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# Developing Rapport and Therapeutic Alliance During Telemental Health Sessions with Children and Adolescents

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## Abstract

***Objective:*** The purpose of this study was to describe the special considerations for building rapport and establishing a therapeutic alliance when conducting mental health evaluations for children and adolescents via videoconferencing.
***Methods:*** The authors review the literature and describe their experience in conducting mental health evaluations, developing rapport, and establishing a therapeutic alliance during telemental health practice.
***Results:*** Clinical need and shortages of clinicians with expertise in evaluating mental conditions for children and adolescents in underserved communities have stimulated the rapid expansion of telemental health programs while the research base continues to develop. The emerging evidence base and clinical experience suggest that teleclinicians can, and do, build rapport and establish a therapeutic alliance during telemental health sessions with youth and families. Families may be more accepting of telemental health approaches than clinicians. The impact that technology, equipment, site staff, community supports, cultural identification, and teleclinicians' characteristics have on building rapport and establishing a therapeutic alliance should be considered when establishing a telemental health service. Staff at the patient site and referring providers have a valuable role in supporting the therapeutic alliance between telemental health providers and their patients, and ultimately supporting the success of a telemental health program.
***Conclusions:*** Teleclinicians are creative in transcending the videoconferencing technology to evaluate patients using guideline-based care. Further research is needed to determine how clinicians build rapport and establish a therapeutic alliance during telemental health sessions, and whether the therapeutic alliance is associated with the accuracy of evaluation and outcomes.

## Introduction

JD was a 5-year-old male, who came with his mother to their local hospital for a psychiatric evaluation with a telepsychiatrist. After several years of concerns about his behavior, they had been unable to find a qualified mental health provider in their community, and elected to seek an evaluation via videoconferencing. When they arrived at the evaluation center, the psychiatrist connected to the site through videoconferencing, was introduced to the child and his caregivers and began the evaluation. Similar to a face-to-face encounter, the psychiatrist obtained a detailed history while observing the child. JD was seen to roam the office, ignoring both the telepsychiatrist and others in the room and holding tightly to a flashlight. With these observations and the caregiver's description of restricted interests including the flashlights, limited social skills, self-injurious behaviors, and poor language development, a detailed understanding of the child was collaboratively developed. After completing a thorough diagnostic assessment, JD was diagnosed with autism spectrum disorder and was referred to appropriate interventions. JD's mother indicated that this was the first time that she had been able to share her story and receive the help she needed.

Prior to the advent of telemental health (TMH), JD might never have been evaluated. The family lives in a small town 4 hours away from the nearest tertiary care center. Limited resources, long travel times, high travel expenses, unreliable transportation, and provider shortages previously rendered this family unable to see a child and adolescent psychiatrist and, therefore, unable to pursue a diagnosis and treatment.

JD is a composite example of one of the nation's 7–20% of children with a psychiatric disorder who need a mental health evaluation. However, most of these children never receive any mental health evaluation or treatment because of the chronic shortage of child mental health specialists, particularly child and adolescent psychiatrists (Thomas and Holzer 2006) and the lack of empirically supported mental health treatments available beyond major metropolitan centers (American Medical Association 2010; American Psychological Association 2011; Comer and Barlow 2014). Telecommunication technologies (American Recovery and Reinvestment Act, February 17, 2009; http://www.recovery.gov/arra/About/Pages/The_Act.aspx), and, specifically, telemedicine (United States Public Health Service Office of the Surgeon General 2001; the Patient Protection and Affordable Care Act [ACA; Public

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Law 111–148; March 23, 2010; www.hhs.gov/strategic-plan/goal1.html]) have been proposed as promising approaches to deliver healthcare services to the nation's children.

The American Telemedicine Association defines telemedicine as the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status. Telemedicine includes a growing variety of applications and services using two-way video, e-mail, smart phones, wireless tools, and other forms of telecommunications technology (www.americantelemed.org/about-telemedicine/what-is-telemedicine). The Centers for Medicare and Medicaid Services reserve the term ''telemedicine'' to refer to telecommunications that involve real-time interactions between the patient and provider through videoconferencing, and note that telemedicine is a cost-effective alternative to the more traditional face-to-face way of providing medical care (Center for Medicare and Medicaid Services 2014). When telemedicine is used to provide mental health or psychiatric services specifically, the terms ''telemental health'' and ''telepsychiatry,'' respectively, are used. This article highlights the development of rapport and establishing a therapeutic alliance when conducting mental health evaluations of children and adolescents through TMH. Many clinicians question the ability to build rapport and establish a therapeutic alliance during TMH sessions. The evidence base supporting the value of TMH in improving the evaluation and outcomes for children and adolescents with mental health conditions is gradually emerging. Nonetheless, TMH programs for youth are rapidly developing. Elucidation of TMH techniques are needed to ensure success of this emerging service delivery model.

## Evidence Base Supporting the Establishment of Rapport and a Therapeutic Alliance During TMH

### *Building rapport and a therapeutic alliance with patients and families*

Rapport has long been considered a crucial element in the success of mental health treatment including psychiatry. Rapport is defined as ''the spontaneous, conscious, feeling of harmonious responsiveness that promotes the development of a constructive therapeutic alliance'' (Sadock et al. 2009). Therapeutic alliance refers to the affective bond that develops between a provider and a patient, and their agreement to collaborate on therapy tasks and goals (Horvath and Symonds 1991). The development of a therapeutic alliance is a robust predictor of positive outcome in mental health treatment per patients' perspective, and does not appear to be a function of the type of therapy or length of treatment (Horvath and Symonds 1991). Building rapport and establishing a therapeutic alliance in TMH has additional nuance given the potentially negative impact of technology on clinical work, especially when the distant patient community differs culturally and demographically from the clinician's own community. Nonetheless, experienced teleclinicians and preliminary research suggest that clinicians and patients can, and do, establish a therapeutic alliance during TMH treatment that closely approximates, even equals, face-to-face treatment (Ghosh et al. 1997; Bishop et al. 2002; Cook and Doyle 2002; Bouchard et al. 2004; De Las Cuevas et al. 2006; Himle et al. 2006; Knaevelsrud and Maercker 2006; Modai et al. 2006; Morgan et al. 2008; Ertelt et al. 2010). Only occasionally do patients rate alliance, or rapport, as significantly lower for TMH versus the face-to-face modality (e.g., Morland et al. 2010) Overall, the number of studies and enrolled subjects in these studies is not large, methodologies have differed across studies, and most studies have focused on patient ratings.

These studies regarding rapport and therapeutic alliance in TMH join a larger emerging evidence base that includes the broader construct of patient satisfaction. Similar to therapeutic alliance, most studies with adults, both large and small, have not found major differences in patient satisfaction when comparing care that is delivered through TMH with care provided face to face (Ghosh et al. 1997; Bishop et al. 2002; Cook and Doyle 2002; Bouchard et al. 2004; De Las Cuevas et al. 2006; Himle et al. 2006; Knaevelsrud and Maercker 2006; Modai et al. 2006; O'Reilly et al. 2007; Morgan et al. 2008; Ertelt et al. 2010).

Fewer studies have evaluated satisfaction with TMH care provided to children and adolescents. In the small, but growing, literature, parents (Elford et al. 2001; Greenberg et al. 2006; Myers et al. 2008; Lau et al. 2011; Reese et al. 2013; Xie et al. 2013; Comer et al. 2014), adolescents (Myers et al. 2006, 2007; Boydell et al. 2010) and their referring providers (Greenberg et al. 2006; Myers et al. 2008) have all reported high levels of satisfaction with care provided through TMH.

### *Clinicians' perception of rapport and therapeutic alliance*

Although current studies of TMH have indicated that patients perceive the therapeutic alliance as equivalent for TMH and face-to-face care, some studies indicate that clinicians perceive the therapeutic alliance as lower when providing care through TMH. Many factors likely influence clinicians' satisfaction, such as their flexibility, comfort with technology, and willingness to explore new ideas. Providers often have the option of providing care in person, whereas patients may base their ratings on convenience, knowing that their alternative is traveling to a distant site or forgoing needed care. Over time, more training, exposure, and patients' requests for TMH-mediated care may help clinicians overcome any barriers and increase their satisfaction with TMH care (Ertelt et al. 2010).

### *Rapport and therapeutic alliance: A dynamic process*

As further studies on rapport, therapeutic alliance, and patient satisfaction emerge, it is important to consider the diversity of settings in which TMH is used, the relevant populations, and the wide variety of applications. Rather than conceiving rapport, therapeutic alliance, and satisfaction as fixed constructs, definitions, implementation, and measurement should focus on their ''responsiveness'' and bidirectional nature to understand how clinicians establish a therapeutic relationship during TMH as well as their techniques for addressing technical limitations. Increasing research in clinic settings has used growth curve modeling analytic approaches to observe that therapeutic alliance in children's mental healthcare is not static, but rather unfolds and evolves in a dynamic transactional fashion across the course of treatment (e.g., Kendall et al. 2009; Marker et al. 2013). It is often helpful to deconstruct complex concepts, such as rapport, therapeutic alliance, and satisfaction, into concrete techniques, and to develop suggestions that can be implemented and adapted by teleclinicians to determine the best strategies for developing clinicians' competence in delivering TMH care (Andersson and Cuipers 2009). It will be helpful to include caregivers, children, and adolescents in determining the salient aspects of building rapport and establishing a positive therapeutic alliance.

## Conducting Mental Health Evaluations via TMH

### *Establishing the infrastructure for conducting TMH evaluations*

Building strong rapport, establishing a positive therapeutic alliance, and ensuring patient satisfaction with care through TMH

involve considerations at multiple levels. Some of these factors may not be intuitive as they do not arise during in-person care, but others will resonate for those individuals who use videoconferencing for social purposes. This section reviews the nuts and bolts of conducting an evaluation through TMH.

### *Role of clinic staff in establishing a therapeutic alliance*

Although there is a growing interest in providing TMH services in clinically unsupervised settings such as the home (Luxton et al. 2010), most families receive TMH services at a hospital, primary care office, mental health center, or another community agency such as a school. Staff at such patient sites are an important ally of, and advocate for, TMH. These include any clinicians, case managers, medical assistants or other staff who work with the family. Staff perceptions can affect the patients' perceptions, particularly in small communities. They can assist the TMH clinician by providing cultural and ecological context regarding patients and the community. This is especially important if the patient lives in a community that differs ethnically, racially, or culturally from the TMH clinician's community (Shore et al. 2006; American Telemedicine Association 2009a, 2013). This is also important for community differences, such as rural versus urban environments, and for youth in residential facilities, or even those in school programs. Staff often know how difficult it is to get specialty mental health services for youth at their sites and may enthusiastically ally with the teleclinicians, but some may need to pay attention to rapport building. Therefore, building rapport and establishing a therapeutic alliance start with staff at the patient site.

For day-to-day TMH practice, it is helpful to dedicate a specific clinic staff person to the role of TMH coordinator. The TMH coordinator will often be the patient's first point of contact with TMH, similar to the office staff at a traditional practice. Often the role of TMH coordinator is filled by a medical assistant, behavioral health technician, nurse, or other clinical staff person. The coordinator should be a person who recognizes the value of the TMH service. This person should have high credibility in both the clinic and the larger community, good communication and organizational skills, and flexibility. As with any endeavor, and especially those involving technology, there will be problems with equipment, and the telemental health coordinator should not be afraid of the technology and should know how to solve minor technical difficulties, and obtain backup support (American Academy of Child and Adolescent Psychiatry 2008).

The TMH coordinator would extend the reach of the teleclinician by coordinating schedules, implementing the teleclinician's treatment plan, communicating with the primary care physician and pharmacy, functioning as the contact person for patients and clinic staff, and tracking patients' appointments and adherence to treatment. Further, telepsychiatrists often find it helpful if the coordinator is present during the clinical session to serve as a liaison among the telepsychiatrist, patient, therapist, and primary care physician. The coordinator would help with completing medication consent forms, filling out laboratory order forms, and taking preliminary notes to communicate to clinic staff. Experienced coordinators can help facilitate clinical care by sharing observations, such as noting that a patient or family member is crying off camera, a child is breaking toys in the waiting room, or that the adolescent recently won a school award. The coordinator may help with disruptive or disabled children. The TMH coordinator becomes a champion for the service (American Academy of Child and Adolescent Psychiatry 2008).

Community rapport building should extend to the patient's referring providers, who may sit in on the patient's evaluation to observe and contribute to the patient's experience. Communication between the teleclinician and the referring provider will benefit patients and all involved in their care. Teleclinicians learn about the patient, family, and the local community while referring providers receive education about the patient's mental health needs and may improve their own skills. Rapport-building extends to other stakeholders in the patient's system of care, such as therapists, teachers, or corrections staff. Some ways to develop these relationships include in-person clinic visits, phone calls, virtual office hours, or informal chats via videoconferencing (Glueck 2013). Patients and their families will look to these important individuals within their system of care for confirmation that videoconferencing is an acceptable alternative to face-to-face care.

### *Physical space*

Room size and design are critical when developing TMH clinics. It is important to avoid relegating telemedicine to small underutilized rooms without ventilation, proper lighting, or room for children's activities. The space must be suitable for observing parents' and children's interactions without obstacles to prevent their visualization. The room should be large enough that the patient can stand, sit, or move during the appointment and the teleclinician can observe the child's gait and extremity usage. Young children may alternate between the parent's lap and floor; therefore, the room must be large enough to observe the child playing on the floor while conversing with the parent. It is important to remember that at least one adult will accompany a child. When TMH evaluations occur in a patient's community, there is an opportunity for additional people, such as school personnel, extended family members, or a therapist, to attend the session. Ideally, all participants will be on camera and the room must accommodate this broader view and have adequate seating. However, a room that is too large or filled with extraneous equipment may be distracting or overstimulating to the child (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b). The University of Colorado in collaboration with the Substance Abuse and Mental Health Services Administration has developed an interactive web site demonstrating the multiple aspects of the physical space that may affect the evaluation (www.tmhguide.org/site/epage/94179_871.htm).

### *Technology*

Conducting mental status examinations and clinical care by videoconferencing require special considerations. Unfortunately, there is no research indicating whether choice of technology is associated with more accurate examination, diagnosis, treatment planning, or outcomes. There is some clinical consensus.

#### Bandwidth.

Teleclinicians rely on the observation of subtle aspects of patients' movements, affect, and communication for diagnosis and medical decision making. Accurate observation of these subtleties consistent with a face-to-face evaluation is thought to require high bandwidth (384 kb/sec) and monitor resolution (>30 frames/sec) (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013). Standards-grade equipment with point-to-point connections readily meets this requirement. Consumer-grade systems compress their signal to approximate high bandwidth, but this can be affected by ''traffic'' on the network resulting in variable signal strength and

decreased connectivity (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

Cameras and video signals. Cameras play an important role in building rapport and establishing a positive therapeutic alliance. Their quality needs to be matched to the bandwidth used and task demand. Cameras should be placed to allow easy observation of the room, participants, and the patient's body and actions, but not so far away that the patient and teleclinician feel alienated from one another. Cameras with high bandwidth end-points usually have pan/tilt and zoom capability that can be manipulated remotely by the teleclinician to follow the child's movements about the room, note interactions with others, and observe play with toys. The zoom feature allows the teleclinician to observe facial features, affect, and fine motor control while the child is drawing or performing other tasks. Approximately 3.05 meters between the camera and patient will allow the teleclinician to observe the patient in context and then zoom in for close-up observations (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

It is also helpful to have the pan/tilt and zoom capabilities at the teleclinician's site. The teleclinician can then show families other individuals attending the session, such as trainees, or give families a virtual tour of the teleclinician's office. Engaging the patient in the technology may help to build rapport and ''break the ice'' (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

For sites that use consumer-grade equipment, either desktop or mobile systems, the intersite pan/tilt and zoom features are becoming increasingly available and are preferable to a fixed camera where the teleclinician's scope may not be sufficiently wide to capture multiple participants or observe the child's range of movements and activities. With fixed cameras, teleclinicians will have to determine optimal placement, perhaps varying with the child's clinical presentation or alternating a more distant or close-up placement over sessions to facilitate observations that facilitate evaluation and rapport building. Staff at the patient site are helpful in determining these parameters (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

Microphones and audio signals. Auditory transmission and sound production may be more important than video transmission during a TMH session. High quality microphones facilitate the development of rapport by transmitting a clear signal that minimizes dropped signals, dyssynchrony with the video signal, and echo interference. They allow fluid verbal communication. They should be placed so they pick up voices but not irrelevant ambient noises. For example, if the microphone is too close to the participants, it picks up sounds such as the teleclinician crinkling papers or the child's noisy toys that impede conversation. If the provider documents notes during the session, ''soft'' keys should be used so that the sound of typing does not distract the patient. If the microphone is too far away, the child's voice may not project well and sounds may be muffled. Street sounds and hallway noise interfere with communication. Sound quality improves by reducing hard surfaces, such as placing carpeting on the floor, draperies on the windows, and sound panels or textiles on the walls. A sound machine outside the room decreases interference from outside noise and increases auditory privacy (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

Arrangement of videoconferencing equipment. Conducting an evaluation through videoconferencing has two features that are not relevant to conducting an evaluation face to face. One is the approximation of eye contact and the other is teleclinicians' ability to observe themselves on the monitor.

Participants naturally look at the monitor when relating over videoconferencing. However, the camera is set either above, below, or to the side of the monitor, producing a gaze that appears to be looking down, up, or sideways, respectively. In this case it may be difficult to assess the patient's eye contact, a particularly important aspect of the developmental assessment of children. The approximation of eye contact can be enhanced by optimizing camera placement directly in front of the patient at eye level for a seated person. The monitor is then set higher or lower on the wall, not at eye level. The closer individuals are to the camera, the more obvious is any deviation of eye contact. It is important to experiment prior to a session to determine the optimal distance from the camera to approximate normal eye gaze (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

This diverted gaze may also impact the patient's perspective of the teleclinician's relatedness. The teleclinician usually alternates gaze between the monitor to observe the patient and the camera to convey eye contact. If teleclinicians are documenting during the session by handwriting or typing notes, or viewing the electronic medical record, their gaze may be diverted frequently. An ideal system would enable the provider to maintain gaze on the patient while performing other activities, but such a system does not yet exist. There are several solutions. Some teleclinicians complete their notes at the close of the session if the change in eye contact negatively impacts the session. If the camera is zoomed above the mid-chest, some basic notes may be taken without disrupting eye contact, providing the clinician can write or type without looking away. A potential downside of camera focus on such a small area of the teleclinician's physical image is that it does not convey the entire person and may not adequately approximate an in-person session. If using two monitors, they should be positioned closely to minimize changes in eye or head position. A novel solution used at the Marcus Autism Center is shown in Figure 1. This arrangement positions the monitors vertically, with the camera in the middle. There is less head movement as teleclinicians looks up and down and their gaze passes the camera during movement. The author recommends placing the electronic medical record on top and the

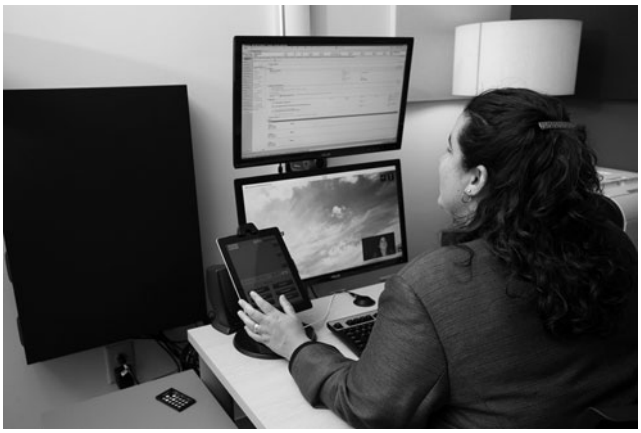

**FIG. 1.** Dr. Felissa Goldstein sits in front of a novel telehealth solution at the Marcus Autism Center in Atlanta, Georgia.

patient monitor on the bottom. Whatever accommodation is made with the technology, it must be in the service of optimizing rapport and establishing a therapeutic alliance. If using desktop or mobile systems that may be moved between sessions, teleclinicians may have to provide regular feedback to the distant site regarding placement of patients in relation to the camera. More research is needed on whether and how the teleclinician's image affects rapport.

The other unique feature of videoconferencing is the ''picture in picture'' function that may be used to facilitate rapport building. A small box in the corner of the monitor shows teleclinicians how they appear to patients. Teleclinicians use the picture-in-picture function to be sure that the patient's view of their office is not distracting, that the teleclinician is optimally positioned on the patient's screen, and to note their movements and affective responses to the patient. The picture-in-picture feature is generally available at the patient site as well. It allows patients to see what they look like on camera (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013).

### *TMH evaluations*

**Orienting families to the TMH experience.** Working with children via videoconferencing can be especially challenging. Unless children are familiar with programs such as Facetime® and Skype™, they may not understand videoconferencing. When the provider talks to the child through a monitor, the child may not know how to respond, although most accommodate to the interaction quickly. Adolescents are often more comfortable with videoconferencing and technology, but not with relating to a healthcare professional through videoconferencing. Parents' familiarity and comfort with videoconferencing will be more variable. For all families, some orientation to TMH will help to set up the session, engage the family so as to build rapport, establish an alliance, and set session parameters. The teleclinician may start the orientation by asking the parent and youth whether they knew that the session would be conducted through videoconferencing, and the teleclinician should not be surprised if they say that they did not know. Although they may have signed a form consenting to care through videoconferencing, the teleclinician should again check to be sure that they agree to continue. Youth and parents like to know where the teleclinician is located, and it is helpful to provide some details about the collaboration between the teleclinician's and patient's sites. If the teleclinician is associated with a known respected agency, such as a major medical center or a children's hospital, a positive institutional transference may quickly develop. If the teleclinician is affiliated with a private vendor or in private practice, it is helpful to develop an orienting script to describe the arrangement and responsibilities so that the family can decide how to approach the collaboration and any further information gathering. Orientation should include information about the technology, including informing the family that the teleclinician will tend to any technical problems that develop. A staff person should be identified as a contact should technical problems develop. The teleclinician should also discuss guidelines regarding procedures for contacting the staff or teleclinician in case of clinical problems, refilling prescriptions, or other needs between sessions. Further, it is helpful to clearly outline with staff the teleclinician's role and availability for any crisis care. The University of Colorado's web site shows an example of a TMH session that is helpful to understand these processes (http://www.tmhguide.org/site/epage/94178_871.htm).

**Clinical guidelines.** No specific modifications have been established for conducting an evaluation through TMH, and teleclinicians should adapt available clinical information to their telepractice. Teleclinicians obtain the patient's history consistent with the guidelines established by their professional organizations. Telepsychiatrists follow the guidelines established by the American Academy of Child and Adolescent Psychiatry (AACAP) for the evaluation of the child and adolescent, as well as the guidelines established for specific disorders and pharmacologic treatment (see AACAP www.aacap.org).

**Videoconferencing etiquette.** To help overcome the potential difficulties in communicating through videoconferencing, some teleclinicians suggest using increased levels of nonverbal and interactive approaches to communication. This may include asking patients whether the teleclincian's observations are accurate. Some teleclincians suggest using a more expressive affect, enthusiastic voice, or hand gestures than used in face-to-face sessions, to engage youth and ensure that they understand the telepsychiatrist's intent. Families who are unfamiliar with videoconferencing may be uncomfortable with the process, and need the teleclinician to ensure that they interpret their communications accurately. However, there is no research to indicate whether such ''videoconferencing etiquette'' is associated with more accurate evaluation or better treatment outcomes.

**Clinical observations and interactions.** One key element of rapport building and establishing a therapeutic alliance is the ability of the teleclinician to respond fluidly to the patient and family. This is essential for conveying empathy and for discussing a patient's responses to the session. It is also important that patients feel that they understand the responses and emotional tone of the teleclinician and know that they are understood. As previously discussed, one important aspect of this exchange is having adequate bandwidth to ensure high-resolution transmissions so that teleclinicians can use real-time changes in visual cues to determine the affective state of another person. Often, clinicians who are new to TMH are surprised, and pleased, to note that patients have the same range of emotional expressions, such as crying or laughing in their sessions, as they do in face-to-face care.

When there is adequate bandwidth, mild tremors, tics, fine motor control, and neuroleptic-induced abnormal movements are readily detected. Administration of the Abnormal Involuntary Movement Scale through videoconferencing has shown reliability comparable to its administration in person (Amerendran 2011). Sufficient bandwidth minimizes the time lapse in verbal transmission so that the patient and the teleclinician can freely converse, and any anomalies of speech and prosody are evident. Teleclinicians are able to assess affective withdrawal caused by internal stimuli or mood disturbance. Rapport easily develops. Insufficient bandwidth may produce pixelation of the video signal and delay of the audio signal so that the teleclinician and patient interrupt one another, impeding the mental status examination. Such difficulties interfere with teleclinicians' attempts to establish a therapeutic alliance (Glueck 2013). When teleclinicians are unsure of the patient's response, based on visual cues, they should seek verbal confirmation of their observation and interpretation. This adaptation can provide additional opportunities to positively impact rapport, as patients have the opportunity to confirm or clarify the teleclinician's understanding of their response. For example, asking a patient ''Is something we are talking about making you sad?'' is an opportunity to both inquire about the relationship between therapeutic content

and affect and to clarify the clinician's understanding of the patient's emotional response through videoconferencing. Teleclinicians are encouraged to use the picture-in-picture function to monitor both their environment and their responses and facial expressions with patients. Some teleclinicians note that seeing the sad expression on their own face makes them aware of an empathic dimension that they may not have previously detected, a potentially important area for feedback and self-monitoring, especially for training purposes.

The maintenance of eye contact during a clinical encounter is an essential component of rapport building and takes on increased importance in a TMH encounter when there is decreased access to other nonverbal means of communication such as is available during a face-to-face encounter. The teleclinician must determine whether apparent poor eye contact is a technical issue, as discussed, or a clinical issue caused by the child's difficulty in interpersonal relatedness. Teleclinicians usually query the child and family about the child's ability to sustain eye contact and the related context.

One of the best ways to build rapport and establish a positive therapeutic alliance is to explore the virtual world together. The picture-in-picture feature is generally available at the patient site as well as the clinician's site. Children and adolescents are delighted to view themselves on camera, especially if their small image can be changed temporarily to full screen view. For younger children and those with developmental disabilities, the picture-in-picture format may be distracting and it should be disengaged.

The teleclinician may use the camera to play ''hide and seek'' with younger children who quickly figure out that the camera can follow their movements. Some oppositional children will deliberately maintain a position off camera to challenge the teleclinician, which can be clinically useful. Children like to draw pictures and hold them up to the camera or have the staff send them to the teleclinician via fax or e-mail. Teleclinicians can display transmitted pictures at their site and ask the child to discuss them. One of the author's sites provides the child a nonfunctioning keyboard on which the children type ''just like the doctor.'' Children like to bring a favorite toy and share their thoughts with the teleclinician. Some toys should be present at the patient site for the teleclinician to observe the child's play and to occupy the child while adults talk. The choice of toys should reflect the goals of the evaluation. Noisy toys will interfere with auditory communication and toys with many parts will provide a cleanup burden for staff. There is also an option to have a staff person on site with the patient who can help engage young children in play or remove them from the examination room to facilitate discussion with parents.

Developing a positive therapeutic alliance with adolescents depends upon assuring them of trust, the same as is conducted during face-to-face visits. Adolescents often require reassurance that the same privacy rules apply for TMH sessions as for in-person sessions. Potentially unique to the TMH setting are adolescent concerns about security and privacy of the teleclinician's videoconferencing system and the inability for others to enter the session or observe without their knowing. Adolescents may need to be assured that their sessions will not be recorded and ''shared on the Internet'' or shown to their parents. They need to know everyone who is present at both sites and that no one will be present without their permission (American Academy of Child and Adolescent Psychiatry 2008; American Telemedicine Association 2009b, 2013). Teleclinicians are encouraged to discuss this directly with patients and ensure confidentiality comparable to what they uphold in a face-to-face encounter. As adolescents are not always comfortable with a verbal treatment modality, sometimes it is helpful to have them engage in an activity during the appointment, such as sharing favorite art pieces, journal writings, music, or personal observations. Teleclinicians can share their desktop with youth to explore materials. Allowing the adolescent to control the camera helps facilitate interactions (Glueck 2013), although some may take advantage of this option. A shared desktop may also be helpful to share materials with parents; for example, for psychoeducation or parent management training (see Comer et al. 2014; Comer et al., 2015).

### Providing culturally appropriate care.

Culturally appropriate care is defined as ''the delivery of mental health services that are guided by the cultural concerns of all racial or ethnic groups, including psychosocial background, typical styles of symptom presentation, immigration histories, and other cultural traditions, beliefs and values'' (United States Public Health Service Office of the Surgeon General 2001; Yellowlees et al. 2008). Often the ethnic or racial identifications of teleclinicians and patients differ, as teleclinicians generally live in urban areas and patients reside in underserved communities with a large population of ethnic minorities (Savin et al. 2006). Patients and providers may use different languages, communication styles, nonverbal language and symbolism, and interpret youths' behaviors and symptoms differently. This difference in cultural identification may add one more challenge to the establishment of a therapeutic alliance during TMH sessions. Referring providers and clinic staff are good resources for information about community culture. For example, staff may help a teleclinician to understand that families may be seasonally unavailable because of subsistence fishing or harvesting crops, or if they celebrate different holidays. Families that hunt may not share the teleclinician's level of concern regarding the availability and safety of guns in the home. A grandparent may strongly influence a parent's attempts to align with the teleclinician. Sometimes families will bring another community member to act as a support or liaison with the teleclinician; for example, a teacher, pastor, or a ''fictive kin'' may attend sessions (Chatters et al 1994). This is a wonderful opportunity for teleclinicians to explore a family's cultural affiliations, preferences, and ideas in order to optimize the alliance and provide a learning opportunity for everyone involved.

## Conclusion and Clinical Significance

TMH is a promising service delivery model to provide mental healthcare to children and adolescents who do not have access to usual models of mental healthcare. Building rapport and establishing a therapeutic alliance during videoconferencing are key to conducting an accurate evaluation, providing evidence-based care, and achieving effective outcomes. The technology, the community's culture, and teleclinician's characteristics all need consideration when designing TMH programs for children and adolescents. To ensure success, stakeholders must champion TMH service by educating families about its value. Successful teleclinicians are creative in transcending the technology to build rapport at all levels of the youth's system of care and to establish a therapeutic alliance with the youth and family so that they may receive the care they need in the communities where they live.

## Disclosures

No competing financial interests exist.

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