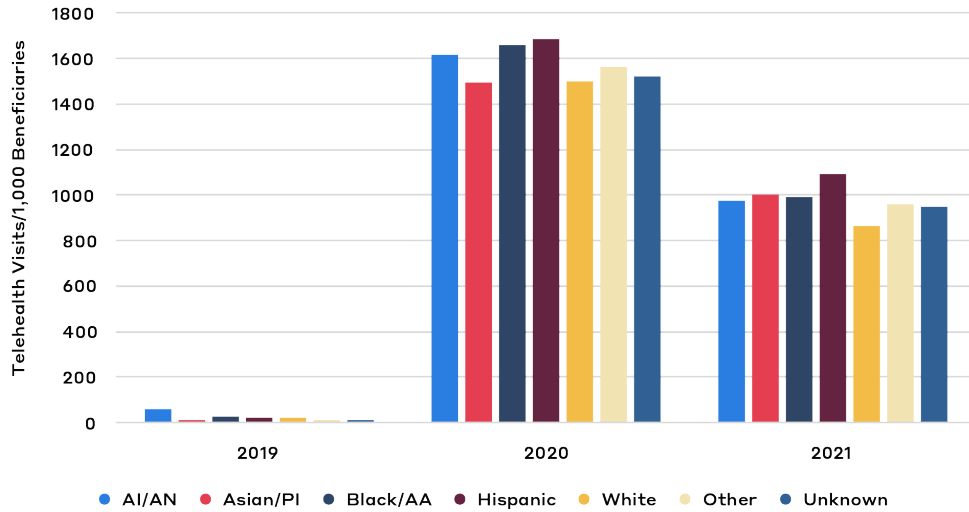
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We examined the impact of the CMS telehealth flexibilities on health equity based on beneficiary characteristics such as race/ethnicity, Social Vulnerability Index, and geographic location (i.e., rural/urban). Telehealth can play a role in addressing access disparities in communities that have faced historical barriers, such as communities of color, or among provider types that often serve as safety net providers.

When stratifying telehealth users in the study population, we found that the distribution of beneficiaries using telehealth by race and ethnicity was roughly proportionate to the distribution of the overall study population by race and ethnicity.

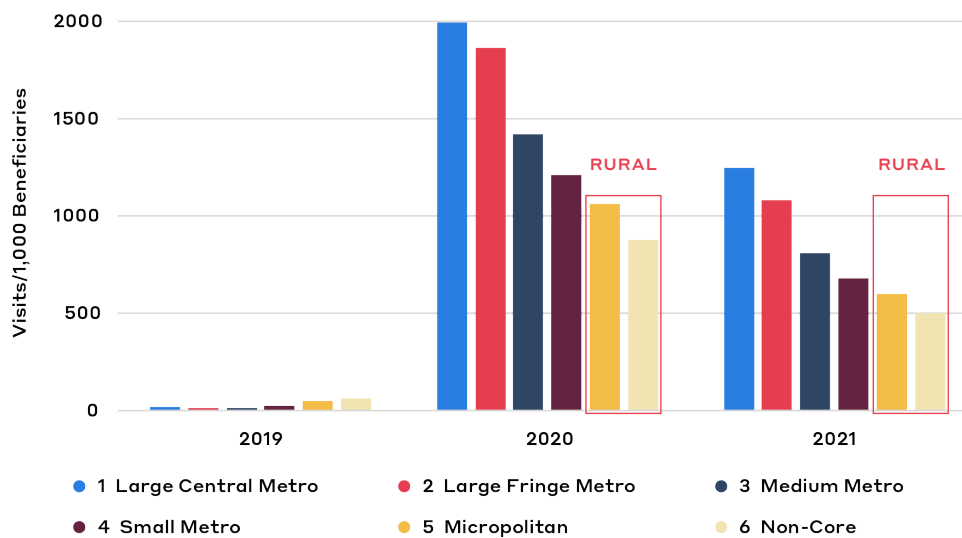
However, we found variation in telehealth visit rates across racial and ethnic groups as shown in Figure 12. Telehealth visit rates for American Indian/Alaska Native (AI/AN), Black/African American (AA), and Hispanic groups exceeded the overall telehealth rates, with AI/AN beneficiaries representing the highest audio-only visit rates. Non-Hispanic/White telehealth visit rates were lower than the overall telehealth visit rates by 2%, on average, across the study period. Behavioral health telehealth rates were some of the highest among Black/AA and non-Hispanic whites in 2020 and 2021.

**Figure 12. Telehealth Use by Race/Ethnicity**



Rates of telehealth utilization by geography vary directly with the size of region. Specifically, Large Central Metropolitan (“central” counties with at least 1 million population) and Large Fringe Metropolitan (“fringe” counties with at least 1 million population) areas saw higher telehealth visit rates, compared with telehealth visit rates across all NCHS groups in 2020 and 2021. Primary care telehealth visit rates were highest in Large Central (250,000-999,999 population) and Large Fringe Metropolitan (50,000-249,999 population) areas in 2020 and 2021 (data not shown). Rural areas, including Micropolitan (counties in micropolitan statistical areas, MSA) and Noncore (counties not within an MSA), had the lowest visits per 1,000 enrollees (see Figure 13).

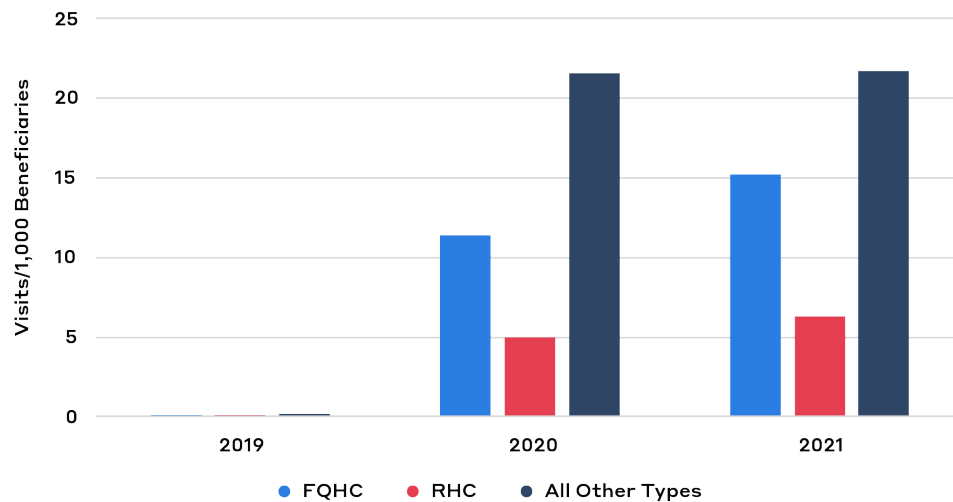
**Figure 13. Telehealth Use by Urbanicity/Rurality**



Another approach to examining access to underserved populations is to characterize telehealth visits offered by facilities such as FQHCs, RHCs, and CMHCs. Care provided in these facilities allows greater access to affordable preventive and behavioral health care services for many patients in rural and underserved communities. In addition, CMS’s expanded telehealth policy for FQHCs and RHCs further increases access to at-risk communities.

We found in our analysis that facility visits made up between 11% to 13% of all study visits, with Part B providers accounting for the remainder. Of all telehealth visits, facility-based providers were responsible for an increasing share over the three years, from 2019, to 2021 (1%, 2%, and 5%, respectively). As shown in Figure 14, RHCs had the lowest telehealth visit rates, compared with FQHCs and all other facility-based provider types, although the share of telehealth visits provided in both FQHCs and RHCs increased from 2020 into 2021, while all other specialty telehealth visits/1,000 remained steady. Together, FQHCs and RHCs represented the highest share of facility telehealth visits in 2020 and 2021, compared with visit rates in any other individual facility type (e.g., Community Mental Health Centers, ESRD Clinics, Rehabilitation Hospitals, Long-Term Acute Care Hospitals (LTCHs), and other facility-based provider types).

**Figure 14. Telehealth Use by Facility (Outpatient) Provider Type**



## MEDICARE AND BENEFICIARY SPENDING ON TELEHEALTH

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Between 2020 and 2021 Q1-Q3, Medicare spending on telehealth totaled approximately \$7.2 billion, including both Medicare payments and beneficiaries' out-of-pocket (OOP) payments; this spending represented approximately 2% of total Medicare and beneficiary spending on in-person and telehealth study visits. During this period, the percentage of telehealth spending paid by beneficiaries increased from 1.5% to 2% (\$0.18 to \$0.24 per beneficiary, per month, in CY2020 and Q1-Q3 2021, respectively), despite the Office of the Inspector General (OIG) at the U.S. Department of Health and Human Services allowing providers to reduce or waive beneficiary cost-sharing for telehealth visits during the PHE. Beneficiary OOP spending on telehealth (audio only and video visits) as a percent of total TH spending varied by specialty, with primary care visits having the highest out-of-pocket percentage in both years (ranging from 3.7-6.6%) compared with behavioral health visits (0.9%) and other specialty visits (0.2-0.3%). Beneficiary OOP spending on audio-only TH as a percent of total audio-only spending also varied by specialty with behavioral health having the highest percentage (1.3% and 1.9% in 2020 and 2021 Q1-Q3, respectively). Per beneficiary, per month (PBPM) spending on all telehealth was highest in second quarter 2020 (\$17.15) and showed an overall decrease to \$10.77 in third quarter 2021, with annual average values of \$11.99 in 2020 and \$11.79 PBPM in 2021 (Q1-Q3).

To inform our cost modeling, it was important to understand the level of payment parity for telehealth services in CY2019 with Q1-Q3 2021, when CMS policy provided payment for most telehealth visits at 100% of in-person visits. Using Q1-Q3 2021 as our baseline for in-person and telehealth visit payment rates allowed us to determine pre-PHE (2019) spending levels relative to 2021. With telehealth use minimal before the PHE, we based our parity-in-payment comparison on only those codes that were billed as telehealth on claims for study beneficiaries in CY2019. As illustrated in Table 5, non-facility based average spending per telehealth visit in CY2019 ranged from 57% (behavioral health) to 72% (primary care) of average telehealth visit spending in Q1-Q3 2021. We did not analyze the pre-pandemic percent parity for facility visits given the limitations discussed previously about OPPS payments and our payment analysis may not represent true Medicare spending for these services.

**Table 5. Telehealth Spending Parity, CY2019 vs. Q1-Q3 2021**

Visit Type	2019	2019	Q1-Q3 2021	Q1-Q3 2021	2019 vs. 2021
<b>Non-Facility</b>	Total Spend (Beneficiary & Medicare)	Average Spend/ Visit	Total Spend (Beneficiary & Medicare)	Average Spend/ Visit	% of Average Spend/Visit
<b>Primary Care (non-facility)</b>	\$9,664,525	\$57.03	\$816,726,559	\$79.45	72%
<b>Behavioral Health (non-facility)</b>	\$18,554,639	\$59.66	\$2,445,483,568	\$105.42	57%

As noted in the Limitations section of this report, our telehealth spending model is based on observed spending and the utilization of telehealth-eligible patient visits for the 11-quarter window, a dynamic period with respect to Medicare telehealth policy and visit coding requirements. Tables 6 and 7 provide a summary of overall spending, as measured according to study parameters, for FFS Medicare and its enrollees, respectively, for 2019 through the third quarter of 2021.

**Table 6. Overall Medicare Spending**

Paid Amounts*	2019	2020	2021 Q1-3
<b>Total Paid for all study visits (In-person + TH)</b>	\$226,408,513,623	\$214,131,794,403	\$166,705,617,596
<b>Total Pay for all TH visits (Medicare + Beneficiary OOP)</b>	\$51,943,798 (0.02% of Total Paid)	\$4,252,910,765 (2.0% of Total Paid)	\$2,994,689,087 (1.8% of Total Paid)
<b>Total Paid for audio-only visits (Medicare + Beneficiary OOP)</b>	\$607,533 (1.2% of Total Paid for TH)	\$564,228,299 (13.3% of Total Paid for TH)	\$282,062,814 (9.4% of Total Paid for TH)
<b>Percent of Total TH payments paid for by beneficiaries</b>	1.0%	1.5%	2.0%
<b>Total Paid PBPM</b>	\$621.88	\$603.87	\$656.55
<b>Telehealth Total Paid PBPM</b>	\$0.14	\$11.99	\$11.79

\*Actual payments may vary from numbers here pending claims adjustments and application of OPPS rules for institutional (outpatient) claims.

\*\*Audio-only codes billed in 2019 include: 99442, 99443, 99441, 98966, 98967, 98968 (see Appendix for detailed descriptions).



**Table 7. Medicare Beneficiary OOP Spending**

Spending Type	2019	2020	Q1-Q3 2021	% Total TH \$ by Specialty, 2019	% Total TH \$ by Specialty, 2020	% Total TH \$ by Specialty, 2021
<b>Total PC TH \$</b>	\$9,983,303	\$1,259,281,552	\$675,039,997			
<b>OOP Primary Care TH</b>	\$438,492	\$47,071,215	\$44,233,474	<b>4.4%</b>	<b>3.7%</b>	<b>6.6%</b>
<b>Change OOP PC TH \$ (YoY)</b>		<b>+10635%</b>	<b>-6.0%</b>			
<b>Total Behavioral Health TH \$</b>	\$22,273,416	\$1,777,728,225	\$1,499,373,369			
<b>OOP Behavioral Health TH \$</b>	\$55,892	\$15,247,370	\$13,708,417	<b>0.3%</b>	<b>0.9%</b>	<b>0.9%</b>
<b>Change OOP BH TH \$ (YoY)</b>		<b>+27180%</b>	<b>-10%</b>			
<b>Total Other Specialty TH \$</b>	\$19,687,079	\$1,215,900,988	\$820,274,721			
<b>OOP Other Specialty TH \$</b>	\$9,281	\$2,610,496	\$2,391,377	<b>0.05%</b>	<b>0.2%</b>	<b>0.3%</b>
<b>Change OOP OS TH \$ (YoY)</b>		<b>+28027%</b>	<b>-8.4%</b>			

# Spending Impact Tool – Illustrative Scenarios

To illustrate the functionality of our spending estimator, we present three scenarios and the associated projected spending estimates below (Table 8). These scenarios are designed to explain how the tool functions and do not correspond to BPC policy positions or recommendations. As a baseline for comparison, 2021 telehealth expenditures for Medicare were approximately \$3.12 billion (Medicare program costs plus beneficiary OOP cost). This totaled an estimated \$110.60 per beneficiary per year in 2021.

**Table 8. Medicare Telehealth Projected Spending Estimates**

Telehealth Spending Calculator			
Selection	Model 1	Model 2	Model 3
<b>Projected Utilization</b>	Expected	Higher	Lower
<b>Beneficiary Selection (Chronic Conditions)</b>	1+	5+	0
<b>Payment Rate (percent of parity with in-person services)</b>	85%	95%	80%
<b>Service and Provider Type</b>	All	Primary Care	Behavioral Health
<b>Modality</b>	Audio-Video	Audio-Video	All Telehealth
<b>New vs. Established Patients</b>	All	All	All
<b>Projected Medicare Telehealth Spending (2022)</b>	\$ 2,015,011,786	\$646,849,327	\$14,809,133
<b>Projected Bene OOP Telehealth Spending (2022)</b>	\$41,430,642	\$13,299,864	\$304,490
<b>Projected Medicare + Bene Telehealth Spending (2022)</b>	<b>\$2,056,442,428</b>	<b>\$660,149,191</b>	<b>\$15,113,623</b>
<b>Projected Medicare + Bene PBPY Telehealth Spending (2022)</b>	<b>\$72.89</b>	<b>\$23.40</b>	<b>\$ 0.54</b>
<b>Projected Medicare Telehealth Spending (2023)</b>	\$2,063,372,069	\$662,373,711	\$15,164,552
<b>Projected Bene OOP Telehealth Spending (2023)</b>	\$42,424,977	\$13,619,061	\$311,798
<b>Projected Medicare + Bene Cost (2023)</b>	<b>\$2,105,797,046</b>	<b>\$ 675,992,772</b>	<b>\$15,476,350</b>
<b>Projected Medicare + Bene PBPY Cost (2023)</b>	<b>\$74.64</b>	<b>\$23.96</b>	<b>\$0.55</b>

In the models displayed, projected utilization is varied from Expected (Model 1), based on Q1-Q3 2021 historical data, Higher (Model 2), and Lower (Model 3). Other parameters that vary among the models include the following selections for telehealth flexibilities: all beneficiaries versus those with specific number of chronic conditions; level of payment parity with 2021 rates; service/provider types; visit modality; and new/established patient status.

Model 1, with utilization estimated equal to the median telehealth visit rate per beneficiary, would allow telehealth visits for beneficiaries with at least

one chronic condition; would reimburse at 85% of the 2021 payment rate for telehealth visits; would allow only telehealth visits with audio and video functionality; and would include new and established patient visits. The estimated Medicare spend associated with Model 1 parameters would be \$1,967,784,947 in 2021 dollars (corresponding to \$71.18 per beneficiary, per year (PBPY)). Assuming the same rate of utilization in 2022-2023 and adjusting for inflation, the total Medicare spending in these two years is estimated to be \$2,015,011,786 and \$2,063,372,069 (corresponding to PBPY of \$72.89 and \$74.64), respectively.

Model 2, with payment parity at 95% of 2021 spending, sets higher-than-expected utilization based, in part, on the assumption that payment rates close to parity could result in greater likelihood of providers using telehealth. Additional selections in Model 2 allow telehealth visits for beneficiaries with five or more chronic conditions; for primary care visits only; and, similar to Model 1, require audio-and-video functionality, as well as visits for both new and established patients. The resulting Medicare telehealth spending estimates are \$646,849,327 and \$662,373,711 (corresponding to \$23.40 and \$23.96 PBPY) for 2022 and 2023, respectively.

Model 3 selects a lower level of utilization, which might be expected with the payment rate at 80% of the 2021 level. It allows telehealth visits for behavioral health only, but for all beneficiaries across all telehealth modalities. The Medicare spending estimates are the lowest of the three scenarios presented, with 2022 and 2023 estimates of \$14,809,133 and \$15,164,552 (\$0.54 and \$0.55 PBPY), respectively.

This tool assumes the study-specific enrolled Medicare FFS population number (28,212,465 beneficiaries) is unchanged from 2021.

The flexibility to select different levers within the tool can result in a wide range of scenarios with their associated spending estimates. The Telehealth Spending Estimator is one way to compare different telehealth policy scenarios and to help determine the potential costs to Medicare. It is important to note the specific limitations of this study, including coding discrepancies and the relaxation of some billing restrictions during the PHE, that affect the accuracy and scope of telehealth service utilization to date. As discussed earlier, the spending estimates are driven solely by telehealth utilization and do not include any adjustments for downstream cost savings or cost increases induced by the use of telehealth. Expected improvements in our ability to capture telehealth utilization, resulting from new and enhanced coding, continuing provider and patient experience with telehealth, and greater acceptance of remote care, in general, will provide more insight into the future of Medicare's telehealth offerings.

# Appendix

## Definitions

### 1. New and Established Patients

First, services billed using the procedure codes, below, were assigned as new or established, depending on the code, for the claims containing these codes. When a visit was billed using a procedure code that is not included in the table below, we used the following approach: claims for patients seeing a particular provider (defined by unique National Provider Identifier, or NPI) for the first time in a calendar year (or the first three quarters of 2021) were defined as “New” in that study year. Subsequent visits for the same patient(s) with the same provider(s) were defined as “Established” if they occurred in the same year.

New	Established	
99203	98966	Audio
99204	98967	Audio
99205	98968	Audio
G0438	99211	
	99212	
	99213	
	99214	
	99215	
	99232	
	99307	
	99308	
	99309	
	99310	
	99335	
	99336	
	99349	
	99350	
	99441	Audio
	99442	Audio
	99443	Audio
	G0439	
	G2251	Audio
	G2252	Audio

## 2. Procedure Code Definitions

See Table 9 for descriptions.

## 3. Specialty Groupings

**Primary Care:** General Practice, Family Practice, Internal Medicine, Pediatric Medicine, Geriatric Medicine, Nurse Practitioner, and Physician Assistant

**Behavioral Health:** Psychiatry, Geriatric Psychiatry, Psychology, Clinical Psychology, Addiction Medicine, Licensed Clinical Social Worker, Opioid Treatment Program, and Neuropsychiatry

**Other Specialty:** All other specialties excluding primary care and behavioral health

**Table 9. List of Included Telehealth Codes and Sources**

CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X		X		0362T	Behavioral identification supporting assessment each 15 min
X		X		0373T	Adaptive behavior treatment each 15 min
X		X		77427	Radiation treatment management x5
X		X		90785	Psychotherapy complex interactive
X		X		90791	Psychiatric diagnostic evaluation
X		X		90792	Psychiatric diagnostic eval w/med services
X		X		90832	Psychotherapy treatment w patient 30 min
X		X		90833	Psychotherapy treatment w patient w eval/management 30 min
X		X		90834	Psychotherapy treatment w patient 45 min
X		X		90836	Psychotherapy treatment w patient w eval/ management 45 min
X		X		90837	Psychotherapy treatment w patient 60 min
X		X		90838	Psychotherapy treatment w patient w eval/ management 60 min
X		X		90839	Psychotherapy treatment crisis initial 60 min
X		X		90840	Psychotherapy treatment crisis each additional 30 min
X		X		90845	Psychoanalysis
X		X		90846	Family psychotherapy treatment w/o patient 50 min
X		X		90847	Family psychotherapy treatment w/patient 50 min
X		X		90853	Group psychotherapy
X		X		90875	Psychophysiological therapy
X		X		90951	ESRD services 4 visits per month <2 yrs
X		X		90952	ESRD services 2-3 visits per month <2 yrs
X		X		90953	ESRD services 1 visit per month <2 yrs
X		X		90954	ESRD services 4 visits per month 2-11 yrs
X		X		90955	ESRD services 2-3 visits per month 2-11 yrs
X		X		90956	ESRD services 1 visit per month 2-11 yrs
X		X		90957	ESRD services 4 visits per month 12-19 yrs
X		X		90958	ESRD services 2-3 visits per month 12-19 yrs
X		X		90959	ESRD services 1 visit per month 12-19 yrs
X		X		90960	ESRD services 4 visits per month 20+ yrs
X		X		90961	ESRD services 2-3 visits per month 20+ yrs

CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X		X		90962	ESRD services 1 visit per month 20+ yrs
X		X		90963	ESRD home patient services per month <2 yrs
X		X		90964	ESRD home patient services per month 2-11 yrs
X		X		90965	ESRD home patient services per month 12-19 yrs
X		X		90966	ESRD home patient services per month 20+ yrs
X		X		90967	ESRD services per day patient age <2
X		X		90968	ESRD services per day patient age 2-11
X		X		90969	ESRD services per day patient age 12-19
X		X		90970	ESRD services per day patient age 20+
X		X		92002	Eye exam new patient, intermediate
X		X		92004	Eye exam new patient, comprehensive
X		X		92012	Eye exam established patient
X		X		92014	Eye exam & treatment established patient 1/>visit
X		X		92507	Speech/hearing therapy, individual
X		X		92508	Speech/hearing therapy, group
X		X		92521	Evaluation of speech fluency
X		X		92522	Evaluate speech production
X		X		92523	Speech sound language comprehension
X		X		92524	Behavioral quality analysis voice
X				92526	Oral function therapy
X				92550	Tympanometry & reflex thresh
X				92552	Pure tone audiometry air
X				92553	Audiometry air & bone
X				92555	Speech threshold audiometry
X				92556	Speech audiometry complete
X				92557	Comprehensive hearing test
X				92563	Tone decay hearing test
X				92565	Stenger test pure tone
X				92567	Tympanometry
X				92568	Acoustic reflex threshold test
X				92570	Acoustic emittance testing
X				92587	Evoked auditory test limited
X				92588	Evoked auditory test complete
X		X		92601	Cochlear implant follow-up (f/up) exam <7 yrs
X		X		92602	Reprogram cochlear implant <7 yrs
X		X		92603	Cochlear implant f/up exam 7/> yrs
X		X		92604	Reprogram cochlear implant 7/> yrs
X				92607	Evaluation for speech device prescription (Rx) 1hr
X				92608	Evaluation for speech device Rx additional
X				92609	Use of speech device service
X				92610	Evaluate swallowing function
X				92625	Tinnitus assessment
X				92626	Eval auditory function 1st hour
X				92627	Eval auditory function each additional 15 min
X				93750	Interrogation of ventricular assist device (VAD) in person
X				93797	Cardiac rehab
X				93798	Cardiac rehab/monitor
X		X		94002	Vent management inpat initial day

CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X		X		94003	Vent management inpatient subsequent day
X		X		94004	Vent management nursing facility per day
X		X		94005	Home vent management supervision
X				94625	Physician/qualified health professional OP pulmonary rehab w/o monitor
X				94626	Physician/qualified health professional OP pulmonary rehab w/o monitor
X		X		94664	Evaluate patient use of inhaler
			X	95250	Ambulatory continual glucose monitoring (CGM) of interstitial tissue fluid via a subcutaneous sensor for a min 72 hours
			X	95251	Analysis and interpretation of CGM data
X				95970	Electronic analysis of a simple or complex brain, cranial nerve, spinal cord, peripheral nerve, or sacral nerve, neurostimulator pulse generator/transmitter (NPGT), without programming.
X				95971	Electronic analysis of simple spinal cord/peripheral nerve stimulator (NPGT) w/program
X				95972	Electronic analysis, complex, simple spinal/peripheral nerve NPGT w/program
X				95983	Analysis brain NPGT w programming 15 min
X				95984	Analysis brain NPGT programming, additional 15 min
X				96105	Assessment of aphasia
X		X		96110	Developmental screen w/score
X		X		96112	Developmental test physician/qualified health prof (QHP) 1st hour
X		X		96113	Developmental test physician/QHP each additional hour
X		X		96116	Neurobehavioral exam physician/QHP 1st hour
X		X		96121	Neurobehavioral exam physician/QHP each additional hour
X				96125	Cognitive test by healthcare provider
X		X		96127	Brief emotional/behavior assessment
X		X		96130	Psychological test evaluation physician/QHP 1st
X		X		96131	Psychological test evaluation physician/QHP each
X		X		96132	Neuropsychological test evaluation physician/qualified health professional (QHP), 1st
X		X		96133	Neuropsychological test eval physician physician/QHPQHP each
X		X		96136	Psychological/Neuropsych test physician/QHP 1st
X		X		96137	Psychological/Neuropsych test physician/QHP each
X		X		96138	Psychological/Neuropsych tech 1st
X		X		96139	Psychological/Neuropsych tech each
X		X		96156	Health behavioral assessment/reassessment
X		X		96158	Health behavioral intervention individual 1st 30 min
X		X		96159	Health behavioral intervention individual each additional
X		X		96160	Patient-focused health risk assessment
X		X		96161	Caregiver health risk assessment
X		X		96164	Health behavioral intervention grp 1st 30
X		X		96165	Health behavioral intervention grp each additional
X		X		96167	Health behavioral intervention family 1st 30
X		X		96168	Health behavioral intervention family each additional
X		X		96170	Health behavioral intervention family w/o patient 1st
X		X		96171	Health behavioral intervention family w/o patient each

CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X		X		97110	Therapeutic exercises
X		X		97112	Neuromuscular reeducation
X		X		97116	Gait training therapy
X				97129	Therapeutic intervention 1st 15 min
X				97130	Therapeutic intervention each additional 15 min
X		X		97150	Group therapeutic procedures
X		X		97151	Behavior assessment by physician/QHP
X		X		97152	Behavior support assessment by 1 tech
X		X		97153	Adaptive behavior treatment by tech
X		X		97154	Grp adapt behavior treatment by tech
X		X		97155	Adapt behavior treatment physician/QHP
X		X		97156	Family adaptive behavior treatment guidance physician/QHP
X		X		97157	Multi-family adaptive behavior treatment guidance
X		X		97158	Grp adapt behavior treatment by physician/QHP
X		X		97161	Physical therapy evaluation low complex 20 min
X		X		97162	Physical therapy evaluation mod complex 30 min
X		X		97163	Physical therapy evaluation high complex 45 min
X		X		97164	Patient re-eval established care plan
X		X		97165	Occupational therapy evaluation low complex 30 min
X		X		97166	Occupational therapy evaluation mod complex 45 min
X		X		97167	Occupational therapy evaluation high complex 60 min
X		X		97168	Occupational therapy re-evaluation established care plan
X		X		97530	Therapeutic activities
X		X		97535	Self-care management training
X		X		97542	Wheelchair management training
X		X		97750	Physical performance test
X		X		97755	Assistive technology assessment
X		X		97760	Orthotic management & training, 1st encounter
X		X		97761	Prosthetic training 1st encounter
X		X		97802	Medical nutrition individual assessment and intervention
X		X		97803	Medical nutrition individual subsequent
X		X		97804	Medical nutrition group
	X		X	98966	Phone assessment & management non-physician, est pt, 5-10 min
			X	98967	Phone assessment & management non-physician, est pt, 11-20 min
	X		X	98968	Phone assessment & management non-physician, est pt, 21-30 min
			X	98970	Qualified non-MD established patient online evaluation & management (E/M), 5-10 min
			X	98971	Qualified non-MD established patient online evaluation & management (E/M), 11-20 min
			X	98972	Qualified non-MD established patient online evaluation & management (E/M), 21+ min
			X	99091	Standalone collection and interpretation of remote data
	X	X		99201	Office/outpatient visit new, straightforward medical decision making (MDM) (deleted 1/1/21)
X	X	X		99202	Office/outpatient visit new, straightforward MDM 15-29 min
X	X	X		99203	Office/outpatient visit new, low MDM 30-44 min



CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X	X	X		99204	Office/outpatient visit new, moderate MDM 45-59 min
X	X	X		99205	Office/outpatient visit new, high MDM 60-74 min
X	X	X		99211	Office/outpatient visit established visit performed by clinical staff
X	X	X		99212	Office/outpatient visit established, straightforward MDM 10-19 min
X	X	X		99213	Office/outpatient visit established, low MDM 20-29 min
X	X	X		99214	Office/outpatient visit established, moderate MDM 30-39 min
X	X	X		99215	Office/outpatient visit established, high MDM, 40-54 min
X		X		99217	Observation care discharge
X		X		99218	Initial observation care, straightforward or low MDM
X		X		99219	Initial observation care, moderate MDM
X		X		99220	Initial observation care, high MDM
X		X		99221	Initial hospital care, avg. 30 min
X		X		99222	Initial hospital care, avg. 50 min
X		X		99223	Initial hospital care, avg. 70 min
X		X		99224	Subsequent observation care, avg. 15 min
X		X		99225	Subsequent observation care, avg. 25 min
X		X		99226	Subsequent observation care, avg. 35 min
X		X		99231	Subsequent hospital care, avg. 15 min
X		X		99232	Subsequent hospital care, avg. 25 min
X		X		99233	Subsequent hospital care, avg. 35 min
X		X		99234	Observation/hospital same date, low severity avg. 40 min
X		X		99235	Observation/hospital same date, moderate severity avg. 50 min
X		X		99236	Observation/hospital same date, high severity avg. 55 min
X		X		99238	Hospital discharge day, <=30 min spent on discharge
X		X		99239	Hospital discharge day, >30 min spent on discharge
X		X		99281	ED visit, self-limited or minor
X		X		99282	ED visit, low-moderate severity
X		X		99283	ED visit, moderate severity
X		X		99284	ED visit, high severity
X		X		99285	ED visit, high severity w/ immediate threat to life or function
X		X		99291	Critical care first hour
X		X		99292	Critical care additional 30 min
X		X		99304	Nursing facility care initial, avg. 25 min
X		X		99305	Nursing facility care initial, avg. 35 min
X		X		99306	Nursing facility care initial, avg. 45 min
X		X		99307	Nursing facility care subsequent, avg. 10 min
X		X		99308	Nursing facility care subsequent, avg. 15 min
X		X		99309	Nursing facility care subsequent, avg. 25 min
X		X		99310	Nursing facility care subsequent, avg. 35 min
X		X		99315	Nursing facility discharge day, <=30 min
X		X		99316	Nursing facility discharge day, >30 min
X		X		99324	Domicil/r-home visit new pat, level 1 avg. 20 min
X		X		99325	Domicil/r-home visit new pat, level 2 avg. 30 min
X		X		99326	Domicil/r-home visit new pat, level 3 avg. 45 min

CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X		X		99327	Domicil/r-home visit new pat, level 4 avg. 60 min
X		X		99328	Domicil/r-home visit new pat, level 5 avg. 75 min
X		X		99334	Domicil/r-home visit est pat, level 1 avg. 15 min
X		X		99335	Domicil/r-home visit est pat, level 2 avg. 25 min
X		X		99336	Domicil/r-home visit est pat, level 3 avg. 40 min
X		X		99337	Domicil/r-home visit est pat, level 4 avg. 60 min
X		X		99341	Home visit new patient, level 1 avg. 20 min
X		X		99342	Home visit new patient, level 2 avg. 30 min
X		X		99343	Home visit new patient, level 3 avg. 45 min
X		X		99344	Home visit new patient, level 4 avg. 60 min
X		X		99345	Home visit new patient, level 5 avg. 75 min
X		X		99347	Home visit established patient, level 1 avg. 15 min
X		X		99348	Home visit established patient, level 2 avg. 25 min
X		X		99349	Home visit established patient, level 3 avg. 40 min
X		X		99350	Home visit established patient, level 4 avg. 60 min
X		X		99354	Prolonged E/M /psychotherapy treatment service, outpatient (OP), first hour
X		X		99355	Prolonged E/M /psychotherapy treatment service OP, each addl. 30 min
X		X		99356	Prolonged service inpatient (IP), 1 hour beyond usual service
X		X		99357	Prolonged service IP, each additional 30 min after 1st hour prolonged service
	X			99401	Preventive medicine counseling, up to 15 min
	X			99402	Preventive medicine counseling, 30 min, separate procedure
	X			99403	Preventive medicine counseling, 45 min, separate procedure
	X			99404	Preventive medicine counseling, 60 min, separate procedure
X	X	X		99406	Behavior change smoking 3-10 min
X	X	X		99407	Behavior change smoking > 10 min
	X			99408	Alcohol/substance brief intervention services (SBI), 15-30 min
	X			99409	Alcohol/substance SBI, 30+ min
	X			99411	Preventive medical counseling group, separate procedure, 30 min
	X			99412	Preventive medical counseling group, separate procedure, 60 min
X	X	X	X	99441	Phone E/M physician/QHP 5-10 min
X	X	X	X	99442	Phone E/M physician/QHP 11-20 min
X	X	X	X	99443	Phone E/M physician/QHP 21-30 min
	X			99444	Online E/M, established patient
			X	99453	Initial set-up and training pts on how to use the medical device(s)
			X	99454	Supply of the medical device(s) for health data alert transmissions
			X	99457	Remote patient monitoring, initial treatment management of the patient
X		X		99468	Neonate crit care initial
X		X		99469	Neonate critical care subsequent
X		X		99471	Pediatric critical care initial
X		X		99472	Pediatric critical care subsequent

CMS <sup>15</sup>	ASPE <sup>16</sup>	Patel, et. al. <sup>17</sup>	Mehrotra <sup>18</sup>	Code	Description
X		X		99473	Self-measurement blood pressure patient educational/train
X		X		99475	Pediatric critical care age 2-5 initial
X		X		99476	Pediatric critical care age 2-5 subsequent
X		X		99477	Initial day hospital neonate care
X		X		99478	Intensive care low birth weight infant < 1500 gm subsequent
X		X		99479	Intensive care low birth weight infant 1500-2500 g subsequent
X		X		99480	Intensive care infant post birth weight 2501-5000 g subsequent
X		X		99483	Assessment & care plan patient cognitive impairment
X		X		99495	Transfer care management within 14 days of discharge
X		X		99496	Transfer care management within 7 days of discharge
X	X	X		99497	Advanced care plan 30 min
X	X	X		99498	Advanced care plan additional 30 min
			X	G0071	Communication services by RHC/FQHC 5 min
X		X		G0108	Diabetes manage training per individual
X		X		G0109	Diabetes management training individual/group
X		X		G0270	Medical nutrition therapy subsequent treatment for change dx
X		X		G0296	Visit to determine lung cancer screening eligibility
X		X		G0396	Alcohol/subsequent intervention 15-30mn
X		X		G0397	Alcohol/subsequent intervention >30 min
	X			G0402	IPPE (Welcome to Medicare visit)
X		X	X	G0406	Inpatient/telehealth follow up 15
X		X	X	G0407	Inpatient /telehealth follow up 25
X		X	X	G0408	Inpatient /telehealth follow up 35
X		X		G0410	Grp psych partial hospitalization 45-50
X		X		G0420	Education service CKD individual per session
X		X		G0421	Education service CKD grp per session
X				G0422	Intensive cardiac rehab w/exercise
X				G0423	Intensive cardiac rehab no exercise
X		X	X	G0425	Inpatient/emergency department (ED) teleconsult30
X		X	X	G0426	Inpatient /ED teleconsult 50
X		X	X	G0427	Inpatient /ED teleconsult 70
		X		G0436	Tobacco-use counsel 3-10 min
		X		G0437	Tobacco-use counsel>10min
X	X	X		G0438	Personalized Prevention Plan of Service (PPPS), annual wellness visit initial visit
X	X	X		G0439	PPPS, subsequent visit
X		X		G0442	Annual alcohol screen 15 min
X		X		G0443	Brief alcohol misuse counsel
X		X		G0444	Depression screen annual
X		X		G0445	High intensity behavioral counseling for STI 30m
X		X		G0446	Intensive behavioral therapy cardiology dx
X		X		G0447	Behavior counsel obesity 15m
X		X	X	G0459	Telehealth inpatient pharm management
	X			G0466	FQHC new patient encounter
	X			G0467	FQHC established patient encounter

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X	X	X		G0506	Comprehensive assess care plan chronic condition management (CCM)
X		X	X	G0508	Critical care telehealth consult 60
X		X	X	G0509	Critical care telehealth consult 50
	X			G0511	Critical care or general care mgmt., 20+ min
	X			G0512	Psychiatric collaborative care model (COCM) RHC/FQHC 60 min +
X	X	X		G0513	Prolonged preventive services, first 30m
X	X	X		G0514	Prolonged preventive services, additional 30m
			X	G2010	Remote eval of video/images submitted by established patient, incl interpretation
			X	G2012	Brief check in by MD/QHP, est patient
			X	G2025	RHC distant telehealth (eff. 2020)
			X	G2061	Qualified non-MD established patient 5-10 min
			X	G2062	Qualified non-MD established pt 11-20 min
			X	G2063	Qualified non-MD established pt 21>min
X		X		G2086	Off base opioid treatment 70 min
X		X		G2087	Off base opioid treatment, 60 min
X		X		G2088	Off base opioid treatment, add 30 min
X				G2211	Complex E/M visit add on
X				G2212	Prolonged outpatient/office visit
			X	G2250	Remote image submission by patient, non-E/M
			X	G2251	Brief check in, 5-10 min, non-E/M audio-only
			X	G2252	Brief check in by MD/QHP, 11-20 min audio-only
X		X		G9685	Acute nursing facility care
X		X		S9152	Speech therapy, re-evaluation

# Endnotes

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7. Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry, “CDC SVI Documentation 2018,” 2022. Available at: [https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI\\_documentation\\_2018.html](https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2018.html).
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9. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, “Medicare Beneficiary Use of Telehealth Visits: Early Data from the Start of the Covid-19 Pandemic,” July 28, 2020. Available at: [https://aspe.hhs.gov/sites/default/files/migrated\\_legacy\\_files/198331/hp-issue-brief-medicare-telehealth.pdf](https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/198331/hp-issue-brief-medicare-telehealth.pdf).
10. S. Patel, A. Mehrotra, et. al. “Variation In Telemedicine Use And Outpatient Care During The COVID-19 Pandemic In The United States” *Health Affairs*, 40(2), 2021. Available at: <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.01786>.

11. Centers for Medicare and Medicaid Services, “Chronic Conditions,” 2021. Available at: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC\\_Main](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main).
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