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Policy Brief
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Patterns of Telepsychiatry Usage within Episodes of Behavioral Health Treatment: Implications for Telehealth Policy

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Background

Telepsychiatry (defined as using virtual care technology to deliver behavioral health therapy or medication management) is an effective model for delivering care.[1-4] The COVID-19 pandemic led to rapid implementation and expansion of telemedicine in many fields, but especially within behavioral health.[5-8] The expansion of telepsychiatry has been critical to expansion of access to behavioral health care, especially for those in rural and underserved communities.[9-11] This is important, given recent trends of rising behavioral health prevalence in the United States.[12,13]

As part of the public health emergency declared by the US Department of Health and Human Services in response to the COVID-19 pandemic, several flexibilities related to telehealth billing and practice were introduced.[14] Some of these flexibilities have been made permanent, especially as it relates to treatment of behavioral health.[15] However, barring future legislative changes, several flexibilities are scheduled to expire, with potential implications to patient access. Pertinent to telepsychiatry practice is the proposed implementation of "in-person" requirements, which specify that individuals treated via telemedicine must first have an in-person visit prior to initiation of telemedicine treatment, as well as periodic in-person visits within specified time frames.[16] Little research has been done to identify the impacts of these rules on psychiatry practice in the U.S and how this may impact access to behavioral health care.

Prior work has demonstrated that telehealth claims for behavioral health treatment by all provider types began to fall in the initial years after the COVID-19 pandemic, although rates remained much higher than pre-pandemic.[17] While previous data show the overall usage of telehealth by psychiatrists, information regarding episodes of care (EOCs) that includes telehealth is lacking. Specifically, the proportion of patients seen by behavioral health providers receiving all their care within an EOC via telehealth versus all in-person care versus a hybrid approach remains unknown. This question is timely, given the potential changes to telehealth coverage by public and private payers to include in-person requirements as discussed previously.

Research Aims

- Determine the types of EOCs (in-person only, telehealth only, hybrid) of behavioral health treatment received by commercial insurance enrollees in 2021-2022.

- Identify factors associated with different EOC types by age, sex, geographic region, and behavioral health provider type.
- Determine the proportion of hybrid EOCs that started with a telehealth visit and what factors are associated with an initiating telehealth visit.

Methods

This is a retrospective study of insurance claims from MarketScan©, a large commercial claims database, for the calendar years 2021-2022. EOCs terminating in 2020 were not included, as this was when many individuals were forced to utilize telehealth exclusively for a period due to COVID-19 pandemic restrictions. All enrollees who had claims for services provided by a behavioral health provider in the calendar years 2021 and 2022 were included. Behavioral health provider types within the data set that were included were psychiatrists, child psychiatrists, psychologists, and therapists. An EOC was defined as an initiating visit with ≥1 additional visit for a behavioral health reason within 12 months of the initiating visit. A gap of >12 months between 2 visits for a behavioral health reason indicated the start of a new EOC. The modality of each visit within an EOC was determined by the presence or absence of a combination of place of service codes (Telehealth, value "02") and procedure modifier codes (codes "95", "GO", "GQ", and "GT"). EOCs were categorized into three options, based on these codes: 1) Telehealth only, 2) In-person only, 3) Hybrid (telehealth and in-person). For each EOC, data on provider type, associated initiating visit diagnosis codes, and claimant characteristics (age, state/region, sex) were extracted. Descriptive summary statistics were followed by multivariate logistic regression analyses to identify differences in telehealth use by patients' initial diagnosis, age, state/region, sex, and provider type. Within the hybrid EOCs, the proportion that had an initiating visit conducted via telehealth was determined, and logistic regression analyses were used to identify associations between the above independent variables and an initiating telehealth visit in this subgroup. For all logistic regression analyses, age was converted from a continuous variable to a categorial variable using age ranges (<18 years, 18-35 years, 36-55 years, >55 years). Given that initial visit diagnoses were not exclusive (visits could include multiple diagnoses), we excluded this variable from the logistic regression.

Key Findings

A total of 937,711 EOCs were identified. The median (Interquartile range) number of claims within an individual EOC was 7 (3-14). Median claims per EOC differed between EOC type, with in-person (median = 5 (3-11)) and telehealth EOCs (median = 6 (3-13)) lower than hybrid EOCs (median = 11 (5-21)). The largest proportion of EOCs were in-person only (41.1%), followed by telehealth only (32.9%) and hybrid (26.0%) (Figure 1A). The proportion of EOCs that were in-person only increased from 2021 to 2022, while hybrid EOCs decreased and telehealth-only EOCs remained the same. Significant differences in proportions of EOC type were seen when examining sex, geographic designation of patient residence (rural vs. urban), geographic region of the U.S., behavioral health provider type, and initiating visit diagnosis group. Specifically, females had higher rates of telehealth only EOCs (34.5%) compared to males (30.1%). Urban enrollees had higher rates of telehealth only EOCs (37.4%) compared to those living in rural

areas (17.0%). U.S. regions 2 (North Central; 24.6%) and 3 (South; 28.9%) had lower proportions of telehealth only EOCs compared to regions 1 (Northeast; 47.9%) and 4 (West; 40.4%). Psychiatrists had a higher proportion of telehealth only EOCs (36.7%) compared to all other behavioral health providers ($p < 0.0001$; **Table 1**). Finally, EOCs with an initiating visit diagnosis of a trauma-stressor disorder had a lower proportion of telehealth only EOCs (31.6%) compared to EOCs with initial visit diagnoses of depressive (33.7%) or anxiety disorders (35.1%). Logistic regression (Table 2) showed that variables associated with higher odds of telehealth only EOCs included all three older age groups, urban residence, and female sex. Residence in the North Central, South, and West geographic regions of the U.S. (reference = Northeast region) and all non-general psychiatrist provider types (psychologist, therapist, child psychiatrist) were associated with lower odds of telehealth only EOCs.

Of the 243,799 hybrid EOCs, the majority started with an in-person visit (57.5%), while 42.5% started with a telehealth visit (Figure 1B). Urban enrollees with hybrid EOCs had a slightly higher proportion of EOCs that started with a telehealth visit compared to rural enrollees (43.3% vs. 35.8%, respectively), but the majority of initiating visits were in-person (56.7%). The Northeast region had a higher proportion of hybrid EOCs start with a telehealth visit (47.0%) compared to all other regions. Factors associated with higher odds of an initial telehealth visit included age between 35-55 years of age, urban residence, and all non-general psychiatrist provider types (**Table 2**). Age >55 years old, and residence in the North Central, South, West, and Unknown regions were associated with lower odds of an initial telehealth visit.

Policy Implications

These results have several implications for current and future policy. First, over half (59%) of behavioral health EOCs involved at least one telehealth visit, indicating the widespread adoption and utilization of virtual behavioral health care. Making telehealth flexibilities permanent, at least as they pertain to behavioral health care, is vital to continuing access to care. This is especially true for urban residents, women, and older adults. Additionally, 42.5% of hybrid EOCs began with a telehealth visit. When combined with the telehealth only EOCs, almost 44% of all EOCs started with a telehealth visit. Under the current policy that will go into place in September 2025, payment for many of those EOCs would not be allowed under CMS guidelines, which require an in-person visit prior to initiation of telehealth. These results support the conclusion that this in-person mandate will predictably disrupt care continuity and reduce access, especially for certain populations. Where clinically appropriate, policies should allow for telehealth-first models of care. Involvement of behavioral health treatment experts in designing more flexible policies as opposed to blanket guidelines is recommended when considering permanent telehealth policies that will allow for increased access to care while maintaining high standards of quality and safety.

These findings also highlight the importance of designing policies that support broader adoption and utilization of telehealth services. For example, telehealth utilization was lower in the North Central and South regions. This could be due to several factors, including structural, cultural, or financial elements related to broadband access and infrastructure. Policies that

work to both study the reasons for these differences and support investments to incentivize and support telehealth adoption in these regions may be beneficial. This could be through broadband expansion, provider and patient training, or reimbursement parity. Similarly, in light of data that suggests different utilization of telehealth services based on specific demographic factors, development of telehealth policies that are demographically responsive will ensure that services are accessible and culturally competent for the populations most likely to use them.

Finally, while there is robust research to support the effectiveness of telehealth for certain aspects of behavioral health treatment, especially certain types of psychotherapy, other aspects would benefit from additional funding to support research and evaluation of real-world effectiveness. For example, our data show that hybrid EOCs had the highest number of visits per episode, suggesting that this model allows for greater longer-term engagement of patients in care. There is little published about the evidence around hybrid models of care, and this area would benefit from more dedicated research and study.

It should be noted that these findings pertain to individuals enrolled in private insurance and may not be generalizable to patients covered by government payors or the uninsured. For example, prior work has shown that telehealth use for behavioral health may be higher among Medicaid enrollees compared to those with private insurance, although Medicaid recipients may face greater access barriers to telehealth overall.[18-20] A comprehensive analysis of behavioral health EOCs that spans patients with a variety of insurance coverage within a health system may better elucidate how patients are receiving behavioral health treatment. If differences do exist, policy alignment between private and public payors will be critical to not only allow for access to care, but to also reduce administrative burden on health care organizations and providers.

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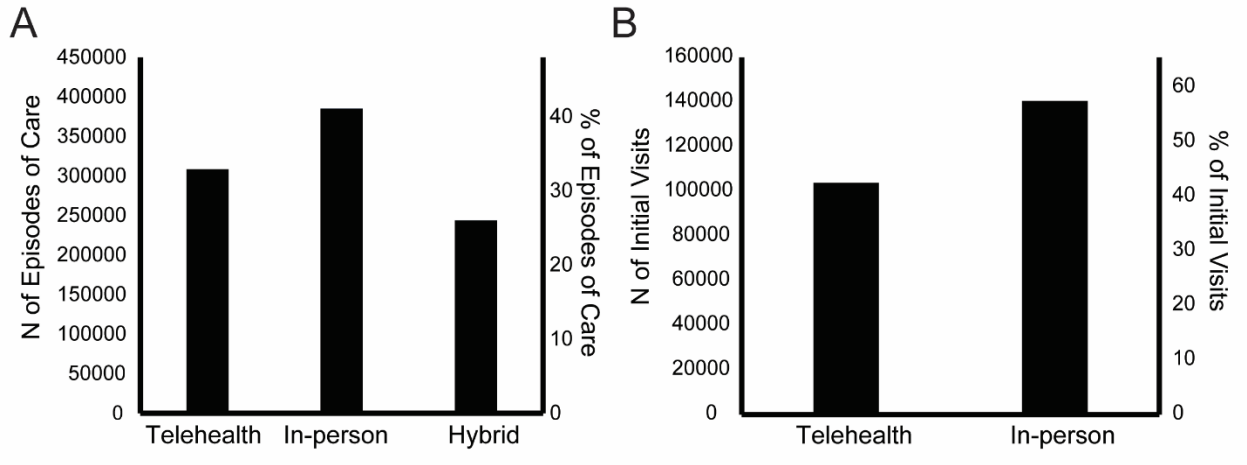

Figure 1. Proportions of behavioral health encounters by delivery type. (A) Total number and percentages of all behavioral health episodes of care (EOCs) by delivery modality. (B) Total number and percentage of initiating visit type for hybrid EOCs.

Table 1. Proportion of behavioral health episodes of care by delivery modality and provider type.

	Therapist		Psychiatrist		Psychologist		Child Psychiatrist		Total	
	N	%	N	%	N	%	N	%	N	%
Telehealth	197855	31.8	60315	36.7	49032	33.8	1381	25.3	308583	32.9
In-person	267710	43.0	56560	34.4	58951	40.6	2108	38.6	385329	41.1
Hybrid	157023	25.2	47640	29.0	37166	25.6	1970	36.1	243799	26.0
Total	622588		164515		145149		5459		937711	

Table 2. Associations between variables and odds of telehealth only behavioral health episodes of care (All) or odds of a telehealth initiating visit in hybrid episodes of care (Hybrid only).

	All			Hybrid Only		
	OR	95% CI	p value	OR	95% CI	p value
Age (R = <19)						
19 - 35	2.50	(2.47, 2.54)	<0.0001	1.00	(0.98, 1.02)	0.86
36 - 55	2.19	(2.16, 2.22)	<0.0001	1.03	(1.00, 1.05)	0.02
>55	1.64	(1.61, 1.68)	<0.0001	0.96	(0.93, 0.99)	0.01
U.S. Region (R = Northeast)						
North Central	0.43	(0.42, 0.43)	<0.0001	0.87	(0.85, 0.89)	<0.0001
South	0.49	(0.48, 0.49)	<0.0001	0.77	(0.75, 0.78)	<0.0001
West	0.77	(0.76, 0.78)	<0.0001	0.91	(0.88, 0.93)	<0.0001
Unknown	1.00	(0.91, 1.09)	0.97	0.63	(0.54, 0.73)	<0.0001
Residence (R = Rural)						
Urban	2.49	(2.44, 2.54)	<0.0001	1.34	(1.29, 1.38)	<0.0001
Sex (R = Male)						
Female	1.20	(1.19, 1.21)	<0.0001	1.00	(0.99, 1.02)	0.63
Provider type (R = psychiatrist)						
Child psychiatrist	0.75	(0.71, 0.80)	<0.0001	1.15	(1.05, 1.27)	0.002
Therapist	0.87	(0.86, 0.88)	<0.0001	1.17	(1.14, 1.19)	<0.0001
Psychologist	0.95	(0.93, 0.96)	<0.0001	1.29	(1.25, 1.33)	<0.0001

R = reference