Access to Outpatient Psychotherapy Services for Adult Medicaid Patients in Allegheny County: A Simulated Patient Study

MAY 5, 2023

Marian Jarlenski¹, PhD, Olivia Hansol Lee¹, Crystal Zang², Jordan Perkins¹, Susan Barnes¹, Julie Donohue¹, PhD, Christine McClure¹, Ed.D,

ACKNOWLEDGEMENTS

Authors gratefully acknowledge the contributions of Jewel Denne with the Allegheny County Department of Human Services to the study design, sampling frame, and data analysis. Funding for this study was provided by the Allegheny County Department of Human Services.

AUTHOR AFFILIATIONS

1. Department of Health Policy and Management, University of Pittsburgh School of Public Health 2. Department of Biostatistics, University of Pittsburgh School of Public Health

ABSTRACT

Background

Mental health disorders account for a substantial burden of morbidity and premature mortality among Medicaid-enrolled populations. Psychotherapy (including cognitive behavioral therapy and other methods of talk therapy) is an evidence-based strategy for the treatment of mental health conditions including depression. However, access to outpatient psychotherapy may be limited for Medicaid patients, a situation that may have worsened during the COVID-19 pandemic when demand for such care increased.

Objective

To assess the availability of new patient appointments for the treatment of moderate depression among Medicaid enrollees and to measure the share of providers in the network directory with any billing for Medicaid patients in claims data.

Methods

Our study setting was Allegheny County, Pennsylvania. The Allegheny County Department of Human Services contracts with one behavioral health managed care organization to deliver comprehensive mental health and substance use disorder treatment services to Medicaid beneficiaries. In August 2022, we identified all practices located in Allegheny County and listed in the behavioral health managed care organization's online network directory as accepting new patients for adult psychotherapy. From September to October 2022, we conducted a simulated patient study, in which trained research assistants called all practices listed in the provider directory as accepting new patients to inquire about scheduling an appointment for depression as a new patient with Medicaid insurance. We calculated descriptive statistics on the proportion of practices accepting new patients, as well as time to appointments. Given an unanticipated high rate of voicemails at initial contact, we quantified the proportion of practices listed in the directory that billed for mental health services in the past year using Medicaid claims from the county's Department of Human Services. The University of Pittsburgh IRB determined that this study did not constitute human subject research.

Results: A total of 285 practices were listed in the managed care network as offering adult outpatient psychotherapy services in the county. Six practices were determined to be pediatric practices and were therefore excluded, leaving 279 adult outpatient psychotherapy practices eligible to be contacted. Appointments were available for only 34 of 279 practices (12%). For over half of those contacted (149 of 279, or 53%), callers left a voicemail and the call was not returned. Ten practices (3.6%) indicated they did not accept Medicaid insurance and therefore no appointment could be scheduled. Fifty-six practices (20%) indicated that they accepted Medicaid insurance but had no available appointments. One practice (0.4%) could offer a place on a waitlist and appointment availability could not be determined for 29 practices (10%) for other reasons including: 1) practices requesting they be called back without providing information on appointment availability, 2) we were unable to leave a voicemail, or 3) practices returned a voice mail with a text or called back but left no information. Very few practices conducted any symptom screening over the phone. We found that 154 (55%) of the 279 practices contacted in the study had billed Medicaid for mental health services during the period June 1, 2021through June 28, 2022.

Conclusions: New patient appointment availability for adult outpatient psychotherapy services for Allegheny County Medicaid patients is limited. Of the 279 practices contacted, appointments were available in 12%. This suggests that Medicaid enrollees with depression may encounter difficulties accessing psychotherapy services. Just over half of practices listed in the online directory had billed Medicaid for mental health services in the past year.

INTRODUCTION

Mental health disorders account for a substantial amount of morbidity globally, with people diagnosed with depression and anxiety representing the bulk of this.¹ In the United States, the 12-month prevalence of major depression is estimated at 8.6% and the 12-month prevalence of generalized anxiety is estimated at 2.0%.² In non-elderly adult Medicaid-enrolled populations in the United States, pre-COVID estimates of depression prevalence were between 5%–22%, with an estimated condition-specific healthcare cost of \$1,500 per patient (2015 dollars).³ Depressive disorders are associated with comorbid conditions such as substance or alcohol use and are associated with lower social functioning.⁴ Depressive disorders are also a major contributor to the maternal morbidity and mortality crisis that is acutely affecting Medicaid populations.^{5,6} The mental health status has worsened since the onset of the COVID-19 pandemic; pandemic conditions including illness, loss of loved ones, and social isolation led to an estimated 28% increase in major depressive disorders.⁷

Clinical guidelines recommend a range of evidence-based interventions for depressive disorders in adults based on patient symptom severity and responsiveness to treatment during past episodes. Generally, at the initial treatment episode for depression, psychotherapy — including various forms of talk therapy — is recommended, with or without an antidepressant medication.⁸ Numerous studies have shown psychotherapy treatment for depression to be effective and acceptable to patients to treat depressive symptoms,⁹ and lead to improvements in social functioning.¹⁰ Evidence shows comparable effectiveness between different types of psychotherapy (e.g., cognitive behavioral therapy, supportive therapy, mindfulness therapy).⁸ Newer data suggest that digitally-delivered psychotherapy may be as effective as in-person treatment.^{11,12} Psychotherapy has been shown to be cost-effective for treatment of mental health disorders, and may actually reduce healthcare costs associated with co-morbid conditions.¹³

Despite the evidence supporting the effectiveness of treatment, there is a significant gap in access to care in the U.S. Nationally, nearly 40% of adults (33% in Pennsylvania) reported an unmet need for mental healthcare due to cost.¹⁴ Recent analyses documented that despite significant gains in insurance coverage among adults after Medicaid expansion, the proportion of those with mental health disorders receiving any treatment has remained unchanged over time at approximately 45%.^{15,16} A study in Oregon Medicaid found that about 60% of mental health providers listed in network directories in a given year did not see any Medicaid patients in that year.17 The Medicaid and CHIP Payment and Access Commission (MACPAC) has recommended that state and federal agencies take additional actions to promote access to the continuum of care in Medicaid.¹⁸

Pennsylvania Medicaid administers behavioral health benefits (i.e., treatment for mental health and substance use disorders) in managed care plans that are separate from other health benefits, in an arrangement known as a "behavioral health carve-out." Under this arrangement, a single behavioral health managed care plan is available to Medicaid beneficiaries in each Pennsylvania county. County governments are responsible for contracting with an entity to manage the Medicaid behavioral health plan. Currently, there are 5 behavioral health managed care plans across Pennsylvania. Allegheny County Medicaid beneficiaries are served by the largest such plan, Community Care Behavioral Health (CCBH) which contracts with a majority of 67 counties in Pennsylvania. Although there is an extensive literature on behavioral health carve-outs, the evidence of the impact of such arrangements on access to treatment is mixed and depends on the context.^{19,20} Many studies of behavioral health utilization in Medicaid rely on claims data to measure utilization of, but not access to, care (appointment availability and timeliness of services). The rate of access to mental health treatment among Allegheny County Medicaid beneficiaries is unknown.

Objective

We sought to assess access to outpatient psychotherapy services for adult Medicaid beneficiaries among CCBH-participating providers. Specifically, we used a simulated patient study to assess the availability of new patient appointments for the treatment of moderate depression, and, among those practices offering new patient appointments, to assess the length of time to the next available appointment. Additionally, we measured the number of providers listed in the managed care network who billed for at least one Medicaid patient using claims data.

METHODS

Rationale for simulated patient study

To measure access to outpatient psychotherapy services, we conducted a simulated patient study (also referred to as secret shopper or mystery client studies). We chose this method because it is the best available method to collect information on the availability of new patient appointments, patient experience in seeking care, and timeliness of appointment availability. Prior research has used these methods to assess ease of unregulated gun purchases,²¹ availability of Medicaid primary care appointments,²² and pharmacy accessibility of over-the-counter emergency contraception.²³ Simulated patient studies provide innovative measurement of a number of components of healthcare access that are not available from surveys (due to nonresponse bias) or administrative data (due to lack of information on patients who do not utilize care).²⁴ Ethical critiques of simulated patient studies center around two axes: use of deception (i.e., a researcher posing as a patient) and the absence of consent (i.e., not asking those answering the phones to participate in research).²⁵

Ethical considerations

To ensure the ethical soundness of our study, we followed the analysis of Rhodes and Miller with respect to the rationale for using a simulated patient approach.²⁵ First, we sought to keep our calls short and to not ask any additional information or responsibilities from those answering phones than they would ordinarily do as part of their job so as not to take time away from actual patients. For instance, we considered including additional questions in our caller script regarding languages available and specific types of therapies offered, but we ultimately decided to exclude such questions to minimize respondent burden. Second, our protocol specified that callers would never report acute distress or suicidal or homicidal thoughts if asked about symptoms over the phone. Specifically, our callers were trained to answer any screening questions in a way that would align with a moderate score on the PHQ-9, which would indicate a need for treatment but would not indicate crisis services.²⁶ Third, we chose to call each practice only 1 time, either speaking with a person or leaving 1 voicemail, to minimize the amount of time that any respondent would need to engage with our study team. The University of Pittsburgh Institutional Review Board determined that this study did not constitute human subject research (#22041063).

Data on outpatient mental health practices

We created a dataset listing providers and their contact information by scraping the CCBH web-based provider directory (https://members.ccbh.com/find-provider/provider-directory/) using web API. This was done in August 2022 by simulating how an individual may look for a provider in the county by initiating a tailored search. We identified all providers of outpatient mental health psychotherapy to adult patients with an address in Allegheny County and listed as accepting new patients. We excluded providers who were listed as pediatric providers. We then aggregated providers with the same address so that the practice was our unit of analysis. Practices included both group practices with multiple clinicians and solo clinician practices. A total of 285 practices were listed in the managed care network as a) offering adult outpatient psychotherapy services in the county and b) accepting new patients. Six providers were determined to be pediatric providers and were therefore excluded, leaving 279 adult outpatient psychotherapy providers eligible to be contacted. The code for web-scraping is publicly available and can be found on GitHub (https://github.com/crystalzang/ccbh-webscraping). After identifying the inputs of patient age, service category, service type, zip code, searching radius, county, whether a provider accepts new patient, language, and gender, the program generated a csv file that included practice name, phone number, address, provider name, and affiliation, in addition to the inputs that were used for searching.

Data collection instrument

Study data were collected in an online survey instrument while the callers were on calls with practices. In addition, data from returned voicemail messages were entered at the time the voicemail was received. Video/audio recording of calls was not conducted because, under the terms of our IRB-approved protocol, we did not obtain informed consent. The instrument to collect data during the calls was a survey created in the Qualtrics platform. Two callers (JP, OL) set up Google Voice accounts to conduct the calls. Google Voice allowed us to create phone numbers that would not appear with personal names or other identifying information (e.g., University of Pittsburgh) in a caller ID. Google Voice also allows for voicemails to be left if practices were asked to return the call.

We created a standardized caller script in which callers were instructed to inquire if a practice was accepting new appointments for Medicaid patients. This script was revised through pilot testing in practices listed in the CCBH provider directory but located outside of Allegheny County (pilot testing data were separate from our study data). The Qualtrics survey used to collect data was also tested by the callers during pilot testing. During pilot testing in July and August 2022, callers contacted 40 practices in Erie County in northwest Pennsylvania to refine and improve the first version of the survey. Because the majority of calls were going to voicemail, a key revision was made during pilot testing; the study team identified additional call types to include in the survey, such as out-of-service, generic nondescript voicemail, voicemail, and auto attendant systems. In addition to the script intended for live conversations, we also created a standard voicemail version of the caller script, inquiring about new Medicaid patient appointment availability. During the pilot phase, we also expanded the number of options respondents could identify for not accepting new Medicaid patients with depression. For example, some practices indicated that they were closed to all new patients whereas others volunteered that they were not accepting new Medicaid patients even if they were accepting privately insured patients. Moreover, an unstructured field was added to the Qualtrics data collection instrument to capture details on how the calls ended and what kinds of information the callers received from voicemails, auto attendants, or a live person.

The final caller script allowed for two scenarios based on appointment availability. First, for practices accepting new Medicaid patients, the script included questions which would be asked by a practice respondent when the callers checked on the availability of an appointment. The script included responses to queries from practices, including medical history related to mental health, the existence of a referral from a primary care doctor, and information about the type of insurance. If the caller was able to identify a date when an appointment could be scheduled, the caller would end the call without actually scheduling the appointment, stating that they needed to check their calendar. This was made to minimize the burden to practices and disruptions or delays in appointment availability for actual patients seeking care. Second, when practices indicated that they were not accepting new Medicaid patients, the caller would end the call. In cases where practices stated they accepted Medicaid patients but currently did not have appointments available, callers would check if the practices had a waitlist before ending the call. The data collection instrument captured all reasons practice respondents offered for the lack of appointment availability.

Study outcomes

Our primary outcome was whether an appointment was available at the practice for a new Medicaid patient. We created a variable with 3 non-ordered categories: a new patient appointment was able to be scheduled; a new patient appointment was not available; or unknown/not able to determine appointment availability. The first two categories were based either on a conversation with a live person at the practice or based on the content of voicemails practices returned from messages left by callers. The third category included all calls that resulted in either a returned voicemail that did not state appointment availability (e.g., "Please call me back regarding your request.") or voicemails that were not returned.

Our secondary outcomes were: 1) the patient experience in using the provider network to schedule an appointment and 2) whether or not practices listed in the CCBH directory had billed Medicaid for adult patient mental health services in the prior year. We measured patient experience using the provider network by quantifying the proportion of the calls where callers spoke with a live person vs. left a voicemail, and the timing of appointment availability. We calculated the number

of days a potential client would have to wait between the first call to a provider and the next appointment date the provider had available by using the original call date as the initial date and the proxy scheduled date (if available). If a provider gave a specific date for an available appointment, that date was used, however, if a provider gave a date range, then an approximate date in the middle of the range was used. Of the 34 appointments available, 12 had specific information on dates or date ranges for appointments. The range of time from the original call to the first appointment available was 2 to 50 days.

We measured which practices in the CCBH network directory billed for services delivered to any adult patients by linking the network directory with the mental health Medicaid utilization records from claims data in the County's Data Warehouse. The most recent claims data available when we conducted this study was June 1, 2021 through June 28, 2022 (a few months before the practices were contacted). We calculated the distribution of the number of Medicaid patients aged 18 and older for whom the 279 practices billed for any mental health or substance use service (not necessarily limited to depression) conducted within the practices during that period.

We also collected some qualitative outcomes identified by the callers based on the results of the calls. These outcomes were based on free-text notes that callers took and are presented as contextual information to represent the experience of Medicaid patients seeking mental health treatment.

All data collected through this study and accompanying data dictionary are included in the appendices or supplementary materials.

The results of this study were analyzed and presented descriptively. We do not provide statistical testing because our data include a census of all practices in the County, not a sample, and our goal was to present frequencies rather than making comparisons across groups.

RESULTS

More than three-quarters (76.3%) of the calls resulted in a caller leaving a voicemail for the practice. **Table 1** presents data on the outcome of each call (e.g., call answered by a live person, call sent to voicemail, unable to leave a voicemail) for all 279 providers contacted.

Table 1. Outgoing Call Type

CALL TYPE	Ν	%
Total	279	100
Voicemail	213	76.3
Live Person	47	16.8
Unable to Leave Voicemail	19	6.8

Note: Reasons why we were not able to leave voicemails include voicemail full and disconnected calls.

Available Appointments

Of the 279 practices called, only 34 (12%) resulted in a schedulable appointment (**Table 2**). Of those 34 appointments, 16 were schedulable after leaving a voicemail and receiving a call back and 18 were schedulable with a live person (**Table 2**). As described above, per our IRB protocol and to avoid administrative burdens for providers and actual patients we did not complete the scheduling process but determined whether or not an appointment was available.

Unavailable Appointments

Of the 279 practices contacted, we determined there was no appointment available for 216 (77.4% of all practices) and appointment availability was undetermined for 29 (10.4% of all practices). Unreturned voicemails were the primary reason appointments were not available. Of 213 voicemails left (**Table 2**), 149 (70.0%) were not returned. Of the total 279 practices contacted, 53.4% did not return voicemails. Of the remaining practices contacted that did not have appointment availability, 10 (3.6%) indicated that they did not accept Medicaid or HealthChoices insurance, 56 (20.1%) had no available appointments and one offered a place on a waitlist. Appointment availability was undetermined for 29 practices that were reached (or returned voicemail) because returned calls did not offer any information about appointments. Determining appointment availability would have required additional contact with these practices which was not possible within our study protocol.

Table 2. Overall Appointment Availability	/
---	---

	Ν	%
Total	279	100
Appointment Available	34	12.2
Scheduled with live person	18	6.5
Scheduled via voicemail	16	5.7
Appointment not available	216	77.4
Not Accepting Insurance	10	3.6
No Appointment Available*	56	20.1
Waitlist+	1	0.4
Voicemail not returned	149	53.4
Appointment availability undetermined~	29	10.4

* Appointments not currently available for new patients, or practice delivers specialized therapy

+ Insurance is not No and Waitlist=Yes from call-back data

 Appointment Availability Undetermined includes practices that were reached (or returned voicemail) and requested return calls without providing any information about appointment availability

Length of Time Until Available Appointment

Of the 34 appointments available, only 12 practices provided specific information on dates or date ranges for available appointments. The range of time from the original call to the first appointment available provided by those practices was 2 to 50 days.

Analysis of Claims Data

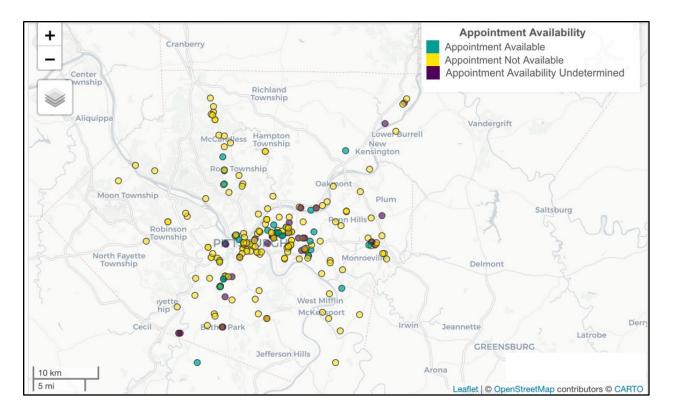
From June 1, 2021 through June 28, 2022, approximately 55% (N=154) of the practices in the CCBH provider directory had at least one billing record (i.e., claim) for mental health or substance use disorder services for Medicaid-enrolled patients in Allegheny County (**Table 3**). Forty-four percent (15 of 34) of practices that had appointments available in the simulated patient study had at least one billing record in the prior year, while 58.8% (127 of 216) of practices that did not have appointments available had at least one billing record in the year prior to our simulated patient study calls.

	PRACTICES BILLING	PRACTICES BILLING >=1 CCBH PATIENTS	
	Ν	%	TOTAL FROM THE DIRECTORY
Total	154	55.2	279
Appointment Available	15	44.1	34
Appointment Not Available	127	58.8	216
Appointment Availability Undetermined	12	41.4	29

Table 3. CCBH Provider Who Submitted at Least 1 Claim (June 1, 2021-June 28, 2022)

Plot 1 shows the geographic location for each of the 279 Allegheny County practices contacted and the appointment request outcome. As the plot demonstrates, the lack of access to appointments with an outpatient mental health practice is not limited to specific geographic areas within the County.

Plot 1. Appointment Availability Map



Appointment Available = Practices with available appointments

Appointment Not Available = Practices not accepting new appointments, no appointments available, or voicemail not returned Appointment Availability Undetermined = Practices that were reached (or returned voicemail) but requested return calls and did not offer any information about appointments

Qualitative Findings

Overall, callers found the rate of practices answering incoming calls was low. There was a lack of standardized practice among providers returning voicemails both in whether providers left messages and in the content of the messages. Some practices provided information on the availability of appointments in their return voicemails. Some providers indicating a lack of appointment availability offered information on the reason(s) whereas others did not. Some providers left messages encouraging callers to schedule an appointment on their websites instead of by phone. Some explained they do not have a psychotherapist available for Medicaid/Medicare plans. Some providers' voicemails were unclear and requested that callers leave a voicemail, but their voicemail did not provide additional information related to appointment scheduling. Furthermore, there were no standardized procedures for scheduling appointments. Depending on the preference of each practice, the callers were encouraged to call, text, send an email, or fill out forms on their websites. Additionally, Short Message Service (SMS or text message) also lacked standardization. Even though the share of calls ending with a practice voicemail was 70%, information regarding appointment availability provided via SMS varied among practices.

Screening for mental health needs during appointment scheduling was rare. Among 279 practices, only 1 practice respondent asked questions following the PHQ-9 instrument for a caller to assess their mental health needs. Some providers reported that they were not aware that their personal/work numbers were listed on the CCBH website directory as a mental healthcare provider for adults. Likewise, although the voicemail greetings and auto attendants for several practices provided emergency call numbers for mental health including 911, 988, and the resolve Crisis Network number, information on crisis services was inconsistent and not uniform across practices.

DISCUSSION AND NEXT STEPS

This study reveals significant barriers in access for Medicaid beneficiaries ages 18 and older seeking outpatient mental health services in Allegheny County. Of the 279 providers contacted, only 34 (12%) resulted in a schedulable appointment and more than 50% (149 of the 279) of the providers contacted did not respond to requests for appointments left via voicemail. Our findings are consistent with current literature that suggests Medicaid beneficiaries with mental health needs have difficulty accessing treatment.^{17,18,20}

A higher share of providers listed in the Medicaid behavioral health network directory had at least one claim for behavioral health services for Medicaid enrollees than had appointment availability using simulated patient methods (55% vs. 12%). There are several reasons for this difference. First, even if practices are seeing some Medicaid patients, they may not be accepting new Medicaid patients in their practice due to capacity or other constraints. Second, we did not limit our analyses of claims data to psychotherapy services for depression, which was the subject of our standardized patient calls. Due to co-occurring diagnoses of mental health conditions, it would be infeasible to limit the claims to depression-related visits. Third, the time span for comparing the network directory to claims was significantly longer than and pre-dated the period during which we placed calls to practices.

Previous studies cite several complicating factors that contribute to access issues for Medicaid beneficiaries, including inaccuracies in the provider network directories.^{18,27} The CCBH online provider directory indicated that all 279 outpatient mental health service providers accepted Medicaid/HealthChoices insurance, however, 10 of those providers when called confirmed that they did not accept Medicaid/HealthChoices insurance.

The findings of this study are consistent with those of a literature review we previously submitted to DHS that identified challenges in behavioral health system performance measurement, including several domains of quality and system performance that are often unmeasured or under-measured. Structure and outcome measures are seldom included because they require additional data collection or reliance on patient-reported and clinical level data.²⁸ Access is one of the structural domains that has been difficult to accurately measure because the data must be collected from individuals who could not access services as well as from those that did.

The most recent Pennsylvania <u>State Quality Strategy Report</u> outlines three key priority areas for managed care in Pennsylvania (including behavioral health managed care organizations): 1) increase access to healthcare services, 2) improve quality of healthcare services, and 3) bending the healthcare cost curve. Likewise, the <u>External Quality Review</u> Report provides baseline data on current performance for CCBH, identifies areas of strength and needed improvements, including the need to improve the adequacy of the provider network. Together, these reports provide a framework to guide DHS as it begins working collaboratively with CCBH to further improve overall system performance.

RECOMMENDATIONS

DHS may consider undertaking additional research to comprehensively measure access to behavioral health care for Medicaid enrollees in Allegheny County as well as instituting operational changes to improve enrollees' experience of behavioral health care. Below we offer recommendations for additional data collection and potential operational changes.

1. Conduct an additional baseline assessment and ongoing annual assessments of the online CCBH provider network directory utilizing the standardized patient methods for other provider types and patient populations.

Conducting an annual assessment of the online provider network directory is necessary to determine the adequacy of the provider network and the accuracy of the provider directory information, as well as to measure changes over time in response to efforts to expand capacity.

While this study evaluated access for outpatient mental health services for individuals ages 18 and over, DHS may support similar studies for other provider types listed in the directory (e.g., buprenorphine providers, children's psychosocial service providers) and for other patient groups (e.g., children and adolescents, individuals with substance use disorders). Once baseline studies have been conducted for other provider types and patient groups, annual or biannual studies can be used to monitor changes in network adequacy.

2. Collect quantitative and qualitative data from clients regarding the experience and perceptions of access to behavioral health services in Allegheny County.

Studies on factors underlying unmet behavioral health needs support the use of mixed methods to collect both quantitative and qualitative data from clients to better understand their experience and perceptions of access to behavioral health care services. Several strategies can be used to collect qualitative data, including focus groups with current and previous Medicaid beneficiaries to ask questions regarding their experience with and perceptions of access to behavioral health providers in Allegheny County. These methods can be used to supplement this study by identifying additional barriers to accessing care beyond appointment availability (e.g., transportation, hours of operation).

Qualitative studies may also be used in conjunction with analyses HPM is currently conducting using administrative claims data. Specifically, we could conduct interviews with providers in the network that are not providing care to Medicaid beneficiaries, to identify reasons why they are not participating. Alternatively, DHS could request that CCBH collect and report this information.

3. Improvements to the management of data and information contained in the online provider network directory.

The online provider network directory is an essential resource for individuals seeking mental health service providers. Therefore, it is important that the directory be as accurate and up-to-date as possible. Our findings indicate that several of the practices contacted had inaccurate information listed in the network directory (e.g., listed as an adult provider but only serving children, accepts Medicaid/HealthChoices insurance when they did not).

Establishing or revising a standard operating procedure (SOP) for the management of data and other information contained in the directory is recommended to ensure that the information in the directory is current. The SOP should indicate the frequency of updates, the data and information to be updated, and who will be responsible for completing the updates.

REPORT AUTHOR ROLES

SUSIE BARNES

Created analytic data file and codebook; conducted analyses

JULIE DONOHUE

Study supervision and design; reviewed and interpreted results; reviewed final report; obtained funding

MARIAN JARLENSKI

Study supervision and design; reviewed and interpreted results; drafted and reviewed final report

OLIVIA HANSOL LEE

Data acquisition and analysis; drafted and reviewed final report

CHRISTINE MCCLURE

Study supervision and design; reviewed and interpreted results; drafted and reviewed final report

JORDAN PERKINS

Data acquisition and analysis; drafted and reviewed final report

CRYSTAL ZANG

Data acquisition and analysis; drafted and reviewed final report

APPENDIX 1. DRAFT SCRIPT

Scenario for clinic that is accepting new patients

Hello, my doctor told me that I should talk to someone because I've been feeling depressed lately. I am wondering how I can get an appointment?

If asked have a diagnosis: No, I don't think so.

If asked have ever been seen before: No.

If asked do you have a referral? I'm not sure. My doctor suggested that I call to make an appointment.

If asked insurance type: I have HealthChoices.

If asked to provide a plan number: I don't know the number. Can I still make an appointment and find out the number before my appointment?

If asked what provider they want to see: I can see whatever [doctor/therapist/provider] is available. **If not accepting new patients, skip to ** below.**

If offered what appt times would work: Can you let me know whatever you have available the soonest?

If offered a date for an appointment, record the date: OK, I think that would work. Will I have to pay anything or will this be covered by my insurance?

If Answer: OK, thanks.

If says it depends on the plan ID and asks for the number: I don't know the number. Can I still make an appointment and find out and bring the card to my appointment?

Yes, the appointment is available without ID number: Thanks

Yes, the appointment is available but please call me back when you find it: Thanks, I will call you back when I find it.

No, the appointment is unavailable without ID number: Okay, then I will call you back when I find it.

If an appointment is available: OK, actually, I have to check my schedule to see if I can come to the appointment, can I call you back to confirm?

Yes.

If the person asks for your number to call you back instead: No thanks, I can check and call you back.

OK thanks for your help. Bye.

END CALL.

**Scenario for clinic that is not accepting new patients

No appointments are available: OK, do you have a waitlist I could get on?

If yes: Thanks, do you know how long the wait is?

If told an estimate: Hmm, I don't know about that. Is there any other doctor I could call to get an appointment?

If yes, pretend to take down the info, then end the call.

Otherwise, end call.

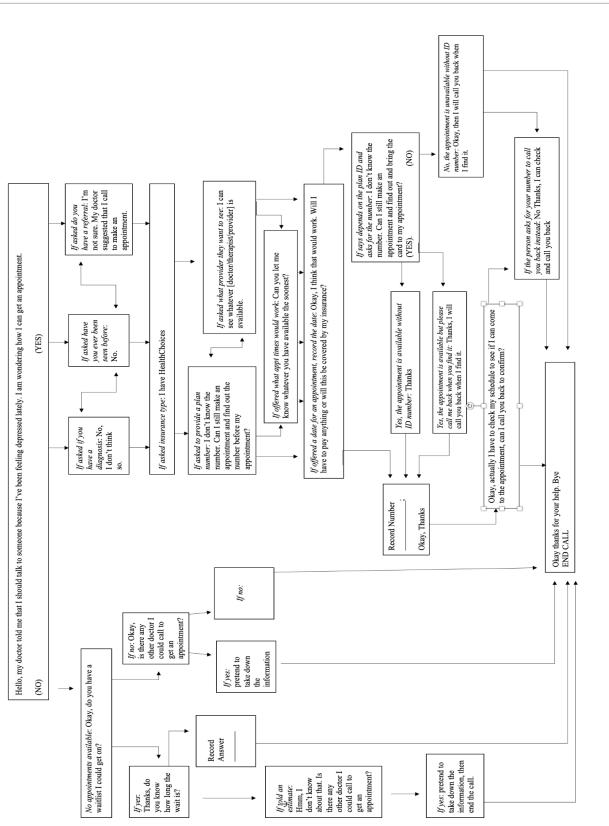
If No: Ok, is there any other doctor I could call to get an appointment?

If yes, pretend to take down the info, then end the call.

Otherwise, end call.

OK thanks for your help. Bye.

END CALL.



Department of Health Policy and Management, University of Pittsburgh School of Public Health Department of Biostatistics, University of Pittsburgh School of Public Health

APPENDIX 2. FLOW CHART

APPENDIX 3. THE FINAL DATA COLLECTION FORM

|--|

REFERENCES

- 1. Liu Q, He H, Yang J, Feng X, Zhao F, Lyu J. Changes in the global burden of depression from 1990 to 2017: Findings from the Global Burden of Disease study. J Psychiatr Res 2020;126:134-140. DOI: 10.1016/j.jpsychires.2019.08.002.
- Kessler RC, Petukhova M, Sampson NA, Zaslavsky AM, Wittchen HU. Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. Int J Methods Psychiatr Res 2012;21(3):169-84. DOI: 10.1002/mpr.1359.
- 3. Chapel JM, Ritchey MD, Zhang D, Wang G. Prevalence and Medical Costs of Chronic Diseases Among Adult Medicaid Beneficiaries. Am J Prev Med 2017;53(6S2):S143-S154. DOI: 10.1016/j.amepre.2017.07.019.
- 4. Hasin DS, Sarvet AL, Meyers JL, et al. Epidemiology of Adult DSM-5 Major Depressive Disorder and Its Specifiers in the United States. JAMA Psychiatry 2018;75(4):336-346. DOI: 10.1001/jamapsychiatry.2017.4602.
- 5. Admon LK, Zivin K, Kozhimannil KB. Perinatal insurance coverage and behavioural health-related maternal mortality. Int Rev Psychiatry 2021;33(6):553-556. DOI: 10.1080/09540261.2021.1903843.
- 6. McKee K, Admon LK, Winkelman TNA, et al. Perinatal mood and anxiety disorders, serious mental illness, and deliveryrelated health outcomes, United States, 2006-2015. BMC Womens Health 2020;20(1):150. DOI: 10.1186/s12905-020-00996-6.
- Covid- Mental Disorders Collaborators. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. Lancet 2021;398(10312):1700-1712. DOI: 10.1016/ S0140-6736(21)02143-7.
- 8. American Psychological Association. Clinical practice guideline for the treatment of depression across three age cohorts. (https://www.apa.org/depression-guideline/guideline.pdf).
- Cuijpers P, Quero S, Noma H, et al. Psychotherapies for depression: a network meta-analysis covering efficacy, acceptability and long-term outcomes of all main treatment types. World Psychiatry 2021;20(2):283-293. DOI: 10.1002/ wps.20860.
- 10. Renner F, Cuijpers P, Huibers MJ. The effect of psychotherapy for depression on improvements in social functioning: a meta-analysis. Psychol Med 2014;44(14):2913-26. DOI: 10.1017/S0033291713003152.
- 11. Kambeitz-Ilankovic L, Rzayeva U, Volkel L, et al. A systematic review of digital and face-to-face cognitive behavioral therapy for depression. NPJ Digit Med 2022;5(1):144. DOI: 10.1038/s41746-022-00677-8.
- 12. Karyotaki E, Efthimiou O, Miguel C, et al. Internet-Based Cognitive Behavioral Therapy for Depression: A Systematic Review and Individual Patient Data Network Meta-analysis. JAMA Psychiatry 2021;78(4):361-371. DOI: 10.1001/jamapsychiatry.2020.4364.
- 13. Lazar SG. The cost-effectiveness of psychotherapy for the major psychiatric diagnoses. Psychodyn Psychiatry 2014;42(3):423-57. DOI: 10.1521/pdps.2014.42.3.423.
- 14. Kaiser Family Foundation. Adults Reporting Unmet Need for Mental Health Treatment in the Past Year Because of Cost. (https://www.kff.org/other/state-indicator/adults-reporting-unmet-need-for-mental-health-treatment-in-the-past-year-because-of-cost/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D).
- 15. Mojtabai R. U.S. Health Care Reform and Enduring Barriers to Mental Health Care Among Low-Income Adults With Psychological Distress. Psychiatr Serv 2021;72(3):338-342. DOI: 10.1176/appi.ps.202000194.
- Zuvekas SH, McClellan CB, Ali MM, Mutter R. Medicaid Expansion and Health Insurance Coverage and Treatment Utilization among Individuals with a Mental Health Condition. J Ment Health Policy Econ 2020;23(3):151-182. (https://www.ncbi.nlm.nih.gov/pubmed/33411677).

- 17. Zhu JM, Charlesworth CJ, Polsky D, McConnell KJ. Phantom Networks: Discrepancies Between Reported And Realized Mental Health Care Access In Oregon Medicaid. Health Aff (Millwood) 2022;41(7):1013-1022. DOI: 10.1377/ hlthaff.2022.00052.
- Medicaid and CHIP Payment and Access Commission (MACPAC). Chapter 2: Access to Mental Health Services for Adults Covered by Medicaid. Report to Congress on Medicaid and CHIP. Washington DC: 2021. (<u>https://www.macpac.gov/</u> <u>publication/access-to-mental-health-services-for-adults-covered-by-medicaid/</u>).
- 19. Frank RG, Garfield RL. Managed behavioral health care carve-outs: past performance and future prospects. Annu Rev Public Health 2007;28:303-20. DOI: 10.1146/annurev.publhealth.28.021406.144029.
- 20. Charlesworth CJ, Zhu JM, Horvitz-Lennon M, McConnell KJ. Use of behavioral health care in Medicaid managed care carve-out versus carve-in arrangements. Health Serv Res 2021;56(5):805-816. DOI: 10.1111/1475-6773.13703.
- 21. Sorenson SB, Vittes KA. Buying a handgun for someone else: firearm dealer willingness to sell. Inj Prev 2003;9(2):147-50. DOI: 10.1136/ip.9.2.147.
- 22. Polsky D, Richards M, Basseyn S, et al. Appointment availability after increases in Medicaid payments for primary care. N Engl J Med 2015;372(6):537-45. DOI: 10.1056/NEJMsa1413299.
- 23. Orr K, Chin J, Cuddeback M, et al. Pharmacy availability of emergency contraception in southwestern Pennsylvania: A simulated patient study. Contracept X 2021;3:100068. DOI: 10.1016/j.conx.2021.100068.
- 24. Lazarus A. Improving psychiatric services through mystery shopping. Psychiatr Serv 2009;60(7):972-3. DOI: 10.1176/ ps.2009.60.7.972.
- 25. Rhodes KV, Miller FG. Simulated patient studies: an ethical analysis. Milbank Q 2012;90(4):706-24. DOI: 10.1111/j.1468-0009.2012.00680.x.
- 26 The Patient Health Questionnaire (PHQ) is a self-adminitered diagnostic instrument for common mental health disorders. The PHQ-9 is the depression module.
- 27. Tenner NL, Reddy M, Block AE. Secret shopper analysis shows getting psychiatry appointment in New York City is a well kept secret. Community Ment Health J 2023;59:290-293. DOI: 1031007/s10597-022-021006-9.
- 28. Kilbourne AM, Keyser D, Pincus HA. Challenges and opportunities in measuring the quality of mental health care. *Can J Psychiatry*. 2010 Sep;55(9):549-57. DOI: 10.1177/070674371005500903. PMID: 20840802; PMCID: PMC3084488.
- Takeshita J, Wang S, Loren AW, et al. Association of Racial/Ethnic and Gender Concordance Between Patients and Physicians With Patient Experience Ratings. *JAMA Netw Open*. 2020;3(11):e2024583. doi:10.1001/ jamanetworkopen.2020.24583.
- 230. Meyer OL, Zane N. The influence of race and ethnicity in clients' experiences of mental health treatment. J Community Psychol. 2013 Sep;41(7):884-901. doi: 10.1002/jcop.21580. PMID: 25400301; PMCID: PMC4228688.