

Getting Started with Home Visits: Recommendations for Serving Families of Children who are Deaf or Hard of Hearing

Lauri H. Nelson, PhD¹
Samantha C. Gotcher, MEd¹
Lauren Smith, MEd¹

¹Department of Communicative Disorders and Deaf Education, Utah State University, Logan, UT

Abstract

The successful implementation of newborn hearing screening programs across the United States has facilitated timely diagnosis of hearing loss and referral to early intervention (EI) services for families of children who are deaf or hard of hearing (DHH), thus increasing the potential for improved language development outcomes. As new parents engage in EI services that involve professionals entering their home, the effectiveness of the early interventionists' engagement, knowledge, coaching skills, and ability to provide emotional support can substantially influence families' experiences. This article provides graduate students and new early interventionists an overview of key concepts related to home-based EI services, including (a) establishing the parent-professional partnership, (b) developing the parent coaching model, (c) setting auditory development priorities, and (d) providing goal-oriented services. Tables containing websites, assessments, and other materials and intervention resources are provided to support content depth and service delivery competence in each concept area. The final section outlines the flow of a typical home visit. An example of a completed Family Session Planning Guide and a hypothetical example of dialogue between the parents and the EI provider as they establish the child and family goals and identify strategies for meeting those goals is provided. Also included is a Family Session Planning Guide template.

Acronyms: CDC = Centers for Disease Control and Prevention; DEC = Division for Early Childhood; DHH = deaf or hard of hearing; ECTA = Early Childhood Technical Assistance Center; EI = early intervention; LSL = listening and spoken language; NAEYC = National Association for the Education of Young Children

Correspondence concerning this article should be addressed to: Lauri H. Nelson, Department of Communicative Disorders and Deaf Education, Utah State University, 2620 Old Main Hill, Logan, UT 84322, USA.
E-mail: lauri.nelson@usu.edu; Phone: 435-797-8051.

Congenital hearing loss affects approximately two to three infants per 1000 live births in the United States and, if undetected or untreated, can result in delayed speech and language development (Centers for Disease Control and Prevention, 2010). However, the successful implementation of newborn hearing screening programs across the United States has facilitated timely diagnosis of hearing loss and referral to early intervention (EI) services for families of children who are deaf or hard of hearing (DHH), thus increasing the potential for improved language development outcomes (Nitttrouer & Burton, 2001; Schramm et al., 2010). Children who are identified early and promptly begin EI services have better language skills compared with children who were later-identified or who did not engage in effective EI services (Ching et al., 2017; Decker & Vallotton, 2016). With advances in hearing technology, such as hearing aids and cochlear implants, and appropriate EI services, many young children who are DHH can develop listening and spoken language (LSL) similar to their same-aged hearing peers (Cole & Flexer, 2015; Hayes et al., 2009; Lederberg et al., 2013; Tomblin et al., 2015). Because more than 90% of babies who are DHH are born to hearing parents (Mitchell & Karchmer, 2004), hearing loss is unfamiliar to most new parents and

the process of preparing for and effectively participating in EI services can seem daunting. In the United States, EI is most commonly defined as the period between birth and age three, as indicated under Part C of the Individuals with Disabilities Education Act (2004). Consistent with the priorities of EI best practices, services should be provided in the child and family's natural environment (Division for Early Childhood/National Association for the Education of Young Children [DEC/NAEYC] Joint Position Statement, 2009), which is most commonly in the home. In a longitudinal study of 122 EI professionals and 131 parents, Harrison et al. (2016) found that family involvement is highest when EI services are home-based, supporting the need for EI in the home whenever possible. See Nicholson et al., 2016 for a comprehensive review of home-visit models.

As new parents embark on this unexpected journey of EI services and having professionals enter their home, the effectiveness of the early interventionists' engagement, knowledge, coaching skills, and ability to provide emotional support can substantially influence families' experiences. In a parent survey, Ealy (2013) reported the EI provider was considered the most influential practitioner and is in the best position to influence the EI experience. In a

study exploring parent engagement in EI, Weiber (2015) reported findings from detailed interviews with 10 parents of children with hearing loss. This study highlighted some of the questions parents have when they first learn about EI services. For example, one parent stated, "I didn't even know prior to this that this thing [EI] even existed.... I didn't even know what it was" (p. 131). Another parent stated, "The first thought that came through my mind was a strange person would be coming to my house once a week" (p. 127). During the process of initiating EI services, one parent stated, "I had a really, really wonderful lady come to my house. We sat and had a long conversation. She told me her personal story and it gave me hope. I walked away from that conversation with the hope that at some point I will be able to communicate with her and she, in turn, would be able to communicate with me. So that's kind of where the ball got rolling" (p. 102). Other parents described the desire for their EI provider to be a better listener or the concern their provider may not have conveyed the full range of service delivery options available to them. However, most parents described their EI provider as "being knowledgeable," "a tremendous professional," "providing valuable one-on-one services," and "being a friend" (Weiber, 2015).

An EI provider who seeks to connect with families in a manner most comfortable and culturally appropriate for the family can become a trusted and valuable companion for families as they engage in EI programs and services (Division for Early Childhood [DEC], 2014). The purpose of this article is to provide graduate students and new early interventionists entering the LSL field an overview of key concepts related to home-based EI services, including (a) establishing the parent-professional partnership, (b) developing the parent coaching model, (c) setting auditory development priorities, and (d) providing goal-oriented services. Tables containing websites, assessments, and other materials and intervention resources are provided to support content depth and service delivery competence in each concept area.¹ In the final section, the flow of a typical home visit is provided, including an example of a completed Family Session Planning Guide. This is accompanied by a script that provides a hypothetical example of dialogue between the parents and the EI provider as they establish the child and family goals and identify strategies for meeting those goals. Also included is a Family Session Planning Guide template.

Establishing the Parent-Professional Partnership

An essential priority when serving young children who are DHH in EI is establishing a strong connection and partnership with parents, caregivers, and families.² The partnership must be founded on trust and assurance

¹ The contents provided in the tables are not inclusive of all available websites, materials, or resources. Further, website URLs can change. Thus, the information provided is the most current at the time of publication.

² The definition of parents, caregivers, and families encompasses a rich variety of circumstances, cultures, and individually-specific details. To improve readability, the term "parents" is used throughout the article but is inclusive of all caregivers and family constructs.

that the EI provider will take the time to learn the parents' priorities for their child and to understand what is important to them and their family (DesJardin, 2009; DEC, 2014; Moeller et al., 2013). The importance of providers developing a trusting relationship with families is recognized as a priority by the Early Childhood Technical Assistance Center (ECTA). The ECTA center is funded by a cooperative agreement with the Department of Education's Office of Special Education Programs and provides technical assistance to state EI agencies to develop high quality EI and preschool special education systems. In partnership with The Center for IDEA Early Childhood Data Systems (DaSy), the ECTA center developed an interactive, four-part web broadcast series aimed at helping EI providers to develop trusting relationships with families (ECTA, 2017). In the broadcast series, the ECTA center emphasizes that the parent-professional partnership lays the foundation for achieving the long-term intended outcomes for the children they serve and provides evidence-based information and materials to support practices that develop parent-professional trust. In addition to the recorded series, written materials and resources are provided.

The initial realization that a hearing loss may be present and the subsequent process of obtaining or confirming the diagnosis is, for most families, a difficult and emotional journey (Scarinci et al., 2018). Professionals involved in this process can contribute to families' experiences both positively and negatively. In a survey study of 445 caregivers of children who are DHH, Scarinci et al. found that approximately 85% of their sample reported they were satisfied with the emotional support and information they received from their providers following their child's hearing loss diagnosis. However, in a follow-up qualitative phase of the study, Scarinci et al. found through in-depth interviews with five families that the diagnostic process, interactions with audiologists, and initiation of EI services was a difficult and emotional experience for parents. In some instances, parents were hurt or confused by the comments of professionals or the manner in which information was provided, however inadvertent. Although most professionals provide caring support and guidance, it is important to ensure implementation of practices that develop trust and that are mindful of parents' needs. Providers should identify practices and behaviors that will minimize the potential for miscommunication and provide the information or supports that align with parents' priorities. As EI services are initiated, providers can help parents understand the construct and purpose of the home visit. EI providers are guides to support parents in skills that can promote their child's language and communication development, whereas the parents are the most important teachers and agents of change for their children as they implement strategies for development throughout the day and across daily routines (Decker & Vallotton, 2016; Roberts, 2019; Roberts et al., 2014; Moeller et al., 2013). Early Intervention providers can guide parents through discussion, coaching, counseling, and listening.

The Parent Coaching Model

A central tenet of providing family-centered services is use of *parent coaching* as the service delivery model. The concept of coaching may elicit the image of a sports analogy, in which the coach is in charge of the team, identifies the goals, calls the plays, and motivates the players. However, the sports analogy in EI services does not hold and, in practice, is quite the opposite. An effective EI provider supports parents in meeting *their* goals for their child and family, with the provider offering content knowledge in research-based recommended practices and suggestions for implementing the goals within the families' daily routines in accordance with family needs and preferences. A working definition of the purpose of parent coaching in EI services is provided by Rush and Shelden (2019):

Coaching is used to acknowledge and perhaps improve existing knowledge and practices, develop new skills, and promote continuous self-assessment and learning on the part of the coachee. The coach's role is to provide a supportive and encouraging environment in which the coach and coachee jointly examine and reflect on current practices, apply new skills and competencies with feedback, and problem solve challenging situations. The coach's ultimate goal is sustained performance in which the coachee has the competence and confidence to engage in self-reflection, self-correction, and the generalization of new skills and strategies to other situations as appropriate. (pp. 3–4)

A coaching model of interaction used in EI home visits requires both planning and flexibility on the part of the EI provider. Planning is essential for the coaching sessions to result in the coachee's desired learning processes or the achievement of a goal or outcome. The act of planning for each EI session can ensure the EI provider is purposeful in guiding developmentally appropriate targets in concert with priorities of the family. Likewise, the EI provider must also be flexible in the home visit plan and be prepared to make on-the-spot adjustments. For example, the provider may have planned to demonstrate joint awareness during book reading but, upon arriving, find the parents and child involved in planting flowers outside. The provider recognizes the rich language opportunities naturally occurring and can engage with the family in this activity. In all sessions, the priorities are determined by the parents, and then the coach can help to identify developmentally appropriate language and auditory perception targets. Together, the provider and the parents can brainstorm ways to implement or reinforce the targets during the family's daily routines and activities.

Reflective Questions

Through open-ended, reflective questions, providers can help parents and caregivers recognize *why* the targeted goals and recommended activities are important to their child's development (Rush & Shelden, 2019). Bruin & Ohna (2015) reported that not all parents understand the

purpose of the activities or strategies their EI provider suggests, with one parent who stated, "We really didn't get it. We were supposed to use [it] in everyday situations, which became quite artificial, I felt. It's unnatural!" That artificial feeling happens when situations are contrived to meet strategies instead of strategies to fit everyday situations. When parents understand the purpose of the strategies, they are more effective at determining points in their natural routines where strategies will support their child's targeted goals. Reflective questions are open-ended questions used to drive discussion, review progress, introduce a new strategy, brainstorm ideas, plan for the future, and build the parent-professional relationship (Smith & Cook-Ward, 2020). For example, to build on a topic that was discussed during a previous visit, the EI provider may ask, "What do you remember about...?" By probing for the parent's current level of understanding in an open and non-judgmental way, the parent is more freely able to give an honest answer.

Specific Feedback

In addition to reflective questions, the thoughtful use of specific feedback can guide parents in their daily implementation of the strategies they are using to facilitate their child's progress and development. Parent-directed feedback should be encouraging, informative, and specific. For example, if a parent is reading a book to their child and uses acoustic highlighting, nonspecific feedback would be "I like the way you're reading to her! Great job!" This comment may be encouraging, but it is not particularly meaningful. In comparison, the provider could provide specific feedback, such as, "Using acoustic highlighting to emphasize certain words over others is keeping her engaged and promotes our goals of auditory perception development, great job!" Specific feedback can facilitate parent confidence and knowledge for using the LSL strategies throughout the child and family's daily routines and across a variety of environments.

Another form of specific feedback is to detail the connection between the actions the parent has taken and the child's demonstrated skills. In the same example of the parent reading to a child using acoustic highlighting, the provider could say, "When you used acoustic highlighting in the book, your child was able to notice our target word and find the corresponding picture in the book." Parents will recognize connections between strategies and outcomes as their coach shares his or her own observations.

Implementation of LSL Strategies During Daily Routines

As parents become adept at analyzing the outcomes of their strategies, they will be able to extend strategies into new daily routines. When intervention strategies are applied across normal daily activities, children are more likely to generalize the skills they are practicing (DEC, 2014). Early intervention providers can guide parents by using reflective questions to inquire about the child's participation in daily routines such as mealtimes, bedtime, bath time, getting ready for the day, going to the store,

and even family outings. For example, the provider might inquire about the activities the child most enjoys or how routines change from the week to the weekend. McGinnis (2017) suggests asking parents to write out their schedule to promote discussion that will help them identify effective strategies that target their child's developmental goals as aligned with the family's routines. In addition to speech and language, it is highly beneficial for parents to include music goals into their daily routines and interactions. Both listening to music and singing is fun and age-appropriate, but also promotes auditory perception development. Torppa et al. (2018) reported children who are DHH with cochlear implants who sing regularly have better perception of speech in noise compared to children who are DHH who don't sing. Implementation of auditory, speech, language, and music into daily living activities with specific feedback empowers parents to extend their

understanding of their child's goals and how to use the LSL strategies in meaningful and age-appropriate ways.

Adult Learning Styles

To facilitate content knowledge and to help parents be reflective and have discussions that utilize feedback, effective coaches must have an understanding of adult learning and the ability to adapt to a variety of personalities and interpersonal communication styles. The partnership between the EI professional and parents will be more positive and successful when professionals, both verbally and through their body language, convey warmth, empathy, and a sincere desire for a meaningful connection with the family. This is more likely achieved when the provider has an understanding of adult learning styles in general and can specifically apply intervention strategies in harmony with the individual learning styles of parents.

Table 1

Websites and Written Materials to Support Parents and the Parent-Professional Partnership

Websites or Online Resources

Alexander Graham Bell Association
<https://www.agbell.org>

Baby Hearing
<https://www.babyhearing.org/>

Early Childhood Technical Assistance Center
<https://ectacenter.org>

EI Excellence
<http://www.eiexcellence.org/>

Family Guided Routines Based Intervention and Caregiver Coaching
<http://fgrbi.fsu.edu/index.html>

Hands and Voices
<https://www.handsandvoices.org>

Hear to Learn
www.heartolearn.org

Hearing First
www.hearingfirst.org

National Association for the Education of Young Children (NAEYC)
<https://www.naeyc.org>

National Center for Hearing Assessment and Management (NCHAM)
<http://www.infantheating.org/index.html>

Parent Center Hub
<https://parentcenterhub.org>

Question Prompt List (QPL) (Phonak, 2017)
<https://www.phonakpro.com/us/en/resources/counseling-tools/family-centered-care/fcc-children/family-centered-care-qpl.html>

Supporting Success for Children with Hearing Loss
<https://successforkidswithhearingloss.com>

Vroom
<https://www.vroom.org/>

Zero to Three
<https://zerotothree.org>

Books and Materials

Agreed Upon Practices for Providing Early Intervention Services in Natural Environments
https://ectacenter.org/~pdfs/topics/families/AgreedUponPractices_FinalDraft2_01_08.pdf

Early Childhood Coaching Handbook, 2nd Ed (Rush & Shelden, 2019)
 ISBN: 1681252562

Framework for Reflective Questions (Rush & Shelden, 2019)
https://fipp.org/static/media/uploads/casetools/casetool_vol4_no1.pdf

Routine-Based Early Intervention (Williams, 2010)
 ISBN: 1598570625

Seven Key Principles: Looks Like/Doesn't Look Like (Ecta Center)
https://ectacenter.org/~pdfs/topics/families/Principles_LooksLike_DoesntLookLike3_11_08.pdf

Furthermore, professionals must learn to *meet parents where they are*. Parents and family dynamics are unique and their engagement with EI services can be influenced by a variety of factors. Early intervention providers who scaffold their support to match parent readiness provide a better EI experience for families in the short-term and long-term. See Table 1 for websites and written materials to support parents and the parent-professional partnership.

Auditory Development Priorities

Auditory Perception Development

A fundamental difference between serving children who are DHH and children with typical hearing is the accessibility of sound, essential for LSL development. The development of LSL in children who are DHH is founded on principles of early identification of hearing loss, use of appropriately-fitted hearing technology worn during all waking hours, and family-centered, goal-oriented EI services guided by professionals with expertise to meet the needs of children and families (Joint Committee on Infant Hearing [JCIH], 2019). A fundamental premise of speech and language development recognizes the critical window of language acquisition as a neurological emergency (Cole & Flexer, 2015; Livotsky, 2015). In other words, intervention to promote development of the auditory system in children who are DHH who use hearing technology should include systematic application and reinforcement of goals implemented during all waking hours through daily routines and across a variety of environments. Although age-appropriate acquisition of speech and language is a broad priority in many EI services, families of children who are DHH who wish for their child to use LSL will benefit from the guidance of a provider with expertise in LSL development. A provider's guidance can maximize the neurological foundations of auditory perception development. Auditory perception development is the maturation of the brain's ability to process and analyze sound, which requires consistent and meaningful stimulation as a foundation for LSL development (Abdollahi et al., 2017; Werner, 2007). It can be easier for parents to understand and be excited about their child's expressive language targets than the less familiar concept of receptive language and auditory perception development. The understanding and implementation of auditory perception goals may take more guidance and practice so they are not under-emphasized; thus, the importance of parents knowing *why* particular targets are being recommended.

Management of Hearing Technology

At the beginning of every session, providers should consistently prompt and reinforce the importance of parents checking their child's hearing technology (e.g., hearing aids, cochlear implants, or other assistive hearing devices). This ensures the child has functioning hearing technology during the session, but more importantly, it reinforces to parents the need for them to check their child's technology on a daily basis. This also provides an opportunity to troubleshoot any concerns and to answer any questions the parents may have about their child's

devices. In a parent-coaching model, the parents perform the listening check with the provider there for support or guidance as needed. A daily listening check is also an opportunity to support parents' understanding and use of the Ling 6/7 sound test (/ah/, /oo/, /ee/, /sh/, /ss/, /mm/, and no sound). Some parents may have confusion between the *learning to listen* sounds that are often included in intervention activities (e.g., "mmmm, I like ice cream" or "shh, the baby is sleeping") with the Ling 6/7 sound test for the purpose of checking the hearing technology. These clarifications are important components of the coaching guidance. The EI provider helps parents know and recognize the type of response from the child that is developmentally appropriate at each stage. This guidance is an opportunity for parents to become more familiar with the development of auditory skills in a hierarchical progression.

Goal-Oriented Services

Assessment and Progress Monitoring

A primary role of the EI provider is to obtain accurate baseline data to establish the child's present levels of performance in their LSL development and then use ongoing assessment data to monitor child progress. Both formal and informal measures can be used to assess young children who are DHH, such as checklists, norm-referenced tests, and language sampling (Neuss et al., 2013; Thomas & Marvin, 2016). Checklists are a common form of assessment for children birth to three years due to their ease of use, although professionals should be mindful of the limitations of checklists given their lack of standardization and potential constraints in their specificity for documenting progress. Most professionals concur that checklists are most valuable when used in conjunction with other measures, such as norm-referenced tests that provide measures of development as compared with a standardization sample of same-aged peers. In fact, use of norm-referenced assessments is specifically recommended by JCIH for baseline and progress monitoring (JCIH, 2019). Use of language samples can also be an effective tool for monitoring both speech and language progress. Providers can track generalization of vocabulary and articulation by transcribing a child's use of their words and word approximations during sessions. Parents can also support data gathering by using video recordings. Video allows providers to observe language use during daily routines that occur when the provider is not present.

The IDEA Part C requires documentation of progress monitoring at least every 6 months (IDEA, 2004). Although the minimum requirements for progress monitoring must be satisfied, the frequency of monitoring should be informed by specific outcomes being targeted and the need for making decisions, rather than the minimum timeline recommendations (Thomas & Marvin, 2016). Overall, the intervention plan and the guidance provided to parents should be data driven to avoid ineffective home visit sessions or misguided goals and targets.

Goal Setting

In a collaborative process, the EI provider and the parents use the assessment data and the developmental hierarchy to identify the speech, language, and auditory perception goals to be implemented until the next home visit. Through discussion and open-ended questions, the provider can offer guidance to combine appropriate goal selection and family priorities (Kahn et al., 2009; Rush & Shelden, 2019). The provider can then formulate the specific wording of the goal that matches the family and child's needs. Early intervention providers who may be tempted to dictate this for the parents fail to realize that the implementation of goals throughout the child's day and during naturally-occurring routines are most effective when the parents are involved in the selection.

As parents consider the family's activities for an upcoming week, the provider and the parents can brainstorm ideas for incorporating the identified goals into those activities in meaningful ways. These may be typical activities such as mealtime or getting dressed, or less-frequent activities such as going camping or an upcoming birthday party. In other words, helping parents to identify the rich language opportunities that are happening all around them can facilitate their consistency and comfort with incorporating their child's goals during nearly any activity. Further, it is ideal when the reinforcement of goals involves the whole family. Through discussion, the provider and parents can identify ways for siblings, grandparents, or others to be involved in supporting the child's LSL goals through natural interactions. See Table 2 for developmental hierarchy guides and checklists, standardized assessments and screening tools, and intervention apps and materials.

Table 2

Developmental Hierarchy Guides and Checklists, Standardized Assessments and Screening Tools, and Intervention Apps and Materials

Developmental Hierarchy Guides and Checklists

Auditory Learning Guide

<https://hearingfirst.org> (free log-in required)

Auditory Skills Checklist

<https://successforkidswithhearingloss.com/wp-content/uploads/2011/12/Auditory-Skills-Checklist-Cincinnati-Childrens-Hosp.pdf>

Centers for Disease Control and Prevention - Developmental Milestones

<https://www.cdc.gov/ncbddd/actearly/milestones/index.html>

Cochlear Integrated Scales of Development

<https://www.cochlear.com/us/en/professionals/resources/school-resource-center/rehabilitation-resources/integrated-scales-development>

Cottage Acquisition Scales for Listening, Language, and Speech

<https://edproducts.sunshinecottage.org/>

Early Listening Function

<https://successforkidswithhearingloss.com/wp-content/uploads/2011/08/ELF-Oticon-version.pdf>

Functional Auditory Performance Index (FAP)

<http://www.tsbvi.edu/attachments/FunctionalAuditoryPerformanceIndicators.pdf>

Infant-Toddler Meaningful Auditory Integration Scale (IT-MAIS)

https://advancedbionics.com/content/dam/advancedbionics/Documents/libraries/Tools-for-Schools/Educational_Support/Assessment-Tools/ITMAIS-ResourceBrochure.pdf

LittleEARS Auditory Questionnaire

<https://www.medel.com/about-hearing/hearing-test/little-ears-auditory-questionnaire>

Rosetti Infant-Toddler Language Scale

https://www.therapro.com/Browse-Category/Comprehensive-Language/The-Rosetti-Infant-Toddler-Language-Scale_2.html

Standardized Assessments or Screening Tools

Ages & Stages Questionnaires®, Third Edition (ASQ®-3)

<https://agesandstages.com/products-pricing/asq3/>

Assessment, Evaluation, and Programming System for Infants and Children, 2nd Ed

<https://brookespublishing.com/product/aeps/>

MacArthur-Bates Communicative Development Inventories (MB-CDIs)

<https://mb-cdi.stanford.edu/>

Preschool Language Scales, 5th Ed (PLS-5)

<https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Speech-%26-Language/Preschool-Language-Scales-%7C-Fifth-Edition/p/100000233.html>

Intervention Apps and Materials

Advanced Bionics - Intervention Apps and Materials

<https://advancedbionics.com/in/en/home/support/rehab.html>

Cochlear Corporation - The Communication Corner

<https://www.cochlear.com/us/communication-corner/program-selection/young-children-families.htm>

Listening Room

<https://thelisteningroom.com>

Med-El - Intervention Apps and Materials

<https://www.medel.com/support/rehab/rehabilitation>

Components of Home-Visit Sessions

The specific components or flow of the home visit will vary depending on the individual needs and circumstances of the family. For example, some families may be navigating a variety of medical appointments or home visit services from other professionals, particularly if their child has health concerns or additional disabilities. There can be cultural factors as to how home visits are constructed, who is present, or how goals are developed and implemented. Financial worries about meeting basic family needs (e.g., having enough food, daycare costs, paying the rent or mortgage and other monthly bills) can influence parents' ability to focus on their child's hearing-related priorities. It is common for many parents to make substantial adjustments and sacrifices to their work and family routines to meet the needs of their children. For example, Bruin and Ohna (2015) reported one father who stated, "We did a lot. . . it takes a huge effort. I took time off work approximately one day a week for about a year." Another father reported, "We had to work many hours every single day and every single week to teach him to listen and speak, because he had to practice much more than normally hearing children." Overall, the challenges parents face in balancing work and community responsibilities, while also meeting the needs and schedules of other children in the family are substantial. Professionals can be more impactful in their services when they are cognizant of these realities and can effectively meet families where they are in their journey. Families are complex and the implementation of the home visit should be appropriately tailored for each family's unique needs and preferences. Keeping this in mind, home visits may be conceptualized into four segments: (a) greeting and family update, (b) prioritizing session targets, (c) implementation and practice, and (d) reflection and planning.

Greeting and Family Update

Consistent with the priority of developing, maintaining, and enhancing the relationship between the family and the EI provider, the home visit session should begin with inquiries as to how the parents and family are doing (Ekberg et al., 2018; Turan, 2010; Turan, 2012). Although this may seem obvious, most EI providers carry demanding caseloads and follow busy daily schedules. It can be easy to fall into a pattern of entering a home with a pre-determined priority and session plan. However, if the provider comes to the home on a day that has been particularly stressful or challenging for parents or if the provider is not in tune with the needs of the parents or child, this can set the stage for an unproductive, or even counter-productive session. Taking the time to make that initial inquiry can promote empathy, engagement, and positive dialogue between the parents and the provider. This personable interaction reinforces the relationship as one of care for each parent as an individual, and not just as parents of the child whom the EI provider is there to support. The beginning of the session is also an opportunity to get an update on child progress since the last session, to address questions or concerns the parents may have, and to celebrate the progress and accomplishments of the child and family.

Prioritizing Session Targets

The follow-up of the events and progress since the previous session can naturally lead to a discussion of that day's targets. An effective coach can implement the joint plan agreed on in the previous session, while also adapting to address needs a parent expresses in the current session. For example, one of the previous session targets may have included the child following a simple direction through listening with no visual or gestural cues. The provider intends to follow up on that target at the next session; however, upon arriving at the home, finds the parents very excited that their child has begun to put two words together. The parents express the priority of continuing to reinforce these new developments and want to spend substantial time in identifying ways to promote this skill. Rather than maintaining the session emphasis on listening to and following directions, the provider makes the adjustment to emphasize the parents' priorities regarding the two-word utterance, knowing the *following directions* goal can be revisited at a future session.

Implementation and Practice

The main portion of the home visit should consist of implementation and practice of skills that the parents can use to meet their priorities. Providers can model skills and coach parents to try the skills themselves. Modeling can be an effective form of instruction (Roberts et al., 2014), but professionals should be careful not to jump into the activity in a manner that parents could perceive as indicating they are not doing it well enough. This would be counter-productive to the coaching model and would be an unfortunate lost opportunity for parents to gain their own confidence and competence in effectively implementing the strategies. Expert modeling followed by guided practice gives parents an opportunity to analyze the strategy and receive feedback to support their use of the skills.

Reflection and Planning

At the end of the session, a period of reflection provides an opportunity for the parents and provider to blend their expert knowledge, perspectives, and observations to determine what is working well, address questions or challenges, and identify upcoming priorities. Using a Family Session Planning Guide, the parents and provider can collaboratively create a written plan for the upcoming week, with the provider ensuring all goals are developmentally appropriate. As parents' priorities and the associated goals are determined, strategies for implementation during the family's activities and routines can be discussed and identified. Use of the term *lesson plan* is intentionally avoided, as this term can imply a preconstructed plan developed by the provider that is to be closely followed. The term *Family Session Planning Guide* can promote the collaborative nature of the home visit, the parents' role in identifying session priorities, and the importance of flexibility in the EI session details. See Appendix A for an example of a completed Family Session Planning Guide. Appendix B provides a hypothetical example of dialogue between the parents and the EI provider as they establish the child and family goals and

identify strategies for meeting those goals. See Appendix C for a Family Session Planning Guide template.

Summary

Early interventionists who provide home visits for families of children who are DHH can support parents and caregivers in learning skills and strategies to promote their child's auditory perception and language development within their daily routines. Early interventionists should understand the breadth of LSL best practice recommendations that provide the foundations of their services and use the resources available to them to best support the children and families they serve.

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Appendix A
Family Session Planning Guide – Example

Family Session Planning Guide			
Child: Jane Age: 8 months Date: 3/2/2020 Listening Check: Visual and Listening inspection was completed with the hearing aids. Both hearing aids sounded clear. Present during session: Mom, Dad, and Jane			
Target	Child/Family Update	Needs/Concerns	Reflection/Plan
Increasing Hearing Aid Wear time	The family reported that they are putting the hearing aids on right after Jane wakes up from the night or a nap, but she is pulling the hearing aids off frequently and putting them in her mouth.	How to get Jane to leave the hearing aids in her ears	Implement the “pat, pat, clap clap strategy,” when they are sitting close to the baby during play.
Auditory attention to speech	The family has been working on joint attention. The parent reported that Jane has been looking at them while they are playing. Extension of joint attention is to work on auditory attention.	How to get Jane’s attention	Use positioning when the baby is upset. Use auditory first while playing with the baby
Vocal turn taking	New target based on parent priority of Jane starting to use words. Create a space for Jane to respond by singing a song they love and stopping before the end of the song. This strategy where we wait for Jane to fill in the space we leave open is called auditory closure.	The parent wondered how long to wait, and how many times to try. Answer: Wait about 10 seconds and try about 3 times in a row before moving on to keep Jane from getting frustrated.	Reflection: The baby started using a sing-song vocalization when we stopped singing. Plan: The parents decided to sing songs with auditory closure before bed at night.

Created by Lauren Smith, MEd, Utah State University

Appendix B

Family Session Dialogue - Example (Reflective Questions marked with *RQ*)

Professional	Parents
Greeting and Family Update	
Hi Jenna. Hi Brad, it's so nice to see you guys. I am excited to hear about your practice this week.	Hi. We had lots of fun this week. Jane really liked playing together.
What did she do that helped you know she liked it? <i>RQ</i>	She was smiling at me and reaching for the toys.
It sounds like she really let you know that she liked the way you were playing with her.	Yeah it was fun. I felt like we really connected.
Prioritizing Session Targets	
Would it be all right if I shared with you another strategy and goal with you to use while you play?	Sure.
Before we jump into that, what other priorities did you have for our session today? <i>RQ</i>	We've been working really hard at keeping the hearing aids on. We put the hearing aids on right after Jane wakes up like we discussed last week, but I don't know if she is really wearing them more because she pulls them out and puts them in her mouth.
What have you already tried to help her leave her hearing aids on? <i>RQ</i>	We tell her no, and she stops for a minute, but then she sticks them back in her mouth.
What kinds of support from me would be helpful? <i>RQ</i>	I don't really know. What can we do?
We can try to teach Jane a replacement for pulling the hearing aids off or we can try one of the listening and spoken language strategies. Which one do you think would be more effective for your family? <i>RQ</i>	I think a replacement sounds better for us. I don't think she will stop no matter what we say.
Ok, So far today we're planning to add a new strategy to our play to work on Jane's listening skills. We are going to try a replacement behavior to keep Jane's hearing aids on. Last week we also talked about your goal of helping Jane use words to communicate with you. We can start working on that by teaching Jane when it is her turn to talk in communicating. So we have three things we want to target today. What would you like to begin with?	We're feeling really frustrated about the hearing aids, so can we talk about that first?
Implementation and Practice	
Absolutely. So you said you wanted to give Jane a replacement behavior. When we implement a replacement behavior we want to try and catch Jane before she grabs the hearing aid and give her something different to do. A replacement behavior other parents I've worked with before have used is to show Jane how to pat her hearing aids instead of pulling on them. So to teach Jane to pat her hearing aids, say "pat, pat" when she reaches for them, then show her what to do, then cheer for her. That way she is more likely to pull her hands back down to clap along before she can pull on the hearing aids.	Ok. I think we can do that.
If we want to try this out, when does she usually pull her hearing aids out? <i>RQ</i>	She just does it all the time.
OK, would you like to show her what to do now? Or wait for her to reach for them to try it?	Let's wait.
In the meantime, which of our other goals would you like to work on next?	Will you remind me what the other two are?

Appendix B (cont.)

Family Session Dialogue - Example (Reflective Questions marked with *RQ*)

We talked about working on listening skills and participating in a conversation.	I'm really excited for her to start talking. So let's do that one first.
The strategy we are going to use to help Jane know when it is her turn to talk to us is auditory closure. What do you already know about auditory closure? <i>RQ</i>	I don't know that one yet.
Auditory closure is when we say something Jane is familiar with, but we stop before the end. Today we can try it with a song that Jane knows already. Then before we finish the song we will stop and wait for Jane to say something.	Jane loves singing.
What song does Jane enjoy the most? <i>RQ</i>	She really loves singing "The Itsy-Bitsy Spider."
OK let's sing it to Jane. Since we are going to stop before the end. Let's sing everything except the last word which is "again".	(Both sing the song together stopping at the last word "again".)
Exactly, that is where we are going to stop. Can I give you another strategy to help Jane know it is her turn?	Sure.
I am going to sing the song to Jane again, but this time I am going to wait a little longer and I am going to raise my eyebrows at Jane to show her I am waiting for her.	(Professional sings "Itsy Bitsy Spider" waiting with an expectant look. This time Jane smiled and laughed.)
I really enjoyed her little laugh. As we try this a few more times, we will hope to hear her voice.	(Professional and parents sing the song again using auditory closure and an expectant look.)
Jane is reaching up for her hearing aids, so I'm going to get in her way so she can't grab them and show her what we want her to do instead. Pat pat Jane, Yay you did it! (Professional reached out and patted Jane's hearing aids right after saying "pat pat").	So, I'm supposed to do that every time she reaches for them? I will try that.
Reflection and Planning	
Realistically, when during the day would it make sense for you to use this strategy? <i>RQ</i>	Well, I don't think I can do this strategy when I'm cooking or doing laundry or those things.
What are the barriers for those times? <i>RQ</i> That may help us find a time that makes sense for your family.	Well I already have my hands full with other things at those times.
What times of the day would work better? <i>RQ</i>	What about just when I'm playing with her. Then I'm already sitting close by her and I'll be able to catch her before she pulls them off.
That sounds like a great plan. Is there any other support you need from me to practice this strategy with her? <i>RQ</i>	No, I don't think so.
Ok, now that we have a plan for the hearing aids, let's go back to our auditory closure. What have you seen working for Jane with this strategy? <i>RQ</i>	She is really interested, but she is still just laughing not talking.
What do you think about practicing this during the week and watching for changes? <i>RQ</i>	Yeah, I feel she is bored now, but another time she might do it for me.
When do you think it would work in your day to practice this? <i>RQ</i>	Well we already sing to her at night. Does it need to be separate from that? Or can we do it then?
Auditory closure works really well with a familiar routine, so that sounds perfect. What else do you need to practice this strategy? <i>RQ</i>	I think we just need to keep doing it.

Appendix B (cont.)

Family Session Dialogue - Example (Reflective Questions marked with *RQ*)

Implementation and Practice	
Let me know if any questions come up when you practice. Our last goal today was to help Jane learn to listen to our voices and to pay attention to what we say. While we are playing today, we can use <i>auditory first</i> to help Jane recognize that our voice is important. Auditory first is when we talk before we start playing or trying to get Jane's attention. For example, "Jane do you want to play with the rattle?" Then after I've said that, I'll pick up the rattle and hold it out to Jane. What questions do you have about using auditory first while you play? <i>RQ</i>	I'm not sure I have one. I just talk about what we are doing and then do it?
Yes, exactly. Why don't we see what Jane does as we keep trying it.	OK, Jane do you want to play with your ball? (The parent holds up the ball to the Jane.) Give me the ball Jane.
How do you feel it is going so far? <i>RQ</i>	How do I get her to pay attention to me? I feel like I'm just talking to myself.
Yes, right now she appears to be in her own world. One way we can help her pay more attention to what she is hearing is to make it easier for her to hear it. When we sit close to her and at her level that will help her hear better.	Ok, so I should be closer when I talk?
It is one strategy that we can try with her. How effective do you feel that strategy will be at getting Jane's attention? <i>RQ</i>	She likes it when I lay on my tummy when she is doing tummy time.
That's a great example of using positioning to get her attention. Can we try it now?	(Parents moved closer to Jane). Let's play with the ball. (Jane looked over at the parent).
Wow, This time Jane looked over at you right when you spoke.	Yeah I guess she did. Jane, do you want your rattle? (Jane reached for the rattle and looked at mom).
Jane did it again. You used auditory first and she looked to you for more information. Do you think you can use this strategy during your week?	I am already talking a lot during the day. I think I can do this auditory first with almost everything.
Reflection and Planning	
That is very true. How will you know that you were successful with the strategy this week? <i>RQ</i>	I guess when she looks over just when she hears me instead of when I show her something.
Are there times when you need her to turn to just your voice? <i>RQ</i>	Sometimes she gets upset when I'm busy and I want her to calm down without having to pick her up.
How could the strategy of moving closer to her help when she is upset? <i>RQ</i>	Well she cries really loud. So maybe right now she can't hear me over herself. So maybe when she cries I should go closer.
I'd love to hear how that goes this week. Our time is almost up for today. What concerns would you like to address next time? <i>RQ</i>	I definitely want to talk about hearing aids again next week. Can we keep playing games where she practices talking?
Yes. Anything else I can help you with today? <i>RQ</i>	I want to make sure I know what to expect her to learn next.
Would it be helpful for me to bring the auditory learning guide and the Cochlear Scales of Development to look at together next week?	Yes, I think that would be helpful.
Ok, I'll see you next week.	Thank you, see you next week.

Appendix C
Family Session Planning Guide Template

Family Session Planning Guide			
Child: Age: Date: Listening Check: Present during session:			
Target	Child/Family Update	Needs/Concerns	Reflection/Plan

Created by Lauren Smith, MEd, Utah State University