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Are auditory-verbal services viable using telepractice?

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People today have opportunities to use technological advances like never before. One tenable advantage is that of accessibility—that is, accessibility to innovations, information, resources, and to one another. Advances in technology for hearing aids and cochlear implants provide better access to acoustic information for the user. Advances regarding the Internet, social networking, and computer technologies provide increasing access to one another. Distance technology affords users the ability to connect and interact across geographic locations and enable individuals to see and hear one another, in real time, even while they are in two or more different places. Such technology is becoming increasingly available for all types of users in everyday life. Thus, the application of distance technology has become a viable option with potentially far-reaching effects for families of children with hearing loss. Depending on where families live, access to communication options and qualified professionals

may not be readily available. Telepractice, therefore, can provide families with access to listening and spoken communication options, including individualized auditory-verbal services.

Telepractice

The American Speech-Language-Hearing Association (ASHA, 2012) defines *telepractice* as "the application of telecommunication technology to delivery of professional services to a distance by linking clinician to client, or clinician to clinician, for assessment, intervention, and/or consultation." We use the term *telepractice* here to refer to auditory-verbal services provided through distance technology. The purpose of telepractice is to form a connection between otherwise isolated geographic locations, enabling listening and spoken language professionals to serve infants or children with hearing loss and to help improve auditory skills and spoken language abilities by using an individualized auditory-verbal approach. The National Center for Hearing Assessment and Management (NCHAM) further states that this unique service is different from the delivery of child-centered therapy, the provision of audiological diagnostic services, and other applications of telepractice in the medical community (NCHAM, 2012).

Considerations

Distance technology may include the use of a computer, webcam, and Internet connection. At the present time, the connections may be made on a closed system, such as a private videoconferencing legacy system (e.g., Tandberg, Polycom) or via the Internet (e.g., Skype, iChat, Facetime). In addition, desktop computers, laptop computers, television monitors/screens, or portable devices such as an iPad may be used. The technological means for telepractice delivery is fast changing and is not device dependent; therefore, it is reasonable to predict that there will be much more telepractice options available in the future. When implementing telepractice, the professional needs to consider the logistical mechanics of specific equipment, professional regulation issues (e.g., privacy and security; Brennan et al., 2010; Watzlaf, Moeini, Matusow, Firouzan, & the University of Pittsburgh School of Health and Rehabilitation Sciences, 2011), and the demands of auditory-verbal practice.

Auditory-Verbal Services and Telepractice

When provided by an experienced and qualified listening and spoken language professional, individualized auditory-verbal services, such as auditory-verbal therapy, are conducive to telepractice for a variety of reasons. The work involves comprehensive one-on-one intervention and focuses on the development of listening as the foundation

for all aspects of spoken communication. The following prominent tenets facilitate the effectiveness of individualized auditory-verbal services by telepractice:

- Parents are regarded as case managers and primary facilitators of listening and spoken language
- Parents undergo guidance and coaching
- Parents and child receive ongoing diagnostic therapy
- Professional applies a family-centered approach

Parents as Case Managers and Primary Facilitators

Telepractice inherently enhances the parent's role as the primary interventionist because the professional is removed physically from the child, environment, and materials. The parent, by necessity, is in primary control of the session, and the practitioner, by necessity, needs to guide and coach the parents. For example, in using telepractice to promote hearing as the primary sensory modality, parents learn quickly about adverse listening factors, such as the possible acoustic degradation of a signal, including the professional's voice, through a computer speaker. They learn to establish and secure appropriate listening environments and to provide a clear signal, "keeping their child within earshot" (Ling, 1981). Reliance on the professional is reduced, and the interaction between the child and parent is increased. During telepractice sessions, parents learn firsthand not only how to implement strategies but also the rationale for such strategies, thereby readily gaining a practical knowledge of what works most effectively. They become adept at facilitating their child's development, effectively advocating—and, ultimately, case-managing—their child's education and therapy.

Parent Guidance and Coaching

The listening and spoken language professional's experience and skills in parent guidance and coaching are especially well-suited to telepractice. In fact, many professionals agree that telepractice is the strongest of parent coaching models. It demands an even higher level of parent coaching than in-person sessions, as the professional has limited means of interaction outside of coaching the parent. Success in implementing the principles of auditory-verbal practice is not necessarily dependent on whether the professional is present in person or via a computer when providing information or guiding, teaching, and coaching the parent. The professional is able to effectively guide the parent by communicating with the parent prior to the session about the intended targets of the session, the strategies to be employed and practiced during the session, and the possible activities, materials, and toys to have ready. During the session, the professional, using duplicate materials when needed, is able to demonstrate and model a variety of techniques and strategies—and, most important, is able to guide, coach, and provide feedback to the parent in real time and during interactions with the child. The effectiveness is comparable to in-person sessions. Given that most telepractice takes

place in the home setting, it lends itself to easy generalization and incorporation of strategies into daily routines, activities, and play.

Ongoing Diagnostic Therapy

The listening and spoken language professional's ability to provide appropriate diagnostic monitoring and feedback is essentially unhampered via telepractice. He or she remains mindful of taking advantage of the child's developmental synchrony and guides the parent to foster the child's learning by following naturally occurring developmental sequences of auditory, cognitive, language, social, play, speech, and literacy skills. During telepractice sessions, the professional is able to guide the parent in implementing modifications or adaptations to make acoustic information and spoken language as salient as possible given the individual child's current strengths and challenges. The overall therapeutic and diagnostic process, therefore, is the same for in-person sessions and telepractice. Although informal diagnostic monitoring occurs regularly in telepractice, formal standardized testing may not be possible via a telepractice session. Best practice may necessitate that standardized assessments be completed either in person or by another professional in the same locale as the family.

Family-Centered Approach

Because auditory-verbal practice is purposefully tailored to address the specific needs of each child and family, so are telepractice sessions. A parent, siblings, or other extended family members have the opportunity to observe and participate in sessions. Parents may choose to conduct a session in their home or at another site with appropriate technology access. The challenges of transportation and scheduling issues can be reduced by telepractice and can result in fewer cancellations, more consistent contacts, and less overall stress on the family. Parents report that sessions can still occur even when a sibling may be ill. Sessions may be recorded for family members or other service providers to view at their convenience. Additionally, telepractice can be consistent with early intervention/birth-to-3 philosophy, as commonly practiced in the United States, by supporting parents within their child's natural environment and providing for increased opportunities for teaming with other service providers. Sessions occur in the family's community, where the child can easily participate in events and be with their peers who have typical hearing. Telepractice mentoring of teachers and/or speech-language pathologists can be conducted in the educational setting for a child who needs continuing support in his or her neighborhood school.

Conclusion

Inherent to telepractice is an adherence to the intervention principles of auditory-verbal practice (AG Bell Academy, 2012). As accessibility increases through the use of

technology, so does accessibility to communication options and qualified professionals for families of children with hearing loss. As reported on parent surveys (Connect*Hear* Teleintervention Program, 2010), the most prevailing and frequently reported reason for participation in telepractice is for access to listening and spoken language as a communication option—specifically, individualized auditory-verbal services. This is especially true for families living in rural and underserved geographical locations. Children with hearing loss deserve the option of learning to listen and speak no matter where their family lives. Families need to have every opportunity to help their children reach their highest communication potential, and this may require a paradigm shift in service delivery models. As technology becomes more common in daily life, auditory-verbal intervention is a viable option via telepractice.

References

AG Bell Academy for Listening and Spoken Language. (2012). *Principles of LSLS.* Retrieved from www.listeningandspokenlanguage.org/AcademyDocument.aspx?id=563

American Speech-Language-Hearing Association. (2012). *Articles about telepractice for speech-language pathology and audiology services.* Retrieved from www.asha.org/practice/telepractice/TelepracticeReferences.htm

Brennan, D., Tindall, L., Theodoros, D., Brown, J., Campbell, M., Christiana, D., Smith, D., Cason, J., & Lee, A. (2010, Fall). A blueprint for telerehabilitation guidelines. *International Journal of Telerehabilitation, 2*(2), 31–34. doi: 10.5195/ijt.2010.6063

Connect*Hear* Teleintervention Program. (2010). *Parent satisfaction survey.* West Allis, WI: Center for Communication, Hearing & Deafness.

Ling, D. (1981). Keep your child within earshot. *Newsounds, 6,* 506.

National Center for Hearing Assessment and Management. (2012). *A practical guide to the use of tele-intervention in providing listening and spoken language services to infants and toddlers who are deaf and hard of hearing.* Retrieved from www.infanthearing.org/ti-guide/index.html

Watzlaf, V. J., Moeini, F. S., Matusow, L., Firouzan, P., and the University of Pittsburgh School of Health and Rehabilitation Sciences. (2011, Spring). VoIP for telerehabilitation: A risk analysis for privacy, security and HIPAA compliance, Part II. *International Journal of Telerehabilitation, 3*(1), 3–9.