*Health Affairs Scholar*, 2024, **2**(9), qxae104
https://doi.org/10.1093/haschl/qxae104
Advance access publication: August 20, 2024
**Research Article**

Health Affairs Scholar
EMERGING & GLOBAL HEALTH POLICY
OXFORD

# Differential impacts of the COVID-19 pandemic on mental health service access among Medicaid-enrolled individuals

**K. John McConnell[1,*], Sara Edelstein[1], Courtney Benjamin Wolk[2], Stephan Lindner[1], Jane M. Zhu[3]**

[1]Center for Health Systems Effectiveness, Oregon Health and Science University, Portland, OR 97239, United States
[2]Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104, United States
[3]Division of General Internal Medicine, Oregon Health and Science University, Portland, OR, 97239, United States

***Corresponding author:** Center for Health Systems Effectiveness, Oregon Health & Science University, 3030 SW Moody Ave, Portland, OR 97239, United States. Email: mcconnjo@ohsu.edu

## Abstract

The COVID-19 public health emergency (PHE) caused significant disruptions in the delivery of care, with in-person visits decreasing and telehealth use increasing. We investigated the impact of these changes on mental health services for Medicaid-enrolled adults and youth in Washington State. Among enrollees with existing mental health conditions, the first year of the PHE was associated with a surge in specialty outpatient mental health visits (13% higher for adults and 7% higher for youth), returning to pre-PHE levels in the second year. Conversely, youth with new mental health needs experienced a decline in specialty outpatient visit rates by ~15% and 37% in the first and second years of the PHE, respectively. These findings indicate that while mental health service use was maintained or improved for established patients, these patterns did not extend to Medicaid-enrolled youth with new mental health needs, potentially due to barriers such as difficulty in finding providers and establishing new patient-provider relationships remotely. To bridge this gap, there is a need for a multi-faceted approach that includes improving service accessibility, enhancing provider availability, and optimizing initial care encounters, whether in-person or virtual, to better support new patients.

## Lay summary

The COVID-19 public health emergency (PHE) generated a wide-ranging shock to the health care system and disrupted the ways in which people accessed care. This study explores how these changes affected mental health care for Medicaid-enrolled adults and youth in Washington State. Our findings show that enrollees with existing mental health conditions had better access to mental health services during the first year of the PHE, with visit rates 13% higher than before. However, youth who developed new mental health needs during the PHE faced challenges, with their access to specialty mental health services dropping by 15% in the first year and 37% in the second year. These results suggest that the COVID-19 PHE may have adversely affected access among youth with new mental health conditions. To address these potential shortcomings, efforts must extend beyond telehealth solutions to encompass a broader strategy that includes increasing provider capacity and ensuring that the initiation of care, whether in-person or remote, is welcoming and effective for new patients.

**Key words:** adolescent health; mental health; telehealth; Medicaid.

## Introduction

The COVID-19 public health emergency (PHE) generated a wide-ranging shock to the health care system, with more than 500 000 excess deaths occurring in the United States (US) in 2020.[1] The toll on mental health was substantial. In 2020, ~39% of US adults had symptoms of anxiety disorder, and 32% had symptoms of depression, rates that were more than four times higher than rates reported in 2019.[2]

The PHE's disruption of in-person care was met with the rapid uptake of telehealth, catalyzed in part by the Coronavirus Aid, Relief, and Economic Security Act, which included provisions that reimbursement for telehealth services for Medicare enrollees should match rates equivalent to those for in-person care. Most Medicaid programs followed suit, recognizing that telehealth created an opportunity to ensure continuity of care while minimizing the risk of viral transmission.[3-5] Washington State implemented provisions that allowed for a wide variety of telehealth technologies, including audio-only options; payment parity, meaning that telehealth services were reimbursed at the same rate as in-person visits; and licensing flexibility, permitting out-of-state providers with equivalent licensing to offer care to Medicaid beneficiaries.[6]

Understanding the impact of the PHE on mental health services in Medicaid is critical, given who the program covers. Medicaid is the largest payer of mental health services nationally.[7] It covers a disproportionate number of people with serious mental illness, a population that may have worse outcomes with disruptions in the continuity of care.[8-11] The program also covers a larger share of lower-income individuals with fewer social supports, which may make telemedicine access difficult.[12-14]

Medicaid also covers ~50% of all children in the U.S. (growing to 53 million between March 2020 and July 2022), including 75% of children living in poverty.[15,16] This

Received: June 7, 2024; Revised: August 9, 2024; Accepted: August 15, 2024

population is of particular concern, as adolescent mental health has been worsening for nearly a decade,[17] culminating in a 2021 Declaration of a National Emergency in Child and Adolescent Mental Health from the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association,[18] accompanied by an official Advisory by the Surgeon General.[19]

Most studies of mental health services during the PHE find that in-person visits dropped substantially but were offset by dramatic increases in the use of telehealth.[20-24] The limited number of studies of the Medicaid population[25-27] have focused on enrollees with mental health conditions diagnosed prior to the PHE, generally finding that telehealth allowed enrollees to maintain access to mental health services during the PHE. There is less evidence on how mental health services fared among children and adolescents, and, to our knowledge, no studies have assessed the extent to which Medicaid-enrolled adults or youth who newly experienced mental health needs during the PHE may have experienced challenges in accessing care. To address these gaps in knowledge, we investigated the implications of the PHE on outpatient mental health use and acute service use among Medicaid enrollees, including adults and youth, in Washington State.

## Data and methods

### Study design and setting

This study used Medicaid claims data from Washington State from April 1, 2019, through March 31, 2022, to assess mental health service use with the onset of the COVID-19 PHE. Claims were obtained from the Washington Health Care Authority. Our enrollee study population included individuals ages 3–64. We excluded members who were dually eligible for Medicare and Medicaid, part of the Emergency Medicaid or medically needy spend-down program, moved from one county grouping to another, or were part of the fee-for-service population. We also excluded member-calendar years in which the member was not enrolled for at least three months (Appendix A).

### PHE and pre-PHE cohorts

To determine whether these outcomes during the PHE were different than typically observed year-over-year, we defined a PHE cohort as having a baseline year (Year 0) from April 1, 2019, through March 31, 2020. We then assessed outcomes from April 1, 2020, through March 31, 2021 (Year 1) and April 1, 2021, through March 31, 2022 (Year 2). We defined the pre-PHE cohort as having a baseline year (Year 0) from April 1, 2017, through March 31, 2018, and assessed outcomes from April 1, 2018, through March 31, 2019 (Year 1) and April 1, 2019, through March 31, 2020 (Year 2). For each cohort, we used the baseline Year 0 to identify individuals with prior mental health diagnosis (MI), defined as any psychiatric inpatient, residential, or partial hospitalization claim, or at least two other non-inpatient claims on separate dates in the year with any mental health or self-harm diagnosis. Among the cohort with a history of mental illness, we also defined a sub-cohort of enrollees with SMI: those with any inpatient, psychiatric residential, or partial hospitalization claim or at least two other claims on separate dates in the year, with a primary diagnosis of schizophrenia (ICD10 F20, F25), bipolar I (ICD10 F30, F31.0-F31.77), or major depressive disorder (ICD10 F32.2, F32.3, F33.2, F33.3). We defined individuals as having no history of mental illness if they did not meet one of these criteria. We defined children as enrollees aged 3–18 and adults as enrollees aged 19–64. Enrollees in each cohort were required to be enrolled in all 3 years.

### Outcome variables

The primary outcome was the number of outpatient mental health visits (including in-person and telehealth visits) to a mental health specialist, per person per month. Secondary outcomes included changes in emergency department visits for mental health conditions and the probability of self-harm events. These outcomes may serve as proxies for the quality of care. We studied the probability of any self-harm event rather than counts of visits because a larger number of visits with self-harm diagnoses may either represent worse outcomes (ie, repeated self-harm events) or better management (ie, multiple visits for follow-up care). The ICD-10 codes and CPT codes used to define outpatient mental health services are provided in Appendix B.

### Covariates

We included the following patient-level covariates: age, sex, rurality (derived from rural–urban commuting area codes), and 15 Chronic Illness and Disability Payment System risk adjusters[24] (Appendix B).

### Statistical analysis

Our analyses were conducted at the member-quarter level. We used linear regression to assess changes from the baseline Year 0 through Years 1 and 2, with indicator variables for the PHE cohort and year; interactions between indicator variables for the PHE cohort and year; and demographic covariates. Standard errors were clustered at the primary care service area level.[28]

### Limitations

This study has several limitations. The study takes place in Washington, a state that has dedicated significant resources to improving mental health in its Medicaid program.[29-33] The maintenance of access to mental health care may not be generalizable to other states with fewer resources. The construction of our patient cohort, definition of patient characteristics, and measurement of outcomes were constrained by the data collected through claims, which lacked detailed clinical and sociodemographic information. For instance, we were unable to assess clinical outcomes based on patient or clinician reports of mental health symptoms. In addition, our analysis of variations across different subgroups did not include adjustments for multiple testing, meaning these results should be viewed as exploratory. Our study may also be limited by the application of an adult-centric definition of SMI to the youth cohort. Traditionally, SMI encompasses schizophrenia, bipolar disorder, and major depressive disorder in adults. While this definition aligns with our adult cohort, it does not include anxiety disorder or behavioral disorders such as conduct disorder and oppositional defiant disorder. The advantage of our approach is that it maintains consistency in the definition of SMI across youth and adult cohorts. Finally, because we did not have access to linked Medicare claims, we did not analyze outcomes for individuals who were dually eligible for

Medicaid and Medicare. Dual-eligible enrollees are likely to have a higher prevalence of behavioral health conditions than other Medicaid enrollees[34]; additional studies are warranted to understand how this population fared with the COVID-19 disruptions.

The study protocol was approved by the Washington State IRB. We followed the Strengthening the Reporting of Observational Studies in Epidemiology reporting guidelines.[35]

## Results

Our study population included 1 908 799 enrollees, with 990 797 enrollees in the PHE cohort and 918 002 in the pre-PHE cohort. Table 1 displays enrollee demographic characteristics for PHE and pre-PHE cohorts, which were generally similar across both groups. For example, 52.5% of enrollees in the PHE cohort were female, and 15.2% had a history of mental health diagnoses in Year 0, compared to 52.9% and 14.7%, respectively, in the pre-PHE cohort. Across most characteristics, the standardized difference (a measure of covariate imbalance between cohorts) was zero and was below 0.05 for all measures, suggesting that the PHE and pre-PHE cohorts were highly comparable.

### Trends in mental health service use

Figure 1 displays trends in unadjusted outpatient mental health visits across 12 quarters for the PHE and pre-PHE cohorts, with the first four quarters (Year 0) corresponding to the baseline (pre-PHE) year for the PHE and pre-PHE cohorts. We display six panels, with top panels A, B, and C showing changes among adults and bottom panels C, D, and E showing children and adolescents. Among enrollees with previous diagnoses of mental illness, utilization trends declined in Years 1 and 2. For the population without previous diagnoses of mental illness, utilization trends demonstrated sharp increases in Years 1 and 2. These phenomena likely result from regression to the mean between groups.

Although the unadjusted trends were generally similar, they also indicate some differences in the PHE and pre-PHE cohorts during Years 1 and 2. Among adults with a history of mental health diagnoses, unadjusted visit rates were visibly higher in the PHE cohort in Year 1 (panel A). In contrast, relative to the pre-PHE cohort, unadjusted visit rates for youth without previous diagnoses of mental illness remained lower in Years 1 and 2 for the PHE cohort (panel F).

### Adjusted changes for adults

Table 2 displays differential changes in outpatient mental health visits per 1000 member months for Years 1 and 2.

Among adult enrollees with previous mental health diagnoses, adjusted visit rates were ~13% higher in the PHE cohort in Year 1 compared to the pre-PHE cohort (differential visit rate 89.3 visits per 1000 member months, 95% CI [64.9, 113.7]). Adult enrollees with SMI also demonstrated significantly higher visit rates in Year 1 than the comparison group (estimate: 125.7, 95% CI 46.7, 204.6), which was ~10% higher than the comparison group's visit rate (1220.7 visits per 1000 member months). In contrast, by Year 2, the PHE cohort's visit rates were not significantly different than the pre-PHE cohort for members with any history of mental illness or SMI.

While mental health visit rates increased for adults with previous mental health diagnoses, this pattern did not hold for adults without previous mental health diagnoses. Among these individuals, the use of specialty outpatient mental health use in the first year was not statistically significantly different from the pre-PHE cohort in Year 1 and was lower than in Year 2 (differential visit rate −5.1 visits per 1000 member months, 95% CI [−7.0, −3.3]) ~10% lower than the comparison group's visit rate (50.0 visits per 1000 member months).

**Table 1.** Enrollee characteristics in PHE and pre-PHE cohorts (%).

| | Characteristic | PHE group | Pre-PHE group | Standardized difference |
|---|---|---|---|---|
| *N* | | 990 797 | 918 002 | |
| Age | 3–12 | 32.9 | 35.0 | 0.02 |
| | 13–18 | 18.8 | 17.7 | |
| | 19–34 | 21.9 | 21.4 | |
| | 35–54 | 18.9 | 18.5 | |
| | 55–64 | 7.6 | 7.4 | |
| Female | | 52.5 | 52.9 | 0.00 |
| Race and ethnicity | American Indian and Alaska native | 1.2 | 1.2 | 0.00 |
| | Asian American and Pacific Islander | 7.6 | 7.5 | 0.00 |
| | Black | 8.3 | 8.3 | 0.00 |
| | Hispanic | 25.2 | 25.0 | 0.00 |
| | White | 50.5 | 51.4 | 0.02 |
| | Other/missing | 7.2 | 6.6 | 0.02 |
| Geography | Urban | 73.4 | 72.9 | 0.01 |
| | Rural | 24.4 | 24.3 | 0.00 |
| | Missing | 2.2 | 2.8 | 0.04 |
| History of mental health diagnosis | | 15.2 | 14.7 | 0.01 |
| Risk factors | Substance use disorder | 6.9 | 6.5 | 0.02 |
| | Cancer | 0.9 | 0.9 | 0.00 |
| | Cardiovascular conditions | 10.7 | 10.6 | 0.00 |
| | Diabetes | 4.1 | 4.0 | 0.00 |
| | Gastroenterological conditions | 8.3 | 8.3 | 0.00 |
| | Pulmonary conditions | 11.1 | 11.5 | 0.01 |

Values are taken in the fourth quarter of year 0 for each cohort. Risk factors are Chronic Illness and Disability and Payment System risk adjusters. Standardized differences >0.1 are typically interpreted as moderate to large differences between groups. The pre-PHE cohort is defined as observations between April 1, 2017 through March 31, 2020; the PHE cohort is defined as observations between April 1, 2019 through March 31, 2022.

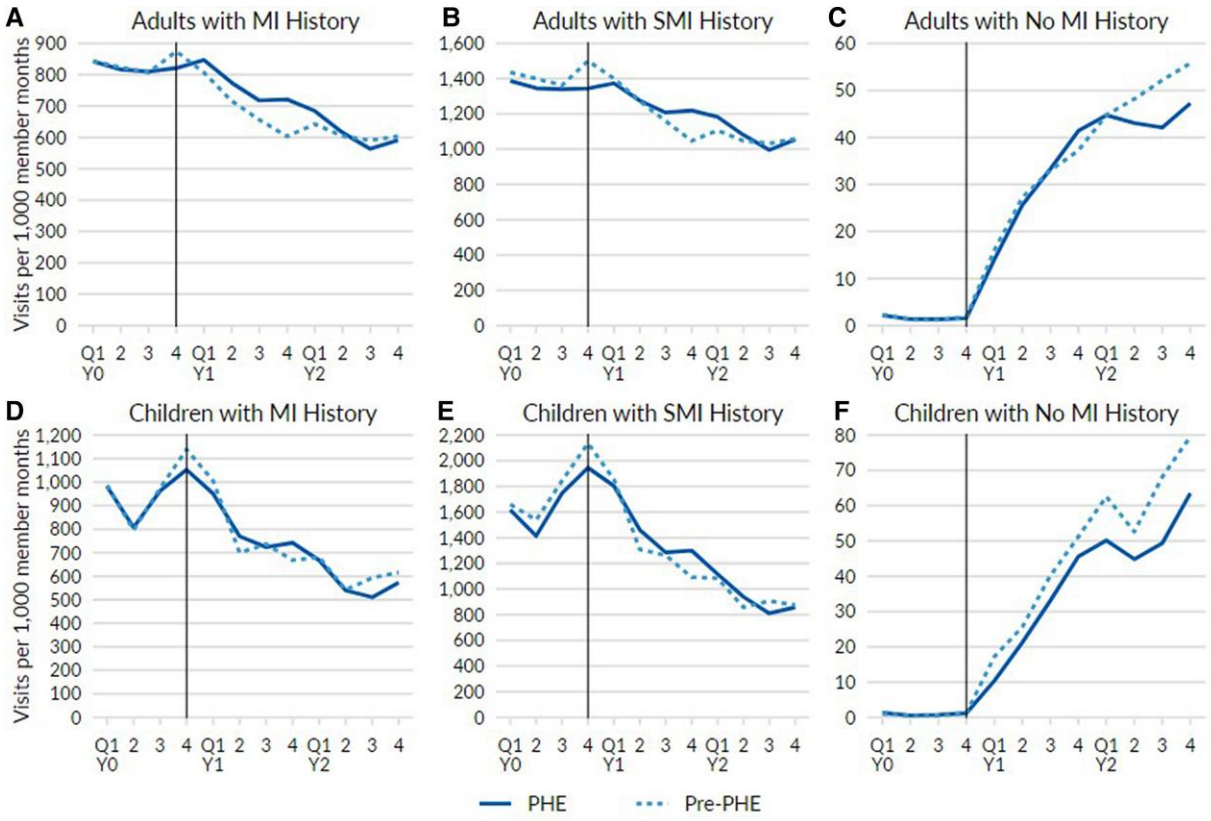


**Figure 1.** Differences in 3-year trends between PHE and pre-PHE cohorts in outpatient mental health visits. Unit of observation is the person quarter. Measures are presented as rates per 1000 member months. Top panels A, B, and C show changes among adults and bottom panels D, E and F show children and adolescents. Dashed line represents pre-PHE cohort (April 1, 2017 through March 31, 2020); solid line represents PHE cohort (April 1, 2019 through March 31, 2022). Solid vertical line reflects demarcation of one year of pre-period data (April 1, 2019, through March 31, 2020, for the PHE cohort; April 1, 2017, through March 31, 2018, for the pre-PHE cohort) with two years of post-period data (April 1, 2020, through March 31, 2022, for the PHE cohort; April 1, 2018, through March 31, 2020, for the pre-PHE cohort). "MI history" and "SMI history" indicate diagnoses for mental illness (MI) or serious mental illness (SMI) in Year 0.

## Adjusted changes for youth

Adolescents and children exhibited patterns of use that were similar to adults. Compared to the pre-PHE cohort, adjusted visit rates for children and adolescents were higher in Year 1 among enrollees with a history of mental illness (differential visit rate 53.2 visits per 1000 member months, 95% CI [17.4, 89.1]), ~7% higher than the comparison group's visit rate of 778.1 visits per 1000 member months. Those with SMI also had higher rates than the comparison group (estimate: 217.7, 95% CI 74.7, 360.6), ~16% higher than the comparison group's visit rate. In Year 2, the PHE cohort's visit rates were not significantly different from those of the pre-PHE cohort.

In contrast, youth who newly experienced mental health needs during the PHE exhibited decreased specialty mental health visits. Compared to the pre-PHE cohort, visit rates among the PHE cohort of youth with no previous mental health diagnoses were lower in Year 1 (differential visit rate −4.9 visits per 1000 member months, 95% CI [−6.8, −3.0]) and in Year 2 (estimate: −12.4, 95% CI −16.3, −8.5), ~15% and 37% lower than the comparison group's visit rates.

## Use of telehealth

The final column of Table 2 displays the percentage of enrollees who used telehealth services for outpatient specialty mental health. Despite the relatively large increases in visit rates in Year 1, the uptake of telehealth was variable in the PHE cohort. For example, among adults with any history of mental illness, only 41.2% of enrollees used any telehealth for outpatient specialty mental health. Furthermore, telehealth use rates were quite low (below 5%) for adults and youth with no history of mental health diagnoses.

## Trends in ED visits for mental health conditions and self-harm events

Table 3 displays changes in ED visits for mental health conditions and any self-harm event, comparing the PHE cohort to the pre-PHE cohort. ED visits for mental health conditions were generally lower or not statistically significantly different in the PHE cohort compared to the pre-PHE cohort. For example, ED visits were lower in Year 1 (differential visit rate −0.6 visits per 1000 member months, 95% CI [−1.2, −0.19]) among adults with previous mental health diagnoses, ~5% lower than the comparison group's visit rate of 11.1 visits per 1000 member months. Adults with SMI had ED visit rates that were lower in the PHE cohort relative to the pre-PHE cohort, but these differences were not statistically significant. Adolescents and children demonstrated patterns of use that were similar to adults.

In contrast to ED visits for mental health conditions, there were some instances where the probability of any self-harm

**Table 2.** Adjusted differences in outpatient mental health visits between PHE and pre-PHE cohorts by subpopulation.

| Study population | Year 1, mean, comparison group | Differential, year 1 | Year 2, mean, comparison group | Differential, year 2 | % of PHE cohort using any telehealth in Y1 and Y2 |
|---|---|---|---|---|---|
| Adults with previous diagnoses of MI | 696.1 | **89.3**[a] (**64.9, 113.7**) | 610.8 | 25.7 (−11.3, 62.7) | 41.2 |
| Adults with SMI | 1220.7 | **125.7**[a] (**46.7, 204.6**) | 1061.7 | 98.1 (−0.1, 196.3) | 54.7 |
| Adults with no history of MI | 28.3 | 1.0 (−0.1, 2.1) | 50.0 | **−5.1**[a] (**−7.0, −3.3**) | 4.7 |
| Children with previous diagnoses MI | 778.1 | **53.2**[a] (**17.4, 89.1**) | 608.5 | 4.4 (−44.0, 52.8) | 40.3 |
| Children with SMI | 1382.3 | **217.7**[a] (**74.7, 360.6**) | 933.7 | 133.0 (−35.8, 301.8) | 54.9 |
| Children with no history of MI | 33.5 | **−4.9**[a] (**−6.8, −3.0**) | 65.6 | **−12.4**[a] (**−16.3, −8.5**) | 4.3 |

The top three rows show changes for adults, including those with Year 0 diagnoses of any mental illness (MI), those with diagnoses in Year 0 for serious mental illness (SMI), and those with no history of mental health conditions, defined as enrollees without at least one inpatient visit with a mental health diagnosis or at least two other visits with a mental health diagnosis. Thus, it is possible for enrollees classified as having "No mental illness" to still have an outpatient mental health visit, a primary care mental health visit, or an ED visit for a mental health condition. The next three rows show the same designations for children and adolescents. Bold entries represent estimates that are statistically significant. The unit of observation was the person quarter. Outpatient mental health visits include in-person and telehealth visits are presented as rates per 1000 member months. Adults are defined as enrollees ages 19–64. Children are defined as enrollees ages 3–18.
[a]$P < .05$.

**Table 3.** Adjusted differences in mental health emergency department (ED) visits and self-harm events between PHE and pre-PHE cohorts by subpopulation.

| Outcome variable | Study population | Year 1, mean, comparison group | Differential, year 1 | Year 2, mean, comparison group | Differential, year 2 |
|---|---|---|---|---|---|
| ED visits for mental health conditions (count) | Adults with previous diagnoses of MI | 11.07 | **−0.64**[a] (**−1.22, −0.07**) | 9.90 | −0.32 (−1.02, 0.38) |
| | Adults with SMI | 27.28 | −2.03 (−4.21, 0.15) | 24.08 | −1.64 (−4.00, 0.72) |
| | Adults with no history of MI | 1.20 | **−0.11**[a] (**−0.17, −0.04**) | 1.36 | **−0.28**[a] (**−0.37, −0.20**) |
| | Children with previous diagnoses MI | 5.93 | **−0.74**[a] (**−1.22, −0.27**) | 5.63 | **−0.49**[a] (**−0.95, −0.04**) |
| | Children with SMI | 28.96 | −2.37 (−7.64, 2.89) | 22.15 | −4.26 (−10.26, 1.75) |
| | Children with no history of MI | 0.54 | **−0.10**[a] (**−0.14, −0.07**) | 0.76 | **−0.09**[a] (**−0.13, −0.05**) |
| Self-harm events (any) | Adults with previous diagnoses of MI | 1.25% | 0.01% (−0.04, 0.06) | 1.01% | **0.06%**[a] (**0.01, 0.11**) |
| | Adults with SMI | 2.25% | 0.00% (−0.16, 0.15) | 2.01% | 0.02% (−0.13, 0.18) |
| | Adults with no history of MI | 0.20% | **−0.01%**[a] (**−0.02, −0.00**) | 0.20% | −0.01% (−0.01, 0.00) |
| | Children with previous diagnoses MI | 1.51% | 0.04% (−0.02, 0.09) | 1.42% | **0.10%**[a] (**0.03, 0.17**) |
| | Children with SMI | 8.56% | −0.05% (−0.67, 0.58) | 6.03% | 0.05% (−0.62, 0.73) |
| | Children with no history of MI | 0.16% | −0.01 (−0.01, 0.00) | 0.22% | 0.01 (0.00, 0.01) |

The top six rows display outcomes for the general population (ie, with no exclusion criteria based on telehealth use). The last six rows focus on the subpopulation of enrollees who did not use telehealth. Previous diagnoses of MI includes those with diagnoses in Year 0 of any mental illness (MI); SMI includes those with diagnoses in Year 0 for serious mental illness (SMI), and No MI history includes those with no history of mental health conditions, defined as enrollees without at least one inpatient visit with a mental health diagnosis or at least two other visits with a mental health diagnosis. Bold entries represent estimates that are statistically significant. Unit of observation is the person quarter. Measures are presented as rates per 1000 member months. "ED MH" stands ED visits for mental health conditions. Adults are defined as enrollees ages 19–64. Children are defined as enrollees ages 3–18.
[a]$P < .05$.

event was higher in the PHE cohort than in the pre-PHE cohort. For example, adults with a history of mental health conditions had a slightly elevated rate of any self-harm events (0.06%, 95% CI 0.01%, 0.11%) compared to 1.01% for the pre-PHE cohort in Year 2 (Appendix C). Youth with a history of mental health conditions also had an elevated rate of any self-harm events in Year 2 (0.10%, 95% CI 0.03, 0.17). While these changes were statistically significant, they were small in relative terms (ie, a change of 0.1% point or less).

## Discussion

Among adults and youth with previous mental health conditions, the PHE was marked by specialty mental health visits

that were generally higher in the first year of the PHE when compared to a similar cohort in the pre-PHE period, with increased telehealth visits more than offsetting decreases in in-person visits. However, youth enrollees with new mental health needs arising during the PHE had lower rates of outpatient mental health visits in Year 2, despite national evidence that the prevalence of mental health conditions generally surged during the PHE.[36-42] Adult enrollees with new mental health needs also had lower rates in Year 2 of the PHE. One possibility for this finding is that established patients may have been able to continue their care despite changes in modalities, while enrollees with new mental health needs may have faced greater barriers to finding providers and establishing relationships when in-person visits were less common.

Given the increased prevalence of mental health needs among youth,[43-48] it is concerning that specialty outpatient mental health rates were lower among youth with new mental health needs, compared to the pre-PHE population. These enrollees might have struggled to adopt telehealth for several reasons. First, the initial process of finding a provider could be more daunting when conducted remotely, as it often involves navigating unfamiliar digital platforms. Additionally, building rapport and trust with a new mental health provider can be more difficult without the nuances of in-person interactions. Non-verbal cues and physical presence can significantly affect patient-provider communication and trust-building, particularly in mental health care. Furthermore, new patients have faced logistical issues such as securing a private space for telehealth sessions. These barriers could be significant for youth without their own computer or room to initiate and carry out a telehealth session. These factors may have posed unique challenges for new patients attempting to initiate mental health care during the PHE.

We found relatively little evidence that the quality of mental health care was worse during the disruptions associated with the PHE. Rates of ED visits for mental health conditions remained stable or declined, and the likelihood of any self-harm event was generally stable, although there were very slight increases in Year 2 for adults and children with a history of mental health conditions. One interpretation of these findings is that the changes in mental health care delivery did not lead to worse outcomes for enrollees. However, it is possible that enrollees were worse off in the PHE, and the lack of measurable changes in adverse outcomes reflects overall reductions in the number of patients who sought care in any venue.

Our study highlights critical implications for telehealth regulations and Medicaid policies, especially as the current telemedicine flexibilities are set to expire at the end of 2024. Lawmakers have raised concerns that extending these regulations could lead to higher health care spending, while advocates fear that reinstating previous site and geographic restrictions could undo the access gains achieved during the PHE.

The experience within Washington's Medicaid program underscores telehealth's significant benefits, particularly in maintaining or improving access for established patients. However, our findings indicate that these benefits may not have extended to Medicaid-enrolled youth with new mental health needs. This gap suggests that telehealth should not be viewed as a one-size-fits-all solution capable of addressing all mental health needs across diverse populations.

Whereas, previous research has largely focused on the effectiveness of telemental health in supporting care for individuals with SMI, our findings show the importance of tending to approaches that specifically target the unique barriers faced by new patients seeking mental health services. Future research should be directed at understanding the specific obstacles new patients encounter when attempting to access services, including identifying available providers, lack of awareness or familiarity with telehealth options, and potential issues with privacy and trust.

To the extent that patients with new mental health needs were uncomfortable with telehealth, there may be value in developing protocols or case studies that can enhance the initial virtual encounters for new patients, demonstrating how to build rapport and trust, which are essential for effective mental health treatment. Reimagining these initial encounters involves creating a more interactive and engaging telehealth platform that can simulate the experience of in-person visits. For instance, ensuring that telehealth providers are trained in techniques that facilitate virtual patient engagement, such as maintaining eye contact through the camera and using clear, empathetic communication, could significantly improve the quality of the interaction.

The observed decline in specialty outpatient visits for youth with new mental health needs during the PHE is particularly concerning in the context of the recent Medicaid unwinding, which has led to a significant reduction in Medicaid enrollment in Washington and other states. This reduction could further exacerbate barriers to accessing care for these vulnerable populations, highlighting the urgent need for policies that ensure continuity of mental health services amid ongoing enrollment fluctuations. The timely identification and mitigation of these barriers are crucial to preventing further disparities in mental health care access for children newly in need of services.

Policymakers should ensure that telehealth expansions do not create greater challenges to accessing mental health care for those with new mental health care needs. Extending telehealth flexibilities may need to be accompanied by subsidies for necessary technology, ensuring broadband access, and offering telehealth services in multiple languages to cater to non-English speaking patients. In the absence of those changes, a greater reliance on telehealth services could unintentionally reduce access for some populations. As telehealth policies evolve, continuous monitoring and evaluation are essential to identify what works and what does not. This adaptive approach will help refine telehealth practices to better serve all patient populations, especially new patients with mental health needs.

## Conclusion

In the first two years of the PHE, Medicaid enrollees in Washington with previous mental health diagnoses had outpatient mental health visit rates that were similar to or higher than a cohort of pre-PHE enrollees, largely due to increased telehealth use. However, youth with new mental health needs had lower rates of use. While telehealth has been a valuable tool in maintaining access to care during the PHE, its expansion must be accompanied by targeted efforts to address the specific needs of new patients, particularly those enrolled in Medicaid with new mental health needs. Additional attention should be focused on what drives the differential use of specialty mental health services as well as the acceptability and suitability of telehealth for different mental health conditions

and populations. By implementing these targeted policies and approaches, we can ensure that access to high-quality mental health care is equitably distributed and that all patients receive the care they deserve.

## Supplementary material

Supplementary material is available at *Health Affairs Scholar* online.

## Funding

K. John McConnell, Sara Edelstein, Stephan Lindner, and Jane Zhu were supported by an R01 grant from the National Institute of Mental Health (1R01MH123416); Jane Zhu was also supported by a K08 grant from the National Institute of Mental Health (K08MH123624).

## Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as supplementary materials.

Author McConnell reports support from multiple grants from NIH, Arnold Ventures, Commonwealth Fund, Robert Wood Johnson Foundation; contracts with states of Washington and Oregon and an honorarium from the Genesis Research Group. Author Edelstein's time was supported by a grant from the National Institute of Mental Health. Author Wolk is supported by NIH grants and reports royalties from a textbook on childhood mental health and consulting fees from Massachusetts General Hospital to support a grant application. She also reports honoraria from Rutgers University Honorarium, Elwyn, Inc, and Behavior Analysis and Therapy Partners, and Participation on an Advisory Board at Penn. Author Lindner's time was supported by grants from NIH and contracts with the states of Oregon and Washington. Author Zhu reports grants from the NIHCM Foundation, AHRQ, NIMH, APA and payment for participation on an Advisory Board (Cambia Medical Policy Physician External Advisory Panel).

## Notes

1. Woolf SH, Chapman DA, Sabo RT, Zimmerman EB. Excess deaths from COVID-19 and other causes in the US, March 1, 2020, to January 2, 2021. *JAMA*. 2021;325(17):1786-1789. https://doi.org/10.1001/jama.2021.5199
2. Coley RL, Carey N, Baum CF, Hawkins SS. COVID-19–related stressors and mental health disorders among US adults. *Public Health Rep*. 2022;137(6):1217-1226. https://doi.org/10.1177/00333549221120451
3. Smith AC, Thomas E, Snoswell CL, et al. Telehealth for global emergencies: implications for coronavirus disease 2019 (COVID-19). *J Telemed Telecare*. 2020;26(5):309-313. https://doi.org/10.1177/1357633X20916567
4. Abraham A, Jithesh A, Doraiswamy S, Al-Khawaga N, Mamtani R, Cheema S. Telemental health use in the COVID-19 pandemic: a scoping review and evidence gap mapping. *Front Psychiatry*. 2021:12;748069. 10.3389/fpsyt.2021.748069
5. Patel SY, Huskamp HA, Busch AB, Mehrotra A. Telemental health and US rural–urban differences in specialty mental health use, 2010–2017. *Am J Public Health*. 2020;110(9):1308-1314. https://doi.org/10.2105/AJPH.2020.305657
6. Guth M, Hinton E. State efforts to expand Medicaid coverage & access to telehealth in response to COVID-19. KFF. Published June 22, 2020. Accessed August 1, 2024. https://www.kff.org/coronavirus-covid-19/issue-brief/state-efforts-to-expand-medicaid-coverage-access-to-telehealth-in-response-to-covid-19/
7. Mark TL, Levit KR, Yee T, Chow CM. Spending on mental and substance use disorders projected to grow more slowly than all health spending through 2020. *Health Aff*. 2014;33(8):1407-1415. https://doi.org/10.1377/hlthaff.2014.0163
8. Ride J, Kasteridis P, Gutacker N, et al. Impact of family practice continuity of care on unplanned hospital use for people with serious mental illness. *Health Serv Res*. 2019;54(6):1316-1325. https://doi.org/10.1111/1475-6773.13211
9. Adair CE, McDougall GM, Mitton CR, et al. Continuity of care and health outcomes among persons with severe mental illness. *Psychiatr Serv*. 2005;56(9):1061-1069. https://doi.org/10.1176/appi.ps.56.9.1061
10. Green CA, Polen MR, Janoff SL, et al. Understanding how clinician-patient relationships and relational continuity of care affect recovery from serious mental illness: STARS study results. *Psychiatr Rehabil J*. 2008;32(1):9-22. https://doi.org/10.2975/32.1.2008.9.22
11. Mitton CR, Adair CE, McDougall GM, Marcoux G. Continuity of care and health care costs among persons with severe mental illness. *Proteome Sci*. 2005;56(9):1070-1076. https://doi.org/10.1176/appi.ps.56.9.1070
12. Williams C, Shang D. Telehealth usage among low-income racial and ethnic minority populations during the COVID-19 pandemic: retrospective observational study. *J Med Internet Res*. 2023;25(1):e43604. https://doi.org/10.2196/43604
13. Park J, Erikson C, Han X, Iyer P. Are state telehealth policies associated with the use of telehealth services among underserved populations? *Health Aff (Millwood)*. 2018;37(12):2060-2068. https://doi.org/10.1377/hlthaff.2018.05101
14. Darrat I, Tam S, Boulis M, Williams AM. Socioeconomic disparities in patient use of telehealth during the coronavirus disease 2019 surge. *JAMA Otolaryngology Head Neck Surg*. 2021;147(3):287-295. https://doi.org/10.1001/jamaoto.2020.5161
15. Centers for Medicare & Medicaid Services. *Medicaid and CHIP and the COVID-19 Public Health Emergency—Preliminary Medicaid and CHIP Data Snapshot—Services through July 31*, 2022. Centers for Medicare & Medicaid Services; 2023. Accessed April 27, 2023. https://www.medicaid.gov/state-resource-center/downloads/covid-19-medicaid-data-snapshot-07312022.pdf
16. Artiga S, Hinton E. *Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity*. Kaiser Family Foundatin; 2018.
17. Centers for Disease Control and Prevention. *Youth Risk Behavior Surveillance Data Summary & Trends Report: 2009-2019*. Centers for Disease Control and Prevention; 2020. Accessed April 28, 2023. https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBSDataSummaryTrendsReport2019-508.pdf
18. American Academy of Pediatrics. AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health. Accessed April 27, 2023. https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/
19. Office of the Surgeon General (OSG). *Protecting Youth Mental Health: The U.S. Surgeon General's Advisory*. US Department of Health and Human Services; 2021. Accessed April 27, 2023. https://pubmed.ncbi.nlm.nih.gov/34982518/
20. Zhu JM, Myers R, McConnell KJ, Levander X, Lin SC. Trends in outpatient mental health services use before and during the COVID-19 pandemic. *Health Aff (Millwood)*. 2022;41(4):573-580. https://doi.org/10.1377/hlthaff.2021.01297
21. Mehrotra A, Chernew ME, Linetsky D, Hatch H, Cutler DM, Schneider EC. *The Impact of COVID-19 on Outpatient Visits in 2020: Visits Remained Stable, Despite a Late Surge in Cases*. Commonwealth Fund; 2021.
22. Lo J, Rae M, Krutika A, Cox C, Panchal N, Miller B. Telehealth has played an outsized role meeting mental health needs during the

COVID-19 pandemic. KFF. Published March 15, 2022. Accessed May 3, 2023. https://www.kff.org/coronavirus-covid-19/issue-brief/telehealth-has-played-an-outsized-role-meeting-mental-health-needs-during-the-covid-19-pandemic/
23. Cantor JH, McBain RK, Ho PC, Bravata DM, Whaley C. Telehealth and in-person mental health service utilization and spending, 2019 to 2022. *JAMA Health Forum*. 2023;4(8):e232645. https://doi.org/10.1001/jamahealthforum.2023.2645
24. Wilcock AD, Huskamp HA, Busch AB, et al. Use of telemedicine and quality of care among Medicare enrollees with serious mental illness. *JAMA Health Forum*. 2023;4(10):e233648. https://doi.org/10.1001/jamahealthforum.2023.3648
25. Bareis N, Tepper MC, Wang R, et al. Engagement of individuals with serious mental illness in outpatient mental health services and telehealth use during the COVID-19 pandemic. *Psychiatry Res*. 2023;329:115497. https://doi.org/10.1016/j.psychres.2023.115497
26. French A, Jones KA, Bettger JP, et al. Telehealth utilization among adult Medicaid beneficiaries in North Carolina with behavioral health conditions during the COVID-19 pandemic. *J Racial Ethn Health Disparities*. 2023. Published online August 16. https://doi.org/10.1007/s40615-023-01730-2
27. Ainslie M, Brunette MF, Capozzoli M. Treatment interruptions and telemedicine utilization in serious mental illness: retrospective longitudinal claims analysis. *JMIR Ment Health*. 2022;9(3):e33092. https://doi.org/10.2196/33092
28. Dartmouth Atlas of Healthcare. Dartmouth atlas primary care service area data. Published June 10, 2015. Accessed June 10, 2015. http://www.dartmouthatlas.org/tools/downloads.aspx? tab=42
29. Parrish C, Basu A, McConnell KJ, et al. Evaluation of a health information exchange for linkage to mental health care after an emergency department visit. *Psychiatr Serv*. 2023;74(5):555-558. https://doi.org/10.1176/appi.ps.20220231
30. Sabbatini AK, McConnell KJ, Parrish C, et al. Impact of a statewide emergency department information exchange on health care use and expenditures. *Health Serv Res*. 2022;57(3):603-613. https://doi.org/10.1111/1475-6773.13963
31. McConnell KJ, Edelstein S, Hall J, et al. The effects of behavioral health integration in Medicaid managed care on access to mental health and primary care services-evidence from early adopters. *Health Serv Res*. 2023;58(3):622-633. https://doi.org/10.1111/1475-6773.14132
32. McConnell KJ, Edelstein S, Hall J, et al. Access, utilization, and quality of behavioral health integration in Medicaid managed care. *JAMA Health Forum*. 2023;4(12):e234593. https://doi.org/10.1001/jamahealthforum.2023.4593
33. Kushner J, Byers J, Petchel S, et al. Washington's Medicaid Transformation Project: Engaging the health care and social service sectors to improve health care delivery and address the social determinants of health. *Healthcare*. 2021;9(3):100560. https://doi.org/10.1016/j.hjdsi.2021.100560
34. Kuramoto-Crawford J, Zodet M. *Behavioral Health Conditions and Health Care Expenditures of Adults Aged 18 to 64 Dually Eligible for Medicaid and Medicare*. Substance Abuse and Mental Health Services Administration (US); 2013.
35. von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *Int J Surg*. 2014;12(12):1495-1499. https://doi.org/10.1016/j.ijsu.2014.07.013
36. Vahratian A, Blumberg S, Terlizzi EP, Schiller JS. Symptoms of anxiety or depressive disorder and use of mental health care among adults during the COVID-19 pandemic—United States, August 2020–February 2021. *MMWR Morb Mortal Wkly Rep*. 2021;70(13):490-494. https://doi.org/10.15585/mmwr.mm7013e2
37. Twenge JM, Joiner TE. U.S. Census Bureau-assessed prevalence of anxiety and depressive symptoms in 2019 and during the 2020 COVID-19 pandemic. *Depress Anxiety*. 2020;37(10):954-956. https://doi.org/10.1002/da.23077
38. Delpino FM, da Silva CN, Jerônimo JS, et al. Prevalence of anxiety during the COVID-19 pandemic: a systematic review and meta-analysis of over 2 million people. *J Affect Disord*. 2022;318:272-282. https://doi.org/10.1016/j.jad.2022.09.003
39. Anderson KN, Radhakrishnan L, Lane RI, et al. Changes and inequities in adult mental health–related emergency department visits during the COVID-19 pandemic in the US. *JAMA Psychiatry*. 2022;79(5):475-485. https://doi.org/10.1001/jamapsychiatry.2022.0164
40. Holingue C, Badillo-Goicoechea E, Riehm KE, et al. Mental distress during the COVID-19 pandemic among US adults without a pre-existing mental health condition: findings from American Trend Panel Survey. *Prev Med*. 2020;139:106231. https://doi.org/10.1016/j.ypmed.2020.106231
41. Amsalem D, Dixon LB, Neria Y. The coronavirus disease 2019 (COVID-19) outbreak and mental health: current risks and recommended actions. *JAMA Psychiatry*. 2021;78(1):9-10. https://doi.org/10.1001/jamapsychiatry.2020.1730
42. Czeisler MÉ, Lane RI, Petrosky E, et al. Mental health, substance use, and suicidal ideation during the COVID-19 pandemic—United States, June 24–30, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(32);1049-1057. https://doi.org/10.15585/mmwr.mm6932a1
43. Deng J, Zhou F, Hou W, et al. Prevalence of mental health symptoms in children and adolescents during the COVID-19 pandemic: a meta-analysis. *Ann N Y Acad Sci*. 2023;1520(1):53-73. https://doi.org/10.1111/nyas.14947
44. Benton TD, Boyd RC, Njoroge WFM. Addressing the global crisis of child and adolescent mental health. *JAMA Pediatr*. 2021;175(11):1108-1110. https://doi.org/10.1001/jamapediatrics.2021.2479
45. Ravens-Sieberer U, Erhart M, Devine J, et al. Child and adolescent mental health during the COVID-19 pandemic: results of the three-wave longitudinal COPSY study. *J Adolesc Health*. 2022;71(5):570-578. https://doi.org/10.1016/j.jadohealth.2022.06.022
46. Kauhanen L, Wan Mohd Yunus WMA, Lempinen L, et al. A systematic review of the mental health changes of children and young people before and during the COVID-19 pandemic. *Eur Child Adolesc Psychiatry*. 2023;32(6):995-1013. https://doi.org/10.1007/s00787-022-02060-0
47. Ng CSM, Ng SSL. Impact of the COVID-19 pandemic on children's mental health: a systematic review. *Front Psychiatry*. 2022;13:975936. https://doi.org/10.3389/fpsyt.2022.975936
48. Zablotsky B, Black LI, Terlizzi EP, Vahratian A, Blumberg SJ. Anxiety and depression symptoms among children before and during the COVID-19 pandemic. *Ann Epidemiol*. 2022;75:53-56. https://doi.org/10.1016/j.annepidem.2022.09.003