Key Words: coronavirus, COVID-19, pandemic, telepsychiatry, telemedicine, mental health, psychiatry, service delivery systems, e-Health

Going Virtual During a Pandemic: An Academic Psychiatry Department's Experience with Telepsychiatry

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ABSTRACT ~ Background: The novel coronavirus pandemic (COVID-19) led healthcare providers, including mental health providers, across the U.S. to swiftly shift to telemedicine. Objectives: This shift gave our Department of Psychiatry a chance to better understand key challenges and opportunities vis-à-vis virtual mental healthcare. We aimed to obtain provider feedback on the use of telepsychiatry and to learn from the provider perspective about patient experiences with video visits. This information will be used to inform the telemedicine strategy at a systems level within our psychiatry department, our academic health system, as well as the field of telemedicine as a whole. Design and Sample: A 22-item online questionnaire comprising 16 quantitative and six qualitative items was distributed to providers currently using video visits to provide care. Results: A total of 89 mental health providers completed the questionnaire. Outcomes demonstrated that while providers perceive challenges associated with virtual care (e.g., fatigue, technology-related issues, and age-related concerns), they also recognize a number of benefits to themselves and their patients (e.g., convenience and increased access). Overall, provider satisfaction, comfort, and willingness to use telepsychiatry was high. Conclusions: The vast majority of providers adapted quickly to the use of virtual platforms; many endorse advantages that suggest virtual care will continue to be a modality they provide in the future, post-COVID-19. It will be important to continue to evaluate aspects of virtual care that may limit clinical assessments and to optimize use to improve access, convenience, and cost-efficiency of mental healthcare delivery. Psychopharmacology Bulletin. 2021;51(1):59–68.

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Telepsychiatry, a subset of telemedicine, involves providing both evaluation and treatment of psychiatric conditions. Telepsychiatry is one of the oldest applications of telemedicine¹ and has been shown to improve access to care and facilitate treatment initiation and engagement, generally with equivalent clinical outcomes compared to face-to-face care.² However, despite its known benefits, widespread adoption prior to the novel coronavirus pandemic (COVID-19) had been relatively slow, in large part due to payment and regulatory challenges, but also due to clinician- and patient-related factors.³⁻⁶

The COVID-19 pandemic forced all healthcare systems to suddenly embrace telemedicine in order to preserve patient access to care while decreasing infection risk.^{7,8} During this time, insurance and regulatory restrictions to telemedicine were relaxed to accommodate this shift. ⁹ This has allowed for a natural experiment in understanding how clinicians and health systems handled a necessary transition to telepsychiatry. With approximately 67,000 psychiatry outpatient visits a year, the University of Michigan Department of Psychiatry provides a suitable system to examine the major pivot to telepsychiatry. The department provides both Child & Adolescent and Adult ambulatory clinics, as well as addiction treatment services, and is the largest provider of psychiatric services within the State of Michigan and the Midwestern region of the U.S. Prior to the pandemic, the department was piloting a limited number of virtual care visits with specific providers. In response to State of Michigan Executive Order 2020–21, temporarily mandating that only emergency healthcare could be provided in person, the University healthcare system, Michigan Medicine, closed all non-urgent ambulatory care clinics on March 25, 2020¹⁰ [Whitmer—Executive Order 2020–21 (COVID-19)]. The department mandated that all outpatient services convert to virtual care visits (called video visits) unless patient circumstance dictated otherwise. Providers were encouraged to conduct video visits using the virtual care platform that was integrated into the Epic electronic medical record used by the healthcare system; however, they were also initially allowed, to use other virtual platforms such as Zoom for Health and BlueJeans, based on patient and provider preference or access.

In June 2020, we surveyed telepsychiatry providers in the department in order to understand the nature of telepsychiatry practice and its advantages and barriers. We aimed to obtain provider feedback on the use of the video visit platforms and learn about patient experiences with video visits from the provider perspective in order to inform our future telemedicine strategy at a systems level within the psychiatry department, Michigan Medicine, as well as the field of telemedicine as a whole. We report questionnaire results here.

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METHODS

Key benefits and challenges in providing virtual mental healthcare, as well as the desirability of distributing this questionnaire within the department, were first discussed at a departmental e-Mental Health interest group meeting, conducted via videoconference. Twenty-seven faculty and staff (the majority of whom are providers) attended. From this larger meeting, we convened a committee of five individuals with extensive evaluation experience to design the questionnaire. Designing the survey was an iterative process; the survey items were drafted then circulated among the committee on two occasions. The questionnaire, which was kept brief in order to minimize the burden to providers during the pandemic, comprised 22 items organized into broad domains, including comfort with digital technology, current use of platforms, key telemedicine challenges/benefits, and barriers for patients/providers. The questionnaire included 16 quantitative items and six qualitative questions or statements. An electronic version of the questionnaire was created through Qualtrics XM survey software. Since activities or procedures—rather than human subjects—were the object of the present study, it did not fit the definition of human subjects research and was exempt from Institutional Review Board review. Sample items from the questionnaire are shown in Table 1.

According to departmental data, approximately 238 clinical faculty and staff in the department saw patients in the last fiscal year (July 2019–July 2020). Prior to March 2020, only seven clinicians had conducted a cumulative total of 26 video visits as part of the pilot program. Following the State of Michigan Executive Order, all 238 providers had conducted at least one video visit and 175 had conducted at least 10 video visits. In June 2020, after providers had a few months to familiarize themselves with using video visits, a link to the questionnaire was distributed to clinical faculty and staff via four departmental listservs. Two reminder emails (one per week) were sent in the weeks following; the survey was closed in July 2020. We asked only those who were currently using video visits with at least some of their patients to complete the questionnaire and we chose to base our sample on the number of providers who had completed at least 10 or more virtual care visits in the last fiscal year (N = 175). For quantitative data, results were calculated and tabulated using Qualtrics software. For qualitative data, authors reviewed and identified the most common themes mentioned for each question. These themes are summarized in the results section.

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TABLE 1

Sample Questionnaire Items and Response Options

Prior to the COVID-19 shift to
telemedicine, how often were you using
video visits (telemedicine in the form of
live videoconferencing) to provide care?
Prior to the COVID-19 shift to

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Prior to the COVID-19 shift to telemedicine, how interested were you in using video visits to provide care?

Over the past month, to what extent have 1 to 2 times per week you been using videoconference platforms 1 to 2 times per day in each of the following areas on average? Multiple times per day

For nonclinical purposes (e.g., teaching, research, or administrative meetings)

To deliver clinical care (video visits)

Please rate your level of satisfaction with any of the following platforms you have used for video visits.

Zoom for Health

BlueJeans

MiChart with video (Epic Warp Drive)

Doximity Doxy.me

Other (Please specify)

From which location have you primarily been delivering your video visits?

In general, how do you feel your video visit appointments with patients compare to your in-person appointments with patients?

If you work with older adults, what problems (if any) have you encountered when providing their care through video visits?

Please share any practical tips you have been using to improve your experience with video visits. RESPONSE OPTIONS

Little to no use

Used once or twice per week
Used more than twice per week

Not interested Somewhat interested Very interested 1 to 2 times per week 1 to 2 times per day

N/A

Not at all satisfied Somewhat satisfied Moderately satisfied Very satisfied

Mostly from my home
Mostly from my office
About 50% from my office

50% from my office Mostly from another location Not as good

Better
Free response

About the same

item

Free response item

RESULTS

Out of 175 providers, 89 completed the 22-item questionnaire (50.9% response rate). Approximately 25.8% of respondents were staff social workers, 23.6% were staff psychiatrists, 16.9% were staff psychologists, 15.7% were psychiatric residents, 10.1% were nurse

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practitioners/physician assistants, 3.37% were social work trainees, 3.4% held "other" positions, and 1.1% were psychologist trainees. Quantitative and qualitative results are summarized below.

Telepsychiatry Interest and Use Before and After the Pandemic Executive Order Mandate

While the survey was administered only once, individuals were asked to report their pre-pandemic as well as post-pandemic interest in and use of telepsychiatry. Regarding provider retrospective report of interest in using video visits prior to COVID-19, 32.6% were not interested, 40.5% were somewhat interested, and 27% were very interested. Moreover, a majority of providers (91%) reported little to no use of video visits (i.e., telemedicine) prior to the COVID-19 shift to telemedicine, while 7.9% reported once or twice per week of use, and 1.1% reported more than twice per week of use.

Representing their post-pandemic experience, participants responded to the question "During the past month, to what extent have you been using videoconference platforms" as follows: 12.8% of respondents used these platforms one to two times per week, 17.4% used them one to two times per day, and 69.8% used them multiple times per day. At the time of the survey in June 2020, since essentially all clinic visits were virtual, the variation in responses reflect the fact that different individuals have differing amounts of clinical work.

Platform use and Connectivity Issues

Most providers used BlueJeans (91%), Epic Warp Drive (which at the time used Vidyo) (89.8%), and/or Zoom for Health (87.5%) to conduct video visits, whereas only a limited number of providers used Doximity (34.1%), Doxy.me (27.4%), and/or other platforms (5.7%). Overall, providers were most satisfied with Zoom for Health, with 48.9% reportedly very satisfied with the platform. Of the three most commonly used platforms, 16.1% of providers reported frequent (>20% of the time) internet connection or device issues when using video visits to provide care, while 34.6% of providers reported occasional (5% to 10% of the time) issues of this nature.

Provider-Perceived Challenges and Benefits

Providers were asked to select all the challenges and benefits they had experienced with video visits from a designated list of responses. Greater

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than 50% of providers endorsed "fatigue" and "challenges with software" as challenges and "convenience" and "efficiency" as benefits. Providers were also asked to select all the challenges and benefits they believed their patients had experienced with video visits. Greater than 50% of providers endorsed "patient challenges with software" and "patient discomfort with video visit" as challenges and "convenience" and "increased access" as benefits. Table 2 summarizes key provider-perceived challenges and benefits of video visits.

Providers were also asked to qualitatively share perceived challenges and benefits. Out of 89 respondents, 50 providers responded. The most frequently endorsed challenges were: Confidentiality concerns; Hard to show empathy; Documentation and scheduling more difficult; Isolating; and Increased fatigue. A representative challenge of video visits is: "I feel we lose from the lack of non-verbal and in person communication, and it increases mental fatigue due to having to rely only on visual and auditory cues." The most frequently endorsed benefits were: Efficiency; Improved accessibility; Reduced no-shows; Easier in terms of travel; and Seeing patients in their own environments. A representative benefit of video visits is: "Overall, video visits have been a very positive change in my practice. Patients who had difficulty with adherence in the past due to busy schedules or transportation challenges are able to connect more easily."

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TABLE 2

QUESTIONNAIRE ITEMS EVALUATING PROVIDER-PERCEIVED CHALLENGES AND BENEFITS OF VIDEO VISITS

ITEM (LISTED BY MOST TO LEAST ENDORSED)	<u>N</u>	<u>%</u>
More convenient for patients	81	91
Patient challenges with software	80	89.9
(e.g. logging on)		
Increases access (e.g. rural/underserved patients)	65	73
More convenient for provider	62	69.7
More efficient use of time	50	56.2
Provider fatigue specific to using video visit format	47	52.8
Patient discomfort with video visit	46	51.7
Provider challenges with software	40	44.9
(e.g. logging on)		
Video visits lack the authenticity of	37	41.6
in-person appointments		
Documentation of visit is easier	22	24.7
Patient worries about security or privacy	18	20.2
Provider discomfort with video visit	7	7.9
Provider worries about security or privacy	6	6.7

Special Challenges for Children and Older Adults

A qualitative question asked providers who work with children to share what problems (if any) they have encountered when providing care through video visits. Twenty-seven providers responded. The most frequent comments were that they experienced difficulty engaging younger patients; challenges using therapeutic games/activities; trouble communicating certain techniques by video; as well as patient privacy concerns when working with adolescents. A provider wrote: "It is much harder to engage a young child via video and you can't use play in the same way to provide structure to the material/learning." The same question was asked of providers who work with older adults. Fifty-six providers responded. The most frequent comments were that older adults had connectivity issues; technical issues; difficulty hearing; as well as resistance to using an online platform for mental healthcare. One respondent shared that there was: "Resistance to even getting on the portal, let alone completing a video visit. Cognitive, hearing, and visual deficits make this group particularly challenging."

Provider Overall Satisfaction with Telepsychiatry

While 13.5% of the providers surveyed shared that they do not especially like providing care through video visits, 59.6% shared that they like having video visits as an option, and 21.4% said they prefer it to in-person appointments. About two thirds of providers felt their video visit appointments were about the same as (56.2%) or better than (11.2%) their inperson appointments, while about one third (32.6%) felt they were not as good. More specifically, 67.4% of providers felt they had been able to connect well with their patients through video visits and a similar portion of providers (65.5%) felt they could effectively evaluate their patients. The vast majority (78.4%) felt comfortable using video visits to provide patient care and more than half (56.8%) of providers felt their patients seemed satisfied with the care they were receiving. Table 3 summarizes provider responses to statements about their overall experience with video visits.

Provider Qualitative Suggestions on Improving Telepsychiatry

When asked for practical tips to improve experiences with video visits, thirty-two providers responded. Representative advice included: review instructions for patients to use if visit disconnected; have a comfortable set-up (e.g., environment, equipment); stand and take brief walks between visits; take notes during the session; and ask patients what their preferences are for the video visit. For instance, one respondent stated that

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TABLE 3

Questionnaire Items Evaluating Providers' Overall Experience with Video Visits

	DISAGREE		SOMEWHAT AGREE		<u>AGREE</u>	
ITEM	N	<u>%</u>	N	<u>%</u>	N	<u>%</u>
I have been able to connect well						
with my patients (provider-	3	3.4	26	29.2	60	67.4
patient rapport)						
I have been able to effectively						
evaluate my patients' mood	2	2.3	28	32.2	57	65.5
and thinking						
I have been able to effectively						
communicate exercises or	2	2.3	37	42.1	49	55.7
suggestions for my patients						
I'm comfortable using video	2.	2.3	17	19.3	69	78.4
visits to provide clinical care	4	4.3	17	17.3	0)	70.4
My patients seem satisfied with						
receiving care through video	1	1.1	37	42.1	50	56.8
visits						
The video visit sessions I've						
had with patients have been	3	3.5	24	27.6	60	69
effective						

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"Intentionally building breaks to walk away and 'change my view' for about 10–15 minutes after a few sessions," was helpful. Another respondent shared that "Taking notes about appointment preferences has helped."

Use of Telepsychiatry Moving Forward

When asked about use of video visits even after in-person visits resume, 22.5% of providers indicated that they would want to spend 0%–25% of their time using video visits to provide care, 41.6% would want to spend >25%–50% of their time doing so, and 36% would want to spend >50% of their time doing so. In addition, 78.2% of providers were interested in specific training around best practices for video visits.

DISCUSSION

While telepsychiatry was described many decades ago and has good clinical outcomes, its adoption prior to the novel coronavirus pandemic (COVID-19) was modest. With the mandated use of telepsychiatry due to the pandemic, including the suspension of many financial and regulatory barriers, there is an opportunity to explore how clinicians and health systems handled the transition to telepsychiatry. These practices

will allow psychiatry to consider how mental healthcare should change moving forward.¹¹

Prior to the pandemic, both Child & Adolescent and Adult ambulatory clinics at the University of Michigan had a slow uptake of video visits despite the favorable changes in reimbursement with some health insurance providers. Approximately 73% of providers surveyed indicated they were not or only somewhat interested in conducting video visits pre-pandemic, and indeed very few telepsychiatry visits had been conducted. Post-pandemic, all providers were conducting video visits, and often multiple times daily. Survey respondents identified a modest number of technological challenges to the use of telepsychiatry, some of which were potentially addressed by use of more capable telepsychiatry platforms. Substantial numbers of respondents identified telepsychiatry fatigue and software challenges as limitations to the modality. Moreover, key additional challenges were noted for special populations such as children and the elderly. The survey generated numerous suggestions for addressing limitations to telepsychiatry, with almost 80% of respondents identifying a need for additional training to optimize use of video visits.

Overall, satisfaction and interest in continuing telepsychiatry was strikingly high. Just over two-thirds of providers reported that video visits allowed good interaction with patients as well as an effective approach to evaluate patients. Almost 70% of respondents felt their video visit appointments were the same or better than in-person appointments. In addition, nearly 80% of respondents were comfortable providing telepsychiatry, and more than half reported perceived satisfaction from their patients. In terms of future plans, a majority preferred having video visits as an option, and 21% said they prefer it to in-person appointments. Importantly, more than one-third of providers indicated a desire to practice telepsychiatry for more than 50% of their clinical work.

Strengths and Limitations

This survey was designed collaboratively by a multidisciplinary team (physicians, social workers, and psychologists). Respondents included a large number of clinicians across professions, in a moderately-sized academic psychiatry program that may be representative of many academic health systems. However, the findings may not be generalizable to private practice or smaller organizations. Responses were captured at only one point in time, approximately three months after mandated use of telepsychiatry; it is unknown how results may evolve with additional experience in telepsychiatry. Lastly, the survey was confined to clinicians; while they did provide their perceptions of patient barriers and satisfaction, actual patient survey data would provide a much more

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precise evaluation of the barriers and benefits of telepsychiatry from their perspective.

CONCLUSION

The vast majority of providers adapted quickly to use of virtual platforms; many endorse advantages that suggest virtual care will continue to be a modality they provide in the future, post-COVID-19. Our experience has demonstrated the utility of virtual care beyond reaching remote/rural populations, and seeing patients outside of clinical settings (prior to COVID-19, virtual care typically required patients to be in a remote clinical setting, office, etc. to connect). It will be important to continue to evaluate aspects of virtual care that may limit clinical assessments and to optimize use to improve access, convenience, and cost-efficiency of care delivery by the scarce resource that is specialty mental healthcare. •

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