

Research Letter | Psychiatry Predeductible Coverage and Receipt of Telemental Health Visits

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Introduction

The marked increase in telehealth visits, particularly for mental health, during the COVID-19 pandemic¹ was bolstered by regulatory changes such as the exemption of telehealth visits from the deductible in high-deductible health plans, plans in which individuals face a minimum \$1600 deductible.² Congress extended this exemption through the end of 2024, and there is ongoing debate on whether the exemption should be made permanent.³ Given that there has been no empirical data on the effect of this exemption, we examined utilization changes associated with the reintroduction of cost sharing for patients receiving telemental health.

Methods

The cohort study included patients from all 50 states and the District of Columbia receiving telemental health care from Included Health (a national telehealth-only company) from 2 clients (1 employer and 1 insurance plan) that varied in their coverage of telemental health during the study period. During the preintervention period (January 1 to June 30, 2021), all patients had no cost sharing for telehealth visits. In July 2021, one client (intervention) reintroduced cost sharing, and the other client (control) continued to offer telehealth services without cost sharing. The Harvard Longwood Campus institutional review board approved this study; informed consent was waived and the study was exempted from human participants review because of the use of deidentified data. This study followed the STROBE reporting guideline.

We used difference-in-difference methodology to evaluate how the reintroduction of cost sharing was associated with telehealth use in the postintervention period (July 1 to December 31, 2021). Among patients receiving care in the preintervention period, our 2 outcomes were the number of telemental health visits per patient and the proportion of patients who had any visits in the postintervention period. Models were adjusted for clinical and demographic characteristics, including a social deprivation index⁴ (eAppendix in Supplement 1). All *P* values were from 2-sided tests, and results were deemed statistically significant at *P* < .05. Analyses were performed using R, version 4.3.1.

Results

There were 15 024 patients (6940 in intervention group; 8084 in control group) (**Table**). Across the entire cohort, the mean (SD) age was 33.5 (10.6) years with 71.4% of patients being female and 28.6% being male. Intervention cohort patients were more likely than those in the control cohort to live in urban areas (95.1% vs 79.0%; P < .001). In the 6-month preintervention period, the intervention and control groups had a mean (SD) of 4.8 (5.0) and 4.7 (5.0) visits per patient, respectively. In the postintervention period, the mean (SD) out-of-pocket costs per visit in the intervention and control groups were \$29.50 (\$30.00) and \$0 (\$0.08), respectively.

After reintroduction of cost sharing, the mean number of visits per patient per month was lower in the intervention group than the control group (**Figure**). In adjusted models, cost sharing was associated with 1.5 (95% Cl 1.2-1.7; P < .001) fewer visits per patient and an 11.7% (95% Cl,

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JAMA Network Open. 2024;7(7):e2420731. doi:10.1001/jamanetworkopen.2024.20731

Supplemental content

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10.1%-13.4%; P < .001) reduction in the proportion of patients who had any visits in the postintervention period (22.0% relative reduction).

Discussion

We found that when patients were required to pay out of pocket for telehealth visits, they had substantially fewer telemental health visits, and a larger fraction stopped seeing their mental health specialists. These findings imply that the expiration of the predeductible telehealth coverage exception in January 2025 may reduce mental health service use, which could lead to worse clinical outcomes. This study is limited by the sample being from a single telehealth company, the inability to determine whether patients received care from other clinicians, and a lack of data on clinical outcomes.

Our findings are consistent with a robust body of research showing that patient cost sharing decreases the use of both high- and low-value care.^{5,6} Given ongoing concerns about access to

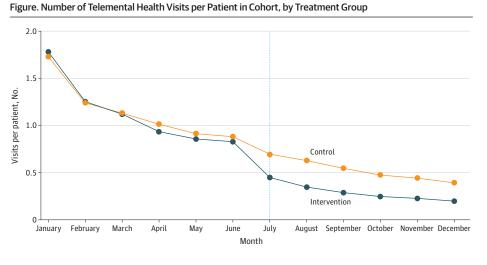
a	Intervention	Control		
Characteristic	(n = 6940)	(n = 8084)	t or χ^2 Value	P value
No. of visits per patient, mean (SD)	4.8 (5.0)	4.7 (5.0)	0.76 ^a	.45
No. of clinicians per patient, mean (SD)	1.4 (0.7)	1.4 (0.7)	-3.16 ^a	.002
Age, mean (SD), y	34.3 (10.6)	32.8 (10.6)	8.63ª	<.001
Sex, No. (%)				
Female	5118 (73.7)	5607 (69.4)	34.97 ^b	<.001
Male	1790 (25.8)	2415 (29.9)	30.66 ^b	<.001
PHQ-9, No. (%) in category ^c				
No to minimal depression (0-4)	2131 (30.7)	2089 (25.8)	43.51 ^b	<.001
Mild depression (5-9)	1928 (27.8)	2114 (26.2)	4.97 ^b	.03
Moderate to severe depression (≥ 10)	2278 (32.8)	3881 (48.0)	355.3 ^b	<.001
Missing PHQ-9	603 (8.7)	438 (5.4)	61.44 ^b	<.001
Social Deprivation Index score, mean (SD)	48.3 (28.4)	51.2 (25.3)	-6.70 ^a	<.001
White patients, mean (SD), % ^d	73.5 (19.3)	77.8 (17.7)	-13.97 ^a	<.001
Urban-rural status, rural, No. (%) ^e	341 (4.9)	1694 (21.0)	819.2 ^b	<.001
No. of psychiatrists per 30 000 in county, mean (SD)	3.3 (2.5)	2.1 (2.2)	32.39ª	<.001

Abbreviation: PHQ-9, 9-item Patient Health Questionnaire.

^a t Value.

^c First PHQ-9 captured from January to June 2021.

- ^d Measured at the zip code tabulation area by the US Census Bureau and underlying data not captured at the individual patient level.
- ^e Rurality is defined by the US Department of Agriculture's Economic Research Service Rural-Urban Commuting Area; rural is defined as isolated, small rural, and large rural areas.



JAMA Network Open. 2024;7(7):e2420731. doi:10.1001/jamanetworkopen.2024.20731

Cost sharing for telehealth visits introduced in July 2021 (vertical dotted line) in the intervention group.

^b χ^2 Value.

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mental health treatment and to help patients stay in treatment, policies that reduce cost sharing for both in-person and telemental health visits could be considered.

ARTICLE INFORMATION

Accepted for Publication: May 6, 2024.

Published: July 9, 2024. doi:10.1001/jamanetworkopen.2024.20731

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Author Contributions: Ms Fang and Dr Mehrotra had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: Fang, Marshall, Thomas, Mehrotra.

Acquisition, analysis, or interpretation of data: Fang, Marshall, Fendrick, Huskamp, Mehrotra.

Drafting of the manuscript: Fang, Fendrick.

Critical review of the manuscript for important intellectual content: All authors.

Statistical analysis: Fang.

Obtained funding: Huskamp.

Administrative, technical, or material support: Marshall, Huskamp, Mehrotra.

Conflict of Interest Disclosures: Ms Marshall reported employment with Included Health, who provided the data for this study. Dr Fendrick reported being a consultant for AbbVie, CareFirst BlueCross BlueShield, Centivo, Clover Insurance Company, Community Oncology Association, Covered California, EmblemHealth, Employee Benefit Research Institute, Exact Sciences, Grail Inc, Harvard University, Health & Wellness Innovations, Health at Scale Technologies, Hopewell Fund, Johnson & Johnson, Medtronic, MedZed, Merck, Mother Goose Health, Phathom Pharmaceuticals, Proton Intelligence, RA Capital, Sempre Health, the state of Minnesota, US Department of Defense, Virginia Center for Health Innovation, Washington Health Benefit Exchange, Wellth, Yale-New Haven Health System, and Zansors; receiving research support from the Agency for Healthcare Research and Quality, the Gary and Mary West Health Policy Center, Arnold Ventures, the National Pharmaceutical Council, the Patient-Centered Outcomes Research Institute, Pharmaceutical Research and Manufacturers of America, the Robert Wood Johnson Foundation, the state of Michigan, and the Centers for Medicare & Medicaid Services; serving as co-editor in chief of the *American Journal of Managed Care;* and being a partner in VBIDHealth LLC. Dr Mehrotra reported receiving personal fees from Delta Airlines, Black Opal Ventures, and NORC at the University of Chicago outside the submitted work. No other disclosures were reported.

Funding/Support: This study was supported by grant 1R01MH112829 from the National Institute of Mental Health.

Role of the Funder/Sponsor: The National Institute of Mental Health had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Data Sharing Statement: See Supplement 2.

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JAMA Network Open. 2024;7(7):e2420731. doi:10.1001/jamanetworkopen.2024.20731

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SUPPLEMENT 1. eAppendix. eReference.

SUPPLEMENT 2. Data Sharing Statement

JAMA Network Open. 2024;7(7):e2420731. doi:10.1001/jamanetworkopen.2024.20731