Virtual Healthcare Use Among Medicare Advantage Members Before and During the COVID-19 Pandemic

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KEY HIGHLIGHTS

- During the early months of the COVID-19 pandemic, there was a large increase in the use of virtual care among Anthem's affiliated Medicare Advantage plan members.
- Mental health conditions and/or substance use disorders were the largest group of primary diagnoses treated virtually, with growth in virtual services of more than 5,000 percent in 2020 compared to 2019.
- Older members (ages 75+) used a smaller share of virtual services in March-May 2020 than would be expected based on their 2019 in-person utilization, but still used substantially more virtual services in 2020 than in 2019.



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Overview

The COVID-19 pandemic—along with the resultant adoption of social distancing and stay-at-home orders—has rapidly shifted providers' and consumers' acceptance of virtual healthcare services delivered through telephone, video "visits," and secure messaging.

Virtual delivery of care protects consumers and care providers from possible exposure to and transmission of COVID-19, while helping to ensure that individuals receive needed acute care and chronic condition management. It also helps care providers maintain their practices even as most individuals are staying home and deferring non-emergent care. Finally, virtual triage and remote monitoring can help people seek COVID-related tests and treatment while self-isolating and without taking up vital capacity at clinics and hospitals.^{1,2}

Looking ahead, there are questions about how the use of virtual care might evolve once the pandemic subsides, including how those services will be used and which members choose to use them.³ Continued access to virtual care that is convenient, affordable, and fully technology enabled has the potential to transform the U.S. healthcare system. A number of issues need to be addressed, including privacy and security, reimbursement, and disparities in access to the required technology (e.g., smart phone, broadband). Additionally, there are questions regarding which clinical assessments and tools are appropriate and effective in a virtual visit.

This brief examines virtual healthcare utilization among Anthem's affiliated Medicare Advantage (MA) plans during the early months of the pandemic. The analysis offers a preliminary look at virtual services by demographic, clinical characteristic, and visit type. Comparisons are made to virtual and in-person care rendered in 2019. The objective is to offer insights on who turned to virtual care when there were fewer in-person options available and what types of care were provided. However, the analysis does not include in-person care in 2020 so inferences about which populations did or did not access care more generally are out of scope.

What is Virtual Healthcare?

Virtual healthcare is a broad term that captures care rendered without an in-person encounter. These services generally include:

- Live, two-way audio (i.e., phone), video, or email discussions between a patient and clinician to evaluate or manage new or ongoing conditions (which is the focus of this paper).
- Services provided in a medical facility but performed by a specialist who is off-site.
- Monitoring and interpretation of clinical data received from remote monitoring devices.
- Exchange of messages and other data via a secure portal or smart device "app."



COVID-19 has rapidly shifted providers' and consumers' acceptance of virtual healthcare.

Background

Before the pandemic, polling indicated wide consumer support for virtual care, but only 10 percent of all consumers had experienced a virtual health encounter. Notably, more than half of seniors expressed interest in virtual services, despite the fact that Medicare rules have been slow to encourage widespread virtual care adoption.^{4,5}

Research also suggests that seniors are less likely to acquire the technology required for virtual care, with roughly 80 percent of all U.S. adults owning a smartphone compared to only about half of seniors.⁶ In 2016, less than 0.5 percent of Medicare fee-for-service (FFS) beneficiaries reported having a virtual healthcare encounter each year.⁷

Despite consumers' interest, as of 2018, only a small segment of care providers (14%) had the technology to provide a video visit, and of those without that capability, only a modest portion (18%) were interested in pursuing virtual care.⁸

The lag in consumer and provider adoption of virtual care has been due to a number of factors that range from technological and cultural to legal and financial.⁹ The COVID-19 pandemic has, through temporary authorities granted for the duration of the Public Health Emergency, removed many of these barriers:¹⁰

- Legal restrictions have been waived, allowing consumers and clinicians to use smart phone technology they already have.
- Regulatory flexibilities have been granted, rendering more services reimbursable including audio-only visits and allowing new patients to have their first encounter with a clinician via virtual visit.
- Many health plans have waived cost sharing for virtual visits during the Public Health Emergency, while others that have historically provided virtual care with no cost sharing, such as Anthem's affiliated MA plans, continued to do so.
- Stay-at-home orders have negated clinicians' reluctance to disrupt their usual practice patterns, and have heightened consumers' awareness of virtual options.¹¹⁻¹³

As noted above, Medicare FFS has been slow to cover virtual services. In contrast, MA plans have offered more expansive access to telemedicine as supplemental benefits. Before calendar year 2020, Medicare FFS allowed only a handful of services to be rendered in a consumer's home. During the pandemic, several restrictions applicable to Medicare FFS and MA were temporarily lifted to allow a wide range of virtual technologies, providers, and services to be deployed via both audiovisual and audio-only options.



During the pandemic, several restrictions applicable to Medicare were temporarily lifted to allow a wide range

of virtual services.



This brief examines changes in the use of virtual visits among MA enrollees. It focuses on audio-only phone calls, video visits, and secure messaging between a patient and clinician that occur in a consumer's home (or other non-clinical location).

It excludes virtual care services provided to a person in a medical facility, episodes of care related to the hospitalization of a patient with COVID-19, and remote monitoring that occurs via a device (e.g., mobile heart monitor) that transmits data directly to a care provider.

This analysis uses claims data from over one million enrollees in Anthem's affiliated MA plans for relevant months in 2019 and 2020. It compares service utilization from March-May 2020 with use in March-May 2019. This timeframe was selected to focus on the first peak of the pandemic (and the time after new virtual care authorities were granted). Note that claims for 2020—in particular, April and May—may not have been complete at the time of the analysis (late July) due to lags in claims receipt and processing.¹⁴ A service is defined as a single Current Procedural Terminology (CPT) code. A visit may have multiple CPT codes. Virtual services include those CPT codes that are only used virtually or that had a modifier or place of service code indicating that a service normally delivered in-person was rendered virtually.

Because race and income are not consistently available in membership data, we cross-referenced member ZIP codes to Census areas in order to use Census-area estimates from the 2018 American Community Survey to examine disparities in use of virtual care. Using these data sources, we characterized areas as follows:^{15–17}

- **Race/ethnicity:** quartiles representing the national distribution of the percentage of residents in a Census area that are non-Hispanic White, from lowest (Quartile 1) to highest (Quartile 4).
- **Income:** quartiles representing the national distribution of the median incomes of the Census areas, from lowest (Quartile 1) to highest (Quartile 4).

We compared use of virtual services during the pandemic to use in the same months in 2019 to illustrate changes in virtual care use. In addition, we compared 2020 virtual visits with non-virtual outpatient visits (for evaluation and management, or E&M, codes) during the same months in 2019. This offers some insights on how the distribution of virtual care use during the pandemic differs from that of "normal" healthcare use.



The use of virtual healthcare visits grew exponentially during the early months of the COVID-19 pandemic.

Findings

The use of virtual healthcare visits grew exponentially during the early months of the COVID-19 pandemic. (Figure 1) Specifically, in March-May 2020, enrollees in Anthem's affiliated MA plans received approximately 600,000 (or 520 per 1,000 members) services virtually—an astounding increase from the same time period in 2019, when there were only about 4,400 (or 4 per 1,000 members) similar services used. (Figure 2)



Source: Claims and membership data from Anthem's affiliated Medicare Advantage plans.

Virtual Services by Consumer Demographics

In 2019, prior to the pandemic, a greater share of virtual services was delivered to younger consumers, with 41 percent of services delivered to enrollees under age 65 and 32 percent delivered to enrollees ages 65-74. In March-May 2020, the share of virtual services used by enrollees ages 65-74 jumped 11 percentage points to 43 percent while the share used by those under age 65 dropped. Notably, when compared to the distribution of in-person services in 2019, there is a smaller portion of care provided virtually to older age groups in March-May 2020, especially those ages 75-84. Nevertheless, the volume of virtual services used in 2020 increased substantially relative to 2019 across all age groups. In both 2019 and 2020, nearly two-thirds of virtual services were delivered to females. (Table 1)

With respect to the racial and ethnic composition of the areas where consumers live, the distribution of virtual services across the quartiles in March-May 2020 was similar to that in March-May 2019. However, compared to 2019 in-person service use, there was a slightly greater share of virtual services in areas with a larger percentage of non-Hispanic White residents (Quartiles 3 and 4), and a commensurate smaller share in areas with a lower percentage (Quartiles 1 and 2), in both 2019 and 2020.

Across areas grouped by median income, when comparing virtual services pre-pandemic with virtual services in 2020, there was a noticeable increase in 2020 in the share of virtual services used by consumers residing in the highest income areas (Quartile 4) and a commensurate decrease in the share used by those in lower income areas (Quartiles 1 and 2). The distribution of 2020 virtual services was similar to the distribution of 2019 in-person services.

Examining the share of services used by enrollees in MA Special Needs Plans (SNPs) versus those in non-SNP MA plans also offers insight into service use by lower-income and frailer MA members. SNP enrollment is limited to one of three groups of Medicare beneficiaries: those who are dually eligible for Medicare and Medicaid; those who have one of 15 specified chronic conditions; and those who reside in an institutional setting or require institutional-level care in the community. The share of virtual services used by SNP enrollees in 2020 was higher than their share of in-person services in 2019, but lower than their share of virtual services in 2019.

Finally, the share of virtual services used by consumers in rural areas dropped by nearly 12 percentage points from 2019 to 2020, though the overall volume of virtual services used in rural areas grew more than 100-fold.

Demographic Group	Virtual Services March-May, 2020		Virtual Services March-May, 2019		In-Person Services (OP E&M) March-May, 2019		
	N	%	N	%	N	%	
Total	600	100%		100%	1,451	100%	
Gender							
Male	223	37%	2	37%	599	41%	
Female	337	63%	3	63%	852	59%	
Age							
<65	182	30%	2	41%	244	17%	
65-74	255	43%	1	32%	646	45%	
75-84	123	20%	1	17%	416	29%	
85+	39	7%	0	9%	144	10%	
Area Race/Ethnicity (% Non-Hispanic White)							
Quartile 4 (highest)	39	7%	0	8%	80	6%	
Quartile 3	112	20%	1	21%	256	18%	
Quartile 2	163	26%	1	23%	374	26%	
Quartile 1 (lowest)	284	47%	2	48%	733	51%	
Area Median Income							
Quartile 4 (highest)	178	30%	1	21%	464	32%	
Quartile 3	137	23%	1	23%	342	24%	
Quartile 2	132	22%	1	26%	309	21%	
Quartile 1 (lowest)	151	25%	1	30%	329	23%	
Special Needs Plan (SNP)							
Non-SNP	403	67%	3	61%	1,052	73%	
SNP	197	33%	2	39%	398	27%	
Rural & Urban							
Rural	106	18%	1	30%	207	14%	
Urban	493	82%	3	70%	1,236	86%	

Table 1 Virtual Care and In-Person Visits by Consumer Demographics

2019 and 2020 (Counts in 000s)

Note: Figures are rounded and may not add up to 100% or to column totals, which are rounded to the nearest thousand. Due to missing data, figures may not add to column totals. The following terms are abbreviated in this table: outpatient (OP), evaluation and management (E&M).

Source: Claims and membership data from Anthem's affiliated Medicare Advantage plans.

Virtual Services by Clinical Characteristics and Visit Type

The vast majority (82%) of virtual services used in March-May 2020 were for physical health conditions, with the remaining 18 percent for mental health conditions and/or substance use disorders (MH/SUD). In contrast, a much greater share of virtual visits were for MH/SUD services prior to the pandemic—accounting for 46 percent of virtual care from March-May 2019. Nevertheless, MH/SUD was still the largest group of primary diagnoses treated virtually, with growth in services of more than 5,000 percent in 2020. (Figure 3)



Source: Claims and membership data from Anthem's affiliated Medicare Advantage plans.

Among physical health conditions, cardiovascular diagnoses (e.g., hypertension) were the most commonly addressed, followed by musculoskeletal ailments and endocrine and metabolic conditions. Not surprisingly given the conditions that were treated virtually, the majority of services—over two-thirds—were for management of a chronic condition.

The vast majority of virtual visits were within established patient relationships; just 2 percent of virtual encounters were for new patient visits in March-May 2020. Nevertheless, those new patient visits totaled about 12,000—more than the sum of all virtual services for the same timeframe in 2019. In comparison, new encounters made up 10 percent of in-person, outpatient E&M visits from March-May 2019. Over the course of the pandemic, restrictions were lifted on audio-only care so it is difficult to distinguish services provided via phone versus an audiovisual platform. Looking just at encounters that used CPT codes that are exclusively for audio-only visits, it appears that nearly 30 percent of services were rendered without visual capabilities.

Virtual Services as Share of Total E&M Services

Regardless of the rise in virtual care use, overall utilization of E&M services was still well under what would be expected if the pandemic had not occurred. For instance, looking at all outpatient E&M services, virtual and in-person, from March-May 2020, we find average utilization is nearly 40 percent lower when compared to average annual 2019 utilization. (Figure 4)





Some consumers

may be more likely to use virtual services than others.

Discussion

During the early months of the pandemic, the number of virtual care services used by Anthem's affiliated Medicare Advantage plan members grew substantially relative to the same months in 2019. This was the case across all demographic groups (e.g., age) and area characteristics (e.g., median income) examined by this analysis.

This early data on virtual care adoption suggests that some consumers may have been less likely to use virtual services than others. Specifically, older consumers and those residing in areas with a lower percentage of non-Hispanic White residents appeared to use a smaller share of virtual services in March-May 2020 than would be expected based on the distribution of 2019 virtual and/or in-person service use. However, the scope of this brief is to analyze virtual care that occurred during the early months of the pandemic, and as such, there is insufficient evidence here to suggest that a specific group received less total care when accounting for both virtual and in-person utilization.

Given that older individuals and Black, Latino, and Asian individuals are at greater risk for serious illness as a result of COVID-19, further work may be warranted to help ensure that their medical needs are met and any barriers to accessing virtual services are addressed.^{18, 19} For instance, the difference in use across age groups may be partially driven by the gap in smart phone adoption by older Americans.²⁰ Similarly, infrastructure barriers, including equipment costs and lack of broadband access, have been shown to impede safety net providers from offering virtual care to the communities they serve.²

Some of these findings are similar to those from a recent analysis of virtual care use among Medicare FFS beneficiaries. For instance, female beneficiaries were more likely to use virtual services when compared to males and younger beneficiaries were more likely to use virtual care than older cohorts.²² However, there were no differences in virtual care use by race or ethnicity among FFS beneficiaries.²³ Other research looking at access to technology as it relates to virtual care during the pandemic found that older age cohorts and Black and Latino Medicare beneficiaries have significantly less access to the technology required to conduct video visits (e.g., smartphone, internet access).^{24,25}

In terms of type of services used, while prior to the pandemic, MH/SUD accounted for about 46 percent of virtual services, its share fell to just 18 percent in March-May 2020 as consumers with chronic physical conditions accessed more virtual care. Nevertheless, use of virtual care for MH/SUD still grew substantially—by over 5,000 percent—in 2020. The use of services to address a broader set of health conditions has the potential to reduce the burden for individuals seeking regular, and sometimes frequent, management of chronic conditions.

The very small share of new patient encounters among 2020 virtual services suggest there may be a reluctance among MA members and/or care providers to establish new clinical relationships virtually. If the pandemic persists and Medicare beneficiaries need to shelter-in-place for long stretches of time, MA plans can play a role in facilitating a greater number of new patient visits, as needed.

It is also unclear whether the use of audio-only options for about 30 percent of virtual services in 2020 reflects limitations in technology adoption and availability for the consumer or the provider or whether a sizable portion of care could simply be provided conveniently over the phone (e.g., routine medication checks). Future research could explore these questions as well as contribute to our understanding of the substitutability of virtual visits whether audio or video—for in-person care. These insights could inform decisions around coverage, reimbursement, use of virtual encounters for risk adjustment, and other Medicare policies.

Finally, more recent data indicates that Anthem's affiliated MA members are steadily returning to in-person encounters. This may reflect technological barriers to or discomfort with virtual visits, as well as the necessity or preference for an in-person visit to treat complex conditions, conduct tests or procedures, or address loneliness heightened by stay-at-home orders. Despite the uptick in in-person services, virtual care services still persist at much higher levels than prior to the pandemic.

Continuing these gains in the use of virtual care, even at levels far lower than those experienced from March-May 2020, could be an inflection point for the Medicare program. For this shift to become permanent, health plans must partner with providers and consumers to better understand their needs and preferences for virtual care and to support new pathways to accessing virtual options. Policymakers and regulators must also make permanent many of the flexibilities that encouraged the uptick in virtual care in 2020.



Continuing these gains in virtual care use, even at far lower levels, could be an inflection point for the Medicare program.



Even as consumers resume in-person care, virtual visits persist at higher levels than prior to the pandemic.

Conclusion

The COVID-19 pandemic has created a unique opportunity for virtual care to scale rapidly, with an exponential number of new consumers and providers experiencing its benefits—and sometimes its limitations—firsthand.

While it is not yet know whether, and to what extent, these gains in use will persist, the Medicare program has already begun to consider policy changes to support more robust adoption of virtual care beyond the period of the Public Health Emergency.

Yet even during the pandemic, virtual care volume did not come near to replacing all of the E&M visits that might have otherwise occurred. To realize the potential of virtual care, and to ensure that it meets the needs of Medicare beneficiaries, continued work is needed to understand consumers' and providers' willingness and ability to adopt virtual care and the ways in which obstacles could be overcome.

Endnotes

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ABOUT US

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