JEHDI
The Journal of Early Hearing Detection and Intervention
NCHAM National Center for Hearing Assessment and Management Utah State University™
2022; 7(2): 2–8

Working with Families of Young Children who are Deaf or Hard of Hearing Through Tele-Intervention

Amanda M. Rudge, PhD[1]
Betsy Moog Brooks, EdD[1]
Arlene Stredler-Brown, PhD[2]
[1]Moog Center for Deaf Education, St. Louis, MO
[2]Colorado Early Hearing Detection and Intervention Program, Denver, CO

Abstract

Tele-intervention services have been used for many years to serve families of young children, in addition to or in lieu of traditional in-person intervention services. Recently, the COVID-19 pandemic cultivated urgent dependence on access to effective services via a distance connection. As such, the need for information, guidance, and resources related to tele-intervention as a primary service model has increased. This article serves as the introduction to a monograph that describes practices, circumstances, and perceptions surrounding tele-intervention services for families of children aged birth to five who are deaf or hard of hearing. Topics include: (a) a brief history of tele-intervention as a service delivery model, (b) an overview of tele-intervention for families of children who are deaf or hard of hearing, including the impact of COVID-19 on emergency virtual services, (c) a description of the components of a tele-intervention session with families of infants and toddlers, and (d) a discussion of the challenges implementing services via tele-intervention. Figures containing information related to state funding and ideal session components for tele-intervention services are provided.

Keywords: deaf, hard of hearing, early intervention, tele-intervention, family centered early intervention

Acronyms: DHH = deaf or hard of hearing; EI = early intervention; FCEI = family-centered early intervention; IDEA = Individuals with Disabilities Education Act; RIDBC = Royal Institute for Deaf and Blind Children; TI = tele-intervention

Correspondence concerning this article should be addressed to: Amanda M. Rudge, PhD, Moog Center for Deaf Education, 12300 S. Forty Dr, St. Louis, MO, 63141, E-mail: arudge@moogcenter.org

Distance technology and use of telecommunication services have become the new normal for general communication and professional operations across the globe. Health, education, and therapeutic service industries have evolved for the digital age, embracing technology as a tool to overcome barriers of distance which may limit the delivery of in-person services. The prefix *tele-,* originating from the Greek adjective meaning far off, is used in words such as *telephone* and *television* to describe early distance technologies. Newer use of the prefix describes a multitude of practices delivered through distance technologies, such as *telepractice, telehealth, teletherapy, telehabilitation, tele-education,* and *tele-intervention*. Decades of research and applications of tele-practices have refined the way the world provides and receives care from a distance, paving the way for professionals to make meaningful connections within any discipline, including speech-language pathology and deaf education.

For the purpose of this paper, tele-intervention (TI) refers to a provider engaging with families virtually to provide support for the development of children's communication and language skills. This work is part of a larger monograph exploring the use and perceptions of virtual service provision in early intervention (ages birth to five) for children identified as deaf or hard of hearing (DHH), with the aim of this specific article being to describe the service delivery model of TI.

Advantages of TI services include the facilitation of access to specialized services regardless of barriers (e.g., geographic, weather, illness), reduction of costs for travel time, flexibility of scheduling, improvement of parent[1] confidence, development of parent skills, and enhancement of connections between families and providers (Ashburner et al., 2016; Behl et al., 2010; Houston & Stredler-Brown, 2012; McCarthy et al., 2012; Molini-Avejonas et al., 2015). These benefits have remained constant over the years. The same constancy is true for the challenges associated with TI. Issues of cost, reimbursement, connectivity, and licensure remain the most often reported barriers to TI (Blaiser et al., 2013; Cole et al., 2019; Houston, 2011; McCarthy et al., 2010; McCarthy et al., 2018). Additional challenges may include the management of child behavior while receiving coaching, the demonstration of techniques, and the need for opportunities for conversations and discussions.

[1]The definition of parents, caregivers, and families encompasses a rich variety of circumstances, cultures, and individual details. To improve readability, the term *parents* is used throughout the article, but is inclusive of all caregivers and family constructs.

Tele-intervention in Early Intervention for Children who are DHH

Within the field of deaf education, TI has increasingly been used to deliver early intervention (EI) services for children who are DHH ages birth to 5 years. This uptake of TI is the result, in part, of the opportunity to provide specialized services regardless of where the family or provider is located. The provision of traditional in-person, home-based specialized services can be limited for children who are DHH due to a number of known barriers, one of which is the lack of appropriate services in remote or rural areas as a consequence of a shortage of qualified practitioners. By its very nature, TI allows EI providers to overcome physical barriers, thus addressing a number of reported limitations for service provisions in the field of early deaf education.

Virtual services via TI have gained support in recent years due to the increasing need for access to professionals when such barriers exist. Tele-intervention allows early intervention professionals to support families of children who are DHH by providing high-quality care to improve child outcomes without the families needing to travel great distances or relocate to receive ongoing intervention services. TI has been recognized as an accepted provision of service delivery by ASHA for over 15 years (ASHA, n.d.).

In the early years of TI for families of children who are DHH ages birth to 5 years, the goal, which remains today, was to serve families in rural or remote areas outside of the reach of in-person programs. In 2004, the Royal Institute for Deaf and Blind Children (RIDBC) in Sydney, Australia received federal funding for a TI program focused on the use of virtual technology to provide ongoing services to families of children who were DHH living in rural or remote areas across the country. This national program, RIDBC Teleschool, became one of the first models of TI in the field of deaf education, and set the stage for the adoption of TI worldwide (McCarthy, 2012). Programs within the United States looked to the RIDBC Teleschool as a model of TI for use with children who are DHH and their families. Early adopters of TI for this population in the United States included the Center for Communication, Hearing, and Deafness in Wisconsin (2006), Sound Beginnings at Utah State University (2007), St. Joseph Institute for the Deaf in Missouri (2008), and the tri-state TeleCITE collaborative in Colorado, New Mexico, and Wyoming (2009). These trailblazing programs navigated the complexities of establishing virtual infrastructures for their families, often by directly providing the technology and/or devices needed to connect with intervention providers. In some cases, such as in the state of Utah, new internet cables were installed underground for the express purpose of providing access to teleservices across the state (Blaiser et al., 2012). In other states, providers shipped suitcases of equipment, including wifi routers, virtual private network connections, laptops, cameras, and toys or learning materials to families (Broekelmann, 2012; Lalios, 2012; McCarthy, 2012; Stith et al., 2012).

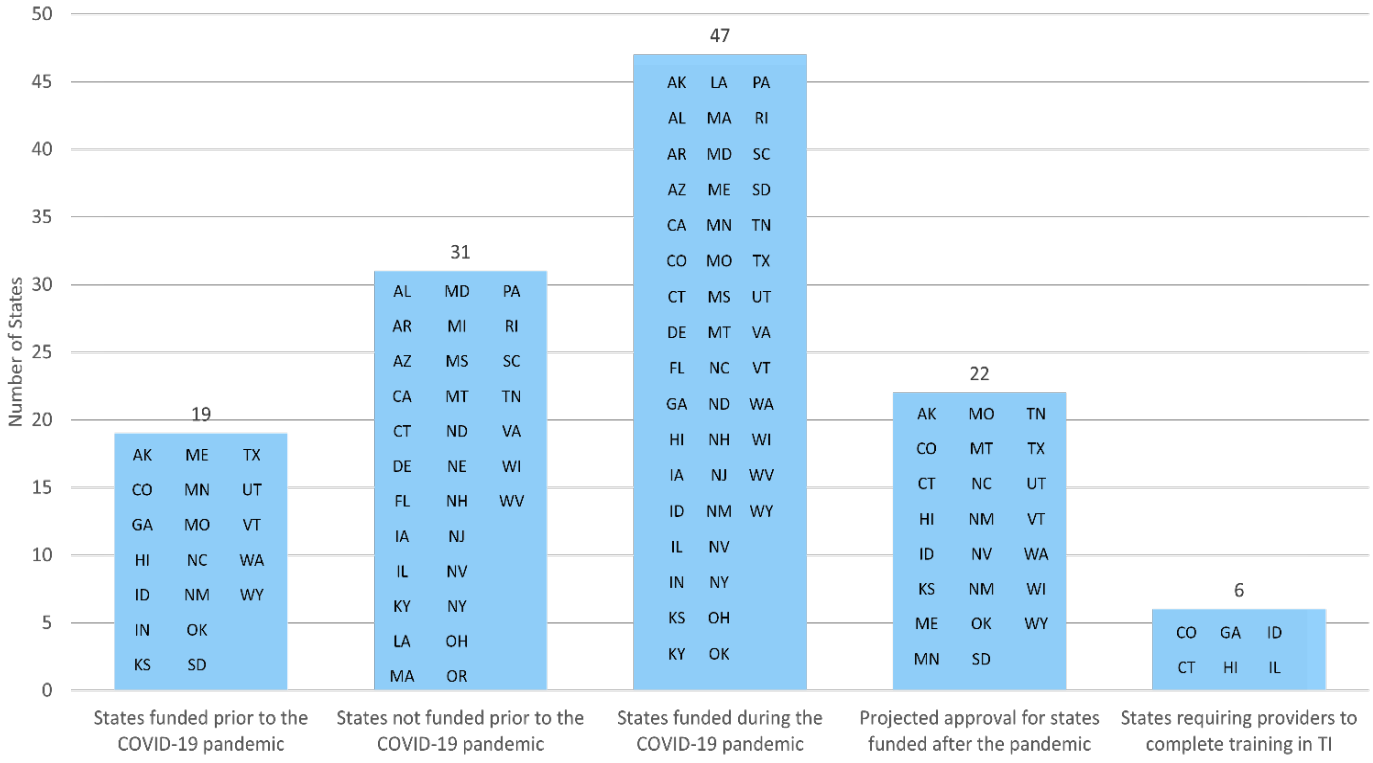
Many of these initial TI programs documented TI as having equal or better outcomes as in-person models. Researchers at Utah State University investigated the expressive language outcomes of children under age five who were DHH enrolled in either the Sound Beginnings TI program or in a traditional in-person program (Blaiser et al., 2013). Results, although reported with a small group of 27 children, revealed both significantly better expressive language scores and significantly higher family engagement in the TI group as compared to the in-person group. Similarly, a multisite study conducted with programs in five states reported significantly higher rates of parent engagement, higher ratings of provider responsiveness to parents, and improved child outcomes in the TI group compared to traditional in-person visits (Behl et al., 2017).

As of 2010, 21 states reported implementing or investigating TI as a method of service delivery for children who are DHH (NCHAM, 2010). To illustrate the landscape of TI services across the United States before, during, and anticipated after COVID, the authors of the current article contacted representatives from all 50 states to ascertain information regarding TI services before, during, and after COVID. Results of those conversations indicated that in 2020, prior to the COVID-19 pandemic, 19 states included TI as an approved/authorized service through Part C of the Individuals with Disabilities Education Act (IDEA), a federally granted early intervention program for infants and toddlers with disabilities. For the purpose of emergency services during the COVID-19 pandemic, 47 states were granted the right through IDEA Part C to use funds for virtual service provision; and three states opted not to approve funding of TI as a service delivery method through Part C. Figure 1 details information about approved reimbursement for TI through Part C by state, as well as the number of states requiring training to deliver services via TI.

As with in-person service delivery, TI providers must develop knowledge and skills specific to virtual service provisions. The prerequisite for TI should include, but not be limited to, experience delivering early intervention services face-to-face. In addition, a TI provider needs to possess knowledge of how to effectively implement coaching strategies over the internet. It is notable that IDEA Part C supports the use of coaching strategies in families' natural environments (IDEA, 2004). In spite of these recommendations, only six states require training for TI as a service delivery model (see Figure 1). During the pandemic, TI services were delivered under emergency conditions, and as such, the only requirement for providing TI in most states was to be a credentialed provider in the state(s) in which one was providing services. Because most providers and families were unprepared for virtual sessions, the uptake of TI during the pandemic may have interfered with the effectiveness of the TI services. Tele-intervention delivered during emergency situations, and not as a regular, planned mode of service delivery, is therefore different than typical TI delivered during non-emergency times.

Figure 1

Tele-Intervention (TI) Reimbursement through Part C by State



Note. State-by-state information gathered by authors to illustrate the landscape of TI services for children who are deaf or hard of hearing through Part C before, during, and after the COVID pandemic. Reimbursement of costs for TI services through IDEA Part C varied by state, before, during, and projections for after the COVID-19 pandemic.

A Model of Tele-intervention for Children who are DHH

Early intervention in-person sessions for families and their children who are DHH are deliberate in nature, because providers implement very specific components during the session. The same is true for early intervention sessions delivered virtually. Providers of TI, and in some cases the Part C service coordinator, are responsible for preparing parents to engage in family-centered early intervention (FCEI) via the internet. The web-based technology to deliver a TI session is determined after consultation between the provider and the family. There are several video-conferencing platforms that are HIPAA-compliant including Zoom, WebEx, FaceTime, and Skype.

The provider also confirms that each family has access to reliable internet services, as well as a device with a camera and microphone. In addition, the provider prepares the parent for a virtual session, including the possibility of a technology failure, a time delay, the benefits of a quiet environment with limited distractions, and ways to occupy the child while parent and provider engage in conversations related to reflection, feedback, and joint planning.

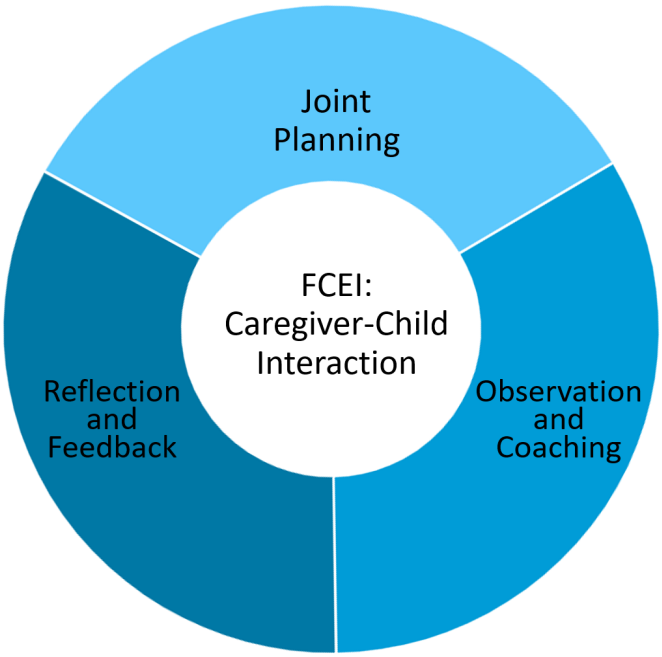
Although the delivery of TI in deaf education has evolved over time, a generally agreed-upon session format closely follows the evidenced-based model of coaching attributed to Dathan Rush and M'Lisa Shelden (Rush & Shelden, 2005, 2011). The Rush and Shelden model includes five components: (a) joint planning, (b) observation, (c) action/practice "coaching", (d) reflection, and (e) feedback. Each of these components depend on the foundation of a partnership between parents and providers. The coaching model developed by Rush and Shelden provides a framework for an adapted model of FCEI for families of children who are DHH, as illustrated in Figure 2 and described below.

Joint Planning

As Rush and Shelden (2005, 2011) describe, joint planning occurs as a part of the introduction to the session and includes agreement between the coach (EI provider) and the learner (parent). During the joint planning activity, the provider and parent engage in a discussion of progress since the last session, a brief introduction of the parent's chosen activity for the session, the parent's objectives for the session, the parent's goals for the child, and how the provider will coach the parent to support these objectives. Joint planning is collaborative, but driven by the parent. The provider supports the parent, imparts guidance based on the parent's knowledge and skills, helps to define appropriate goals for the child, and identifies the child's skill-levels. The activities and ideas for session objectives come from the parent; this promotes the development of parental confidence to carry over skills acquired from the coaching sessions into everyday life.

Figure 2

Model of Family Centered Early Intervention (FCEI)



Note. Model of FCEI adapted from Rush, D. D., & Shelden, M. L. (2005). Evidence-based definition of coaching practices. CASEinPoint, 1(6). https://fipp.ncdhhs.gov/wp-content/uploads/caseinpoint_vol1_no6.pdf and Rush, D. D., & Shelden, M. L. (2011). The early childhood coaching handbook. Paul H. Brookes Publishing Co.

A brief example of joint planning follows:

> ***EI Provider (EIP)****: How have things been since the last session?*
>
> ***Parent (P)****: I've been trying to get Hattie to say more words, but it doesn't work all the time.*
>
> ***EIP:*** *Okay. Is that something you want to work on today?*
>
> ***P:*** *Yes.*
>
> ***EIP:*** *Okay. What is it you are going to do today?*
>
> ***P****: We're going to play with playdough.*
>
> ***EIP****: And what are you going to work on?*
>
> ***P:*** *I'm going to work on getting word combinations, two or three words. I want Hattie to say word combinations when prompted, but if not, then I want her to at least imitate the word combinations.*
>
> ***EIP****: Okay, perfect. You want to elicit two or three words at a time from Hattie.*
>
> *Let's work in the same way we did last week. If Hattie says something, then you will think about her intent, what she's meaning or trying to say; then, think about the language to model so that her production is more correct.*
>
> *What is your goal for yourself?*
>
> ***P****: I want to make sure that I am modeling two or three words correctly.*
>
> ***EIP****: All right, then what I'll do is if Hattie says something and you don't provide a model, I'll remind you by saying "Model that" or "Give her a model." I'll judge whether I think you are stuck and can't think of what to say quickly, by your response. If that happens, then I'll say the words to model and you can just repeat what I've said.*
>
> *Okay, do you feel good about that?*
>
> ***P****: Yes.*
>
> ***EIP:*** *Let's get started.*

Observation and Coaching

Although Rush & Shelden (2005, 2011) define observation and coaching as separate components, the adapted FCEI model combines observation and coaching to occur simultaneously. Together, these components are an examination of the parent's actions during the activity with his child. The purpose of observation and coaching is to actively watch the parent interaction with the child so the provider can offer the parent suggestions for real-time strategies to embed into the interaction. Observation and coaching give the provider an opportunity to provide immediate comments including positive reinforcement. Coaching is the catalyst which begins the process of empowering parents to help their children develop language. Goals of coaching are to identify the skills and capabilities within parents, enable parents to use their skills to the best of their abilities, and increase their independence using specific techniques which will reduce their reliance on professionals. The provider will provide specific statements to the parent (e.g., That was perfect; she imitated the model you gave her.) During this part of the session, the parent is reminded of the expectations he previously planned for his child and is given specific comments related to his own objectives for himself. The embedded coaching also provides opportunities for the parent to expand his child's speech and language while implementing a fun activity.

An example of coaching follows, where the goal for the parent is to provide prompts that encourage the child to use at least two-word combinations and the goal for the child is to produce at least two-word combinations:

> ***P****: What color do we have?*
>
> ***Hattie****: pink*
>
> ***EIP****: Ask, "What color playdough do we have?".*
>
> ***P****: What color playdough do we have?*
>
> ***Hattie****: playdough*
>
> ***EIP****: Ask again, "What color playdough?"*
>
> ***P****: What color playdough?*
>
> ***Hattie****: pink*

***P**: pink playdough, Tell me pink playdough.*

***Hattie**: pink playdough*

***EIP**: Great model. Great imitation.*

***P**: What will you do with the playdough?*

***Hattie**: smash*

***P**: Smash the playdough. Can you tell me that? Smash the playdough.*

***Hattie**: mash playdough*

***EIP**: Great, you got her to imitate two words.*

***Hattie**: Daddy turn*

***P**: It's Daddy's turn.*

***EIP**: Say, "**It's** Daddy's turn." Try to get that third word.*

***P**: **It's** Daddy's turn.*

***Hattie**: -i- Daddy's turn.*

***EIP**: That was great. She tried to add "it's."*

***P**: Daddy is smashing the playdough.*

***EIP**: Say, "Daddy smashes the playdough." It'll be easier for Hattie.*

***P**: Daddy smashes the playdough.*

***Hattie**: Daddy smash.*

***P**: playdough*

***EIP**: Model the whole thing, "Daddy smashes the playdough."*

***P**: Daddy smashes the playdough.*

***Hattie**: Daddy mash*

***EIP**: Model it again.*

***P**: Daddy smashes the playdough. Tell me, Daddy smashes the playdough.*

***Hattie**: Daddy mash playdough*

***EIP**: Woo Hoo! Nice work, both of you! You stuck with it and she did it! Great job.*

Reflection and Feedback

The last components of the session are reflection and feedback. In the adapted model of FCEI, these two components are intertwined; happening as two parts of a single conversation. These portions include a thoughtful summary or recap from both the parent and provider. Reflection provides an opportunity for the parent to review his perspective of his communication and his child's engagement in the activity. Reflecting occurs immediately after the activity ends and creates an opportunity for the parent to comment on what went well, what didn't go well, what he would like to do more or less of, what he would like to see the child do more or less of, and what can be modified to meet the intended outcomes. The provider is able to give specific feedback based on the parent's reflection and her own observations and point out what the parent may not have noticed that he or his child were doing during the activity. The purpose of this final component of the session is to actively think about the progress that was made during the session, how the current session can guide the next session, and ultimately, how the session can help the parent carry over skills to facilitate language development at home.

An example of reflection and feedback follows:

***EIP:** How do you think that went?*

***P**: I think that was okay?*

***EIP**: All right, what do you think went well?*

***P**: I think Hattie imitated some word combinations.*

***EIP**: Yes, Hattie imitated "pink playdough" and "smash playdough." But she said, "Daddy turn" on her own and tried to imitate "It's Daddy's turn."*

What about what you did well?

***P**: I was trying really hard to model three words, but it was hard to think of what to say that's not too much. It's hard for me when it's happening to figure out what words to say.*

***EIP**: You did a nice job. Remember, if Hattie says one word, then modeling two words is okay. You are trying to expand her original utterance. When Hattie says two words, like when she said, "Daddy turn," then that's when you want to be sure to model three words, "It's Daddy's turn."*

Is there anything about the activity that was hard for you?

***P**: Yeah, it's hard for me to know exactly what to say.*

***EIP**: Well, let's think about some two-word combinations that you can use with the playdough activity. Think about verb-noun or an action word to combine with playdough. Hattie said, "smash playdough" what other verbs could you use with "playdough."*

***P**: Push?*

***EIP**: Absolutely. "Push the playdough. Roll the playdough." Do you have a knife or a scissors?*

***P**: Oh yes, I could "Cut the playdough."*

***EIP**: Exactly. And you could have Hattie say, "Open the playdough" when you are getting it out.*

*Then, to expand the utterance to three words, you could either emphasize the little words, the articles such as "the" or you could add the color of the playdough. For example, you could use acoustic highlighting, saying the word you want Hattie to add, "Open **the** playdough." or "Smash **the** playdough." That would be one way to try to get Hattie to add a word, emphasizing it with your voice by saying it just a little bit louder. Another way to*

add a third word would be to add the color of the playdough. For example, "Push the pink playdough." Does that sound reasonable?

***P**: Yes, it's just hard to remember in the moment.*

***EIP**: As you do other activities with Hattie, think about it. Think about how to put her thoughts into three words. I think this is a good goal for Hattie. And a good goal for you, to think about how to expand her utterances. What do you think?*

***P**: That's a good idea. I can try to do that.*

Addressing the Unique Challenges of TI while Implementing Family-Centered Early Intervention

When a session is virtual, the above model of family-centered early intervention is followed closely, with added challenges managing the technology and being in separate physical locations. With training, the provider likely will be more prepared both to explain the unique elements of tele-intervention and to establish expectations with the parent(s). Considerations specific to virtual service provision related to the technology and the setting include time, connectivity, and environment.

Time

The lack of face-to-face time before and after a virtual session results in fewer opportunities for detailed explanations during the session's activities. For this reason, it is important for the provider and parent to agree on expectations before engaging in TI. This could be accomplished through consultation with the family prior to beginning regularly scheduled sessions, at which time all of the considerations for receiving intervention services via the internet can be reviewed.

TI sessions often have a feeling of immediacy that in-person sessions do not present. Once the computer is on, coaching must begin. When in-person, there may be time both before and after the FCEI session to review updates, provide additional tips or answers to parents, or engage in conversations. To make the most of the session time, the parent and provider may choose to prepare, or engage in joint planning, prior to the session (e.g., via email, telephone, text messaging, etc.). Preparations might include choosing activities together that align with the parents' goals for himself and his child, and encouraging the parent to send questions as they arise day to day via email rather than waiting to address questions during the session. The provider may also choose to send notes to the parent after the session, with additional feedback and tips for future sessions.

Connectivity

It is important that both provider and parent be prepared for technology failures. In the event of poor connectivity or complete disconnect, the provider can be prepared with options to continue the session including (a) attempting to redial or re-establish the video call, (b) using alternative audio sources such as a cell phone while continuing video connection, or (c) using a headset to reduce feedback. Tele-intervention services rely on the internet, and thus, there may exist a time delay between voice and motion. For this reason, it is important that providers are careful to not disrupt the flow of the activity or to interrupt the children while giving their responses to their parents. A combination of positive reinforcement and an explanation help the parent to understand what they did that is being reinforced (e.g., "Great model" "Nice job; you held up the toy," "Good; you got eye contact," "Wait time worked; she included *is*."). Simple corrections and positive statements that are specific, quick, and clear are effective ways to provide meaningful feedback while remaining mindful of time constraints and delays.

Environment

Since TI sessions are often held in the parents' home environment, it is likely that background noise from televisions, family members, or other sources may be present during the session. Prior to beginning regular TI sessions, both the provider and the parent can be thoughtful about the location in which the session will occur. It may be helpful to have a specific space where the child is expected to be during the session (e.g., blanket on the floor, chair at table, high chair) to ensure that the child is within range of the camera. A designated space for TI may signal to the child that when in the space for TI, he will be expected to engage in activities and be held accountable for speech/language objectives.

It is likely that the child will be most engaged when sessions occur in a space where other family members, who are not actively included in the session, are absent. Ideal settings include quiet spaces with minimal competing background noise to ensure the child has an optimal learning environment free from visual and auditory distractions. Rooms in the house that are free of high-traffic (i.e., family members are not often walking through the space) are likely to provide the most focus for all parties participating in the session. Often, siblings are at home during the TI session. This presents an excellent opportunity to include siblings in the session activities.

Conclusion

The delivery of human services such as health, education, and intervention through telepractice has become increasingly common in today's connected world; there have been particular gains in its use during the global pandemic of 2020. As this virtual model of service provision continues to grow, so too must the understanding of TI in the field of deaf education. Limitations of TI include cost, reimbursement, connectivity, equipment, licensure, management of child behavior, lack of hands-on demonstrations, and limited conversational opportunities. Advantages of TI include access to services, reduced costs in time and travel, and flexible scheduling. Further research is needed to elucidate the advantages, challenges, and recommendations of professionals and families who have engaged in both traditional in-person

services and virtual TI services. Work related to these needs is addressed in the subsequent articles of this monograph (Nelson et al., 2022a, 2022b).

References

American Speech-Language-Hearing Association (ASHA). (n.d.). *Telepractice.* (Practice Portal). www.asha.org/Practice-Portal/Professional-Issues/Telepractice/

Ashburner, J., Vickerstaff, S., Beetge, J., & Copley, J. (2016). Remote versus face-to-face delivery of early intervention programs for children with autism spectrum disorders: Perceptions of rural families and service providers. *Research in Autism Spectrum Disorders, 23*, 1–14. https://doi.org/10.1016/j.rasd.2015.11.011

Behl, D. D., Blaiser, K., Cook, G., Barrett, T., Callow-Heusser, C., Brooks, B. M., Dawson, P., Quigley, S., & White, K. R. (2017). A multisite study evaluating the benefits of early intervention via telepractice. *Infants & Young Children, 30*(2), 147–161.

Behl, D. D., Houston, K. T., Guthrie, W. S., & Guthrie, N. K. (2010). Tele- intervention: The wave of the future fits families' lives today. *Exceptional Parent, 40*(12), 23–28.

Blaiser, K. M., Behl, D., Callow-Heusser, C., & White, K. R. (2013). Measuring costs and outcomes of tele-intervention when serving families of children who are deaf/hard-of-hearing. *International Journal of Telerehabilitation, 5*(2), 3–10. https://doi.org/10.5195/ijt.2013.6129

Blaiser, K. M., Edwards, M., Behl, D., & Muñoz, K. F. (2012). Telepractice services at Sound Beginnings at Utah State University. *Volta Review, 112*, 365–372.

Broekelmann, C. (2012). ihear Internet therapy program: A program by St. Joseph Institute for the Deaf. *Volta Review, 112,* 417–422.

Cole, B., Pickard, K., & Stredler-Brown, A. (2019). Report on the use of telehealth in early intervention in Colorado: Strengths and challenges with telehealth as a service delivery method. *International Journal of Telerehabilitation, 11,* 33–40.

Individuals With Disabilities Education Act, 20 U.S.C. § 1400 (2004).

Houston, K.T. (2011). TeleIntervention: Improving service delivery to young children with hearing loss and their families through telepractice. *Perspectives on Hearing and Hearing Disorders in Childhood, 21,* 66–72.

Houston, K. T., & Stredler-Brown, A. (2012). A model of early intervention for children with hearing loss provided through tele-practice. *Volta Review, 112*, 283–296.

Lalios, A. P. (2012). ConnectHear teleintervention program. *Volta Review, 112,* 357–364.

McCarthy M. (2012). RIDBC Teleschool [TM]: A hub of expertise. *Volta Review, 112*, 373–381.

McCarthy, M., Duncan, J., & Leigh, G. (2012). Telepractice: The Australian experience in an international context. *Volta Review, 112*, 297–312.

McCarthy, M., Leigh, G., & Arthur-Kelley, M. (2019). Telepractice delivery of family-centred early intervention for children who are deaf or hard of hearing: A scoping review. *Journal of Telemedicine and Telecare, 25*(4), 249–260. https://doi.org/10.1177/1357633X18755883

McCarthy, M., Muñoz, K., & White, K. R. (2010). Teleintervention for infants and young children who are deaf or hard-of-hearing. *Pediatrics, 126*(Supp. 1), S52–S58.

Molini-Avejonas, D. R., Rondon-Melo, S., Albuquerque De La Higuera Amato, C., & Samelli, A. G. (2015). A systematic review of the use of telehealth in speech, language and hearing sciences. *Journal of Telemedicine and Telecare, 21*(7), 367–376. https://doi.org/10.1177/1357633x15583215

National Center for Hearing Assessment and Management (NCHAM). (2010). Telehealth and EHDI Systems. http://infanthearing.org/telehealth

Nelson, L., Rudge, A. M., Dawson, P., Culianos, D., Broekelmann, C., & Stredler-Brown, A. (2022a). Parents' perspectives about tele-intervention services for their children who are deaf or hard of hearing. *Journal of Early Hearing Detection and Intervention,* 7(2), 9–21.

Nelson, L., Rudge, A.M., Dawson, P., Culianos, D., & Stredler-Brown, A. (2022b). Provider perspectives in serving children who are deaf or hard of hearing and their families using tele-intervention. *Journal of Early Hearing Detection and Intervention,* 7(2), 22–32.

Rush, D. D., & Shelden, M. L. (2005). Evidence-based definition of coaching practices. CASEinPoint, *1*(6). https://fipp.ncdhhs.gov/wp-content/uploads/caseinpoint_vol1_no6.pdf

Rush, D. D., & Shelden, M. L. (2011). The early childhood coaching handbook. Paul H. Brookes Publishing Co.

Stith, J., Stredler-Brown, A., Greenway, P., & Kahn, G. (2012). TeleCITE:Telehealth – A cochlear implant therapy exchange. *Volta Review, 112*, 393–402.

Yaribakht, M. & Movallali, G. (2020). The effectiveness of an early family-centered tele- intervention program on pre-verbal and listening skills of deaf children under 2 years old. https://doi.org/10.13140/RG.2.2.28239.92326