The pandemic has created the need for telehealth, not only for established patients but for youth who develop problems during the crisis, and this need has been turned into an opportunity, with one provider developing a “roadmap” for establishing what it called home-based telemental health, or HB-TMH. Psychiatrists in Seattle, at the University of Washington, the Seattle Children’s Research Institute, and Seattle Children’s Hospital, report on their rapid implementation for TMH during — not after — future crises when community resources are not available. Most child and adolescent training programs have not integrated TMH into their curricula at all, and are therefore not equipped to handle a crisis of this nature.

### SUBSTANCE USE

**Psychosis: Cannabis-induced, cannabis-concurrent, or primary?**

*By Alison Knopf*

Telling the difference between primary psychosis, cannabis intoxication, and cannabis-induced psychosis is challenging but important, especially now that it’s known that almost 50% of cannabis-induced psychosis precedes primary psychosis. A fictional case study reported in *Paediatrics & Child Health* makes these challenges come to life. But the purpose of the case study is only as an introduction to the meat of the article, which is how to differentiate between the three. The authors are psychiatrists from Canada.

Substance-induced psychosis in the acute phase — intoxication — shares many clinical manifestations with primary psychotic disorder. Cannabis intoxication can alter cognition and perceptions, causing hallucinations and delusions. Management of psychosis in the context of cannabis use is important, as well as addressing substance use.

### TELEMEDICINE

**How one large outpatient practice moved to home-based telemedicine services**

*By Alison Knopf*

The pandemic has created the need for telehealth, not only for established patients but for youth who develop problems during the crisis, and this need has been turned into an opportunity, with one provider developing a “roadmap” for establishing what it called home-based telemental health, or HB-TMH. Psychiatrists in Seattle, at the University of Washington, the Seattle Children’s Research Institute, and Seattle Children’s Hospital, report on their rapid implementation for TMH during — not after — future crises when community resources are not available.

Most child and adolescent training programs have not integrated TMH into their curricula at all, and are therefore not equipped to handle a crisis of this nature.

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**Highlights…**

Our page 1 stories this month look at how to tell whether psychosis following cannabis use is related to the substance or primary, and at how to convert to telemedicine in a large outpatient psychiatry practice.

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**SUBSTANCE USE**

**Précis**

- Cannabis intoxication, cannabis-induced psychosis, and concurrent psychotic disorder with cannabis use have similar clinical features.
- Diagnosis can be helped with collateral information, past history, and thorough evaluation.
- Almost 50% of cannabis-induced psychosis may become a diagnosis of primary psychotic disorder.
- Whether cannabis-induced or primary, management of psychosis in the context of cannabis use is important, as well as addressing substance use.

**Telemedicine**

**Précis**

- During the COVID-19 pandemic, telemedicine, including in psychiatry, has emerged as a safe and effective approach to meet patients’ needs.
- However, planning, training, and reassessment is required for high-quality care.
- The experience of a large children’s psychiatric practice in Seattle shows the technical challenges of relying on videoconference vendors who cannot handle the load.
- Training, patient communication, and staff training are key.
cannabis use lasting more than a few days should be managed following the first episode of psychosis.”

This means there needs to be follow-up. The researchers don’t specifically say whether patients should be prescribed medications, but they do say there should be “evidence-based interventions for both mental health and substance use, and ultimately, to attempt to reduce the risk of chronic psychosis.”

One of the authors reported nonfinancial support from Insys Therapeutics having nothing to do with this study.

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**Telemedicine**

*continued from page 1*

to respond to their patients’ needs. In this study, the authors describe the technological, administrative, training, and clinical implementation components involved in transforming a comprehensive outpatient child and adolescent psychiatry program to an HB-TMH virtual clinic.

**Background in Seattle**

The first COVID-19 death in Washington state was reported on Feb. 29. By March 31, there were 6,021 cases and 228 deaths. There was some evidence that asymptomatic or mildly symptomatic persons could shed the virus and that the virus could remain viable on plastic and stainless steel surfaces for up to 72 hours, with reports varying on the incubation period. Testing supplies were limited, precluding the possibility of testing asymptomatic or mildly symptomatic individuals, delaying detection of the virus and contributing to further spread within the state.

The state and local health departments issued recommendations for appropriate hygiene and “social distancing,” and, in particular, avoiding large public gatherings. The University of Washington restricted travel, rescheduled presentations, canceled in-person classes and final examinations in favor of online academic activities, and eventually halted clinical research. In early March, multiple public schools closed temporarily for decontamination when new-onset cases were suspected. Mandates to close schools and workplaces statewide followed, and increasingly, children and parents were homebound.

On March 2, Seattle Children’s Hospital, the tertiary pediatric medical center for a five-state region that includes Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI), intervened to protect patients and staff by decreasing person-to-person exposure, such as restricting the number of hospital entrances, screening staff and patients for symptoms or travel at hospital entry, and limiting visitors to primary caregivers. Phone consultation instead of clinic appointments for minor illnesses were encouraged, and elective surgical procedures were halted.

The Department of Psychiatry and Behavioral Medicine at Seattle Children’s Hospital, which includes the Division of Child and Adolescent Psychiatry and is the training site for the Department of Psychiatry and Behavioral Sciences at the University of Washington, started discussing the possibility of converting the outpatient clinic to a TMH clinic early on, and presented its plan to transition to HB-TMH between March 4 and 6 for many established and all new patients. Faculty were to remain in the clinic, which already had a small group of TMH faculty, with the goal of expanding these services to satellite clinics, community sites, and homes. “We fast tracked this process,” the authors write.

Evidence-based TMH therapies are safe and effective when delivered to youth outside of clinic settings, such as schools, the authors write. These interventions are possibly more family-friendly, as well as ecological. However, there are concerns, such as privacy, security of technology platforms, management of crises including suicidality, and disclosure of information in case of emergency.

Before the emergence of COVID-19, Seattle Children’s Hospital’s existing privileging protocol for telemedicine consisted of five steps:

- complete training with the Audio-Visual Department to learn use of the legacy videoconferencing endpoint system and the online program used for clinic-to-clinic and at-home services,
- complete didactic self-administered modules and post-test on the Hospital’s Learning Center,
- read a selected article that for the Department of Psychiatry and Behavioral Medicine included a choice between the telepsychiatry guidelines published by the American Academy of Child and Adolescent Psychiatry (AACAP) or a book chapter on telepsychiatry practice,
- observe a 30–60-minute clinic-to-clinic TMH session with a designated privileged faculty, and
- submit attestation of completion of these steps to the Medical Staff Office.

The department conducts, on average, 28 parent and/or child treatment or support groups per week. Previously, no group interventions by TMH were conducted, so a 1-hour videoconference-based faculty training session was presented to discuss translation of group treatments to HB-TMH. After the training, faculty reported increased comfort with “TeleGroups.”

**Results**

One of the early challenges was processing applications for hospital privileging for telemedicine fast enough. The scheduling office couldn’t keep up with the new steps required for the direct-to-consumer (DTC) platform or remote consenting, complicated by the fact that the hospital had just changed its videoconferencing platform and vendor in January. Most faculty still needed training on that new platform.

Another problem was finding out how many families could have access to private and secure technology at home. Staff considered alternatives such as phone appointments to make sure clinical care continued while they were working this out.

One solution to the privileging problem was to temporarily waive the final step, and to have faculty members complete all the other steps and submit their attestations to leadership, which then approved them to deliver TMH services.

The hospital also developed a protocol to convert established patients from in-clinic to HB-TMH sessions with their same clinician, which included scripts for clinicians or support staff to explain...
the HB-TMH service and to assess the ability to conduct TMH sessions safely at home. Should there be urgent situations, the clinicians needed phone numbers for local contacts (e.g., police, pastor, relative, or neighbor). The faculty or staff obtained consent for TMH, explained the potential limitations of payment by their insurance plans, and the options for financial aid from the hospital.

Training scheduling staff was essential as well. They needed training in:
- converting in-clinic appointments to a TELEMED HOME visit type,
- activating a MyChart Account,
- providing e-Check-in instructions,
- obtaining the family’s appropriate email address, and
- communicating the date and time of the HB-TMH appointment to the faculty and family, sending appropriate links to each.

The authors developed a “cheat sheet” to guide families through the process of setting up their home systems and responding to the e-invite for an HB-TMH session. To complete the requirement of an observational session with a designated privileged staff member, they broadened the list of supervising faculty from five to nine, and provided a checklist of session components for the supervising faculty to note and to discuss, including topics such as:
- room setup,
- camera arrangement,
- lighting,
- audio,
- privacy, and
- relatedness.

On March 17, President Trump moved telemedicine to the forefront of healthcare and prevention during the COVID-19 crisis.

Some of the rules specified in the Health Insurance Portability and Accountability Act (HIPAA) were suspended temporarily, and the Office for Civil Rights at the Department of Health and Human Services indicated that a health care provider could use any popular but nonpublic-facing remote communication product to communicate with patients. Providers were encouraged to notify patients that these third-party applications potentially introduce privacy risks, and to enable all available encryption and privacy modes when using such applications.

During this time, there was a significant decrease in overall outpatient volume. By March 20, appointment volumes started to stabilize, and 67% of all outpatient appointments were conducted at home. Most of these appointments were conducted by phone, with some TMH sessions. By March 27, 90% of all outpatient appointments were done at home, predominantly by phone (59%) but increasingly by HB-TMH (31%). One week later (April 3), these rates were 48% and 45%, respectively.

The authors then developed a protocol to enroll new patients whose scheduled in-clinic appointments had been put on hold. If families were not interested in participating in an HB-TMH visit and were not high acuity, then their visits were postponed until a later date when in-person visits could occur. If a family was not able to participate in HB-TMH due to lacking internet, then a phone appointment was offered.

**Crashing system**

Two major setbacks took place immediately. The hospital’s platform crashed as soon as faculty members all logged on to provide home services. Some faculty members continued to access the primary and/or the secondary backup platform successfully, but phone sessions that require much less bandwidth continued to be the major platform for patient care while awaiting reliable availability of the platform. In an attempt to provide home-based TeleGroup services, one of the authors conducted a pilot test with three groups of eight to nine parents each (n=25) enrolled in the Incredible Years School-Aged parent program. The primary DTC platform again did not provide adequate connectivity. The secondary backup platform did well. A survey of parents indicated their preference for this secondary backup platform in terms of ease of use, connectivity, engagement, and overall satisfaction with their experience.

In response to “the seemingly unresolvable difficulties with our primary DTC platform,” the hospital allowed use of a third back-up platform. After 3 weeks of technical consultation, when the primary DTC platform’s problems were still not resolved, the hospital contracted directly with this third vendor. This whole technical problem delayed the full implementation of HB-TMH services another 2 weeks, during which the department delivered care through a mix of phone and the three DTC platforms.

The next challenge related to the observation sessions required for faculty who did not have hospital privileges — many contracted TMH sites closed, with intent to move to HB-TMH or phone services, so the designated TMH supervising faculty no longer had training clinics where they could conduct observations. There were too many technical difficulties involved with connecting from one home to another.

“We managed this challenge in two ways,” the authors write. “We conducted remote group observations with faculty connecting to volunteer families. We also used recordings of TMH sessions from an earlier project to demonstrate the components of a clinically appropriate TMH session.”

By March 31, 98% of faculty obtained departmental approval for HB-TMH services during the COVID-19 crisis. Clinical leaders in each specialty clinic within the outpatient psychiatry clinic determined the criteria for who would be offered HB-TMH and who would continue to be treated in person. “For example, the autism clinic had already established HB-TMH services for their applied behavior analysis clinic, feeding clinic, and pharmacotherapy clinic, all of which they then expanded,” the authors write. “Patients in the mood and anxiety clinic predominantly moved to TMH. Initially, the Dialectical Behavior Therapy (DBT) clinic continued individual sessions through HB-TMH while planning to include family sessions at a later date. The early childhood clinic started plans for conversion to HB-TMH. The Incredible Years and anxiety programs successfully implemented selected parent components of our TeleGroups.”

By April 10, all established outpatients were offered individual HB-TMH visits, and a trial process for enrolling new patients had started.

Only the crisis clinic continued a regular in-clinic presence.

On March 18, the Accreditation Council for Graduate Medical Education announced it was accelerating implementation of telemedicine requirements originally scheduled for July, and that effective immediately, residents and fellows were permitted to participate in the use of telemedicine to care for patients affected by the pandemic. The hospital was then able to train all 47 fellows, general psychiatry residents, psychology residents, and psychology postdoctoral students in service delivery through HB-TMH.
Implications

“Our experience may provide lessons for psychiatry training programs seeking to include telepsychiatry in their practices during the current pandemic, and during future crises that are sure to occur,” the authors conclude. “Beyond such pragmatic clinical and service-related lessons, our experience demonstrates an inspiring collaboration between psychiatry and community to aid efforts to reduce the severity of a pandemic while meeting patients’ needs, as well as to show the way to innovate in the future.”

It was helpful that the Department of Psychiatry and Behavioral Medicine at Seattle Children’s Hospital had an existing TMH infrastructure on which to build HB-TMH services, the authors write. But 6 weeks is both a fast response and a slow one — the clinical staff was ready, but the technology failed.

“The good news is that it took only 6 weeks for a large training program to move from beginning considerations to actual implementation of a stable HB-TMH program. The bad news is that it took 6 weeks to do so.

“The Department had several psychiatrists and psychologists already using TMH for clinical care and teaching and an administration familiar with the needed protocol modifications needed to convert the outpatient faculty to HB-TMH. All were able to mobilize quickly to teach other faculty and problem-solve needed next steps to convert to a virtual clinic.”

It should not have been surprising that the technology failed, the authors write. “Most distressing and delaying to full HB-TMH implementation was the failure of our videoconferencing platform.” Although there were many clues that the system wasn’t adequate for outpatient, psychiatry was the “major complainer” because it was the main user, and the hospital focused instead on the inpatient platform used across the WWAMI region for consultation.

“The primary platform was InTouch, which our department had been using for telepsychiatry services clinic-to-clinic,” lead author Aditi Sharma, M.D. told CPU. “We had difficulties with InTouch when we transitioned to home-based services and the number of users across the department increased. We initially used WebEx as a backup — this was a platform we used for much of our meetings anyway so all had access to it.” The secondary backup option was Zoom. “Initially a handful of us were using Zoom that was provided through the University of Washington to UW faculty, but then Seattle Children’s also obtained Zoom accounts for Seattle Children’s employed providers and it became the primary platform,” said Sharma.

Another problem was the many administrative steps needed to convert services from clinic to home. “Possibly these steps could be less complex than described here,” the authors write, noting that the department is large, with multiple clinics, trainees, sites, and support staff. “Community medical centers or small training departments is large, with multiple clinics, small private practices may find it much easier to contract with videoconferencing vendors, based on the authors’ personal communications with the AACAP and APA telepsychiatry committees. But, they worry about quality. “How familiar these providers are with issues affecting HB-TMH practice is not known.… Implementation during a crisis does not mean compromising clinical and technological training.”

Limitations

The authors warn that their system was in a better place to start telemedicine — because it was already under way — than others. “It is difficult to know how to get started,” they write. On the other hand, small private practices may find it much easier to contract with videoconferencing vendors, based on the authors’ personal communications with the AACAP and APA telepsychiatry committees. But, they worry about quality. “How familiar these providers are with issues affecting HB-TMH practice is...”

Children need school, but under pandemic, how?

For some answers to this question, see the July 9 JAMA letter from Rita Rubin, “School Superintendents Confront COVID-19—‘There Are No Good Options for Next Year,’” and recommendations from the American Academy of Child and Adolescent Psychiatry (AACAP) and the American Psychiatric Association (APA) on how schools should open safely, if they do, during the pandemic.

“Children need school,” Susan Enfield, superintendent of Highline Public Schools, tells Rubin. “There is no scenario in the fall that doesn’t break your heart.” Students could fall behind academically, or, if they don’t stay home, become infected or transmit the virus.

“If you talk to any pediatrician … we are getting inundated by calls from school districts,” says general and behavioral developmental pediatrician Nathaniel Beers, M.D., who helped craft the American Academy of Pediatrics’ (AAP’s) school reopening guidelines (https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/).

Common questions are whether the schools should test for SARS-CoV-2 and what to do about sports. Beers spent more than 7 years working for the District of Columbia Public Schools, the last 15 months as chief operating officer. So he knows the quandaries superintendents are dealing with.

The very students who are the most adversely affected when classrooms close falling dramatically as patients were transitioned from clinic to home. Phone appointments yielded far less revenue per appointment than either in-clinic or HB-TMH appointments, although the phone appointments required the same amount of time and almost the same amount of documentation.

A note: Psychiatry is probably at lower financial risk than other medical specialties, where cancellation of elective procedures was a threat to existence. Psychiatry doesn’t depend on procedures, and needs escalate during crises. In the future, the authors write, HB-TMH can overcome barriers to treatment such as distance, transportation, and scheduling. However, rapid mobilization is necessary.

What’s New in Research

Children need school, but under pandemic, how?