

Expanding Evidence-Based Hearing Screening Services for Children Birth to Three Years of Age: Building State and Community-level Partnerships



Rationale

The Reauthorization of the Early Hearing Detection and Intervention (EHDI) Act of 2017 includes an expanded focus on identifying children who are deaf or hard of hearing up to three years age. This represents an opportunity for EHDI systems to coordinate efforts, share resources, and work together to expand evidence-based hearing screening practices to a broader range of early care and education providers for the benefit of a wider population of children.

Research indicates that by the time children enter school, at least 6 in 1000 are deaf or hard of hearing. Newborn hearing screening is able to identify approximately half of these children (2 - 3 in 1000), but what about the other half who experience late onset or progressive loss or whose congenital hearing loss was not identified at birth? Health care providers do not consistently perform evidence-based hearing screenings as a part of well-child visits for children birth to three years of age. In fact, there is no system for universal periodic hearing screening of young children. There are, however, a range of early care and education settings in which screening could occur and some programs that have an existing commitment to periodic early childhood hearing screening. For example, Early Head Start/Head Start programs and early intervention programs operated under Part C of the Individuals with Disabilities Education (IDEA) Act have regulations requiring hearing screening of all children being served.

Support for Expanding the Scope of EHDI from Newborn Screening to 0 - 3 Screening

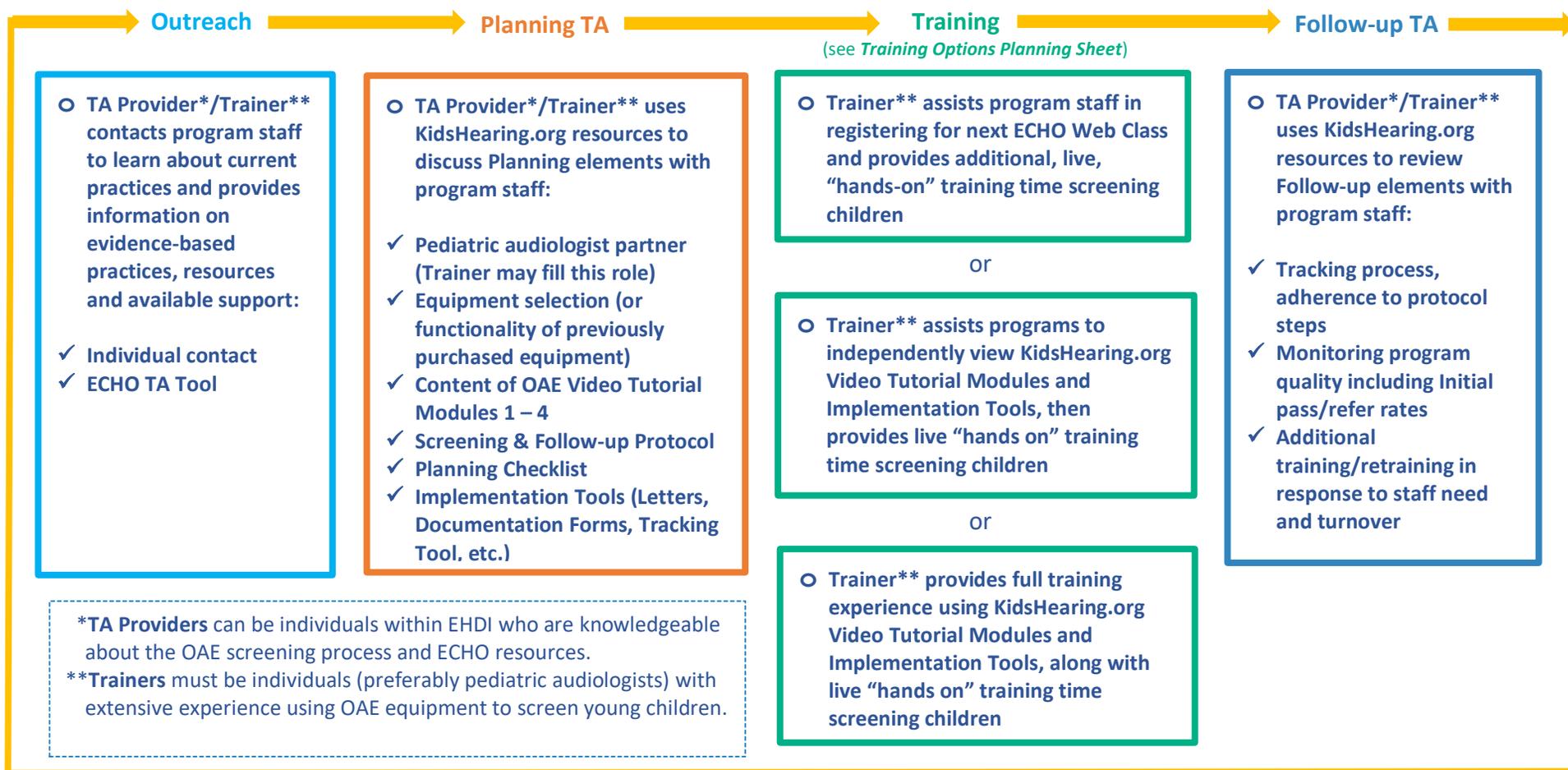
The Early Childhood Hearing Outreach (ECHO) Initiative within the National Center for Hearing Assessment and Management (NCHAM) at Utah State University serves as a National Technical Assistance Resource Center to assist Early Head Start, Head Start and other early care and education providers in developing evidence-based hearing screening and follow-up practices for children under five years of age. In addition to providing direct technical assistance and training to early childhood programs across the country since 2001, the ECHO Initiative has also been actively providing assistance, training, and practical resources to state and local leaders in developing hearing screening and follow-up practices aimed at early identification of hearing loss in children 0 – 3 years of age.

As State EHDIs work toward increasing hearing screening opportunities for children up to age three, the ECHO Initiative stands ready to add support with a range of resources. The Figure on the following page provides a general framework for conceptualizing how EHDIs can potentially draw on existing ECHO resources to effectively engage with early care and education programs at the state and community levels. The subsequent pages of this document provide additional relevant information that will be helpful to EHDIs in initiating or strengthening partnerships with Early Head Start and Part C Early Intervention programs. Engaging with these programs is likely to be productive and will also inform development efforts with other potential partners. The ECHO training and technical assistance resources referenced throughout this document, available at KidsHearing.org, have been designed specifically for easy adaptation across program settings and contexts.

Potential Strategies and Resources for Hearing Screening Program Development in Early Care and Education Settings



1. Engage in Statewide outreach to educate professionals and parents about periodic hearing screening.
2. Identify potential partners (programs/agencies/individuals regularly serving children 0 – 3 years of age) that are already providing, or could be trained to provide, hearing screening services.
3. If a partner program has State-level leadership or representation, meet with the representative to:
 - Learn about program organization and infrastructure and any existing guidelines that inform hearing screening practices.
 - Share information about evidence-based hearing screening practices, EHCI goals, and State EHCI/ECHO Initiative resources.
 - Explore what is/is not known about the hearing screening capacity of each local program, needs for Training and Technical Assistance (TA) and how to effectively make contact with local Coordinators to further collaborate on initiating, sustaining or expanding quality screening practices.
4. Engage in local Community-based Program-level Outreach, TA and Training using ECHO resources that may include some or all of the following activities:



Potential Strategies and Resources for Hearing Screening Program Development in Early Care and Education Settings

Because there is no single organization or infrastructure for providing hearing screening to all children 0 – 3 years of age, expanding screening to this population will require building partnerships with a number of early care and education programs and providers within each State. There are many ways in which the ECHO Initiative can potentially help State EHDIs to accomplish their specific objectives for outreach and coordinated partnership building at the state and community levels. Four basic strategies and available resources are described below that can serve as a template and a springboard for other collaborative activities:

- 1. Engage in Statewide outreach to educate professionals and parents about the need for periodic hearing screening and the evidence-based practices that can help to identify children at risk for permanent hearing loss.** Most people are not aware of how many young children are affected by permanent hearing loss. Many parents and professionals erroneously assume that when health care providers examine a child’s ears during well-child visits, possibly using tympanometry or pneumatic otoscopy, they are screening a child’s hearing. In reality, providers are typically looking at the general health of the outer and middle ear and do not have the equipment needed to conduct evidence-based hearing screening with children under 3 years of age. Both the American Speech-Language Hearing Association and the American Academy of Audiology recommend OAE screening as the most appropriate method that trained screeners can reliably use with children 0 – 3 to identify those who need further evaluation for potential permanent hearing loss.

Consequently, health care providers, early care and education professionals, as well as parents, will benefit from learning about the:

- Importance of ongoing early childhood hearing screening.
- Currently recommended evidence-based hearing screening practices for children 0 - 3 years of age.

An awareness and education campaign can target specific provider groups or it may be very broad. Potential activities can include:

- Electronic dissemination of resources (email).
- Live presentations at professional conferences or community coordination meetings or conferences.
- Individual correspondence via email, phone or social media to share ideas and resources.
- Information sharing via newspaper, social media, and traditional press, etc.
- Targeted inquiries to specific providers or provider groups.

Available on KidsHearing.org, ECHO Initiative “Spread the Word” awareness and education resources include ready-to-use handouts, short video clips and drafts of email messages designed to convey basic information to a wide audience. Home visiting programs, public

health outreach programs, community health centers, hospitals and private health care facilities all represent entities that would benefit from receiving accurate information about early childhood hearing loss and the need for periodic screening. Some have the potential to actively adopt hearing screening practices and help to increase the identification of children with late onset or progressive hearing loss.

- 2. Identify potential partners (programs/agencies/individuals regularly serving children 0 – 3 years of age) that are already providing, or could be trained to provide, hearing screening services.** Although there are a number of different early care and education settings where hearing screening could potentially be integrated into other services being provided to children 0 – 3 years of age, not every context will support successful screening program implementation. EHDIs may want to initiate partnerships with programs that have both the commitment to screening and the capacity to support follow-up. As with newborn hearing screening, periodic screening must be integrated into a comprehensive protocol that includes medical and audiological assessment of children not passing the screening. Some programs lack the structure essential for supporting effective follow-up. As EHDIs engage with a range of early care and education programs, it can be helpful to use this list of considerations in evaluating program capacity. Focusing intensive training efforts and energies on programs that already have a service infrastructure that has the potential to support and sustain screening and follow-up is likely to be the most productive use of resources.

Two particular partnerships merit exploration because of existing program commitment to hearing screening for young children and the capacity to support follow-up:

Early Head Start. Head Start is a federal program that promotes school readiness for children in low-income families by offering educational, nutritional, health, social, and other services. One of the largest programs serving low-income infants and young children, Head Start includes preschool programs for children 3 - 5 years of age, and **Early Head Start** programs for children 0 - 3 years of age. Additionally, **Migrant Head Start** and **American Indian/Alaska Native Head Start** programs serve children 0 - 5 years of age in their respective populations. Since its beginning in 1965, Head Start has served over 35 million children. Currently Early Head Start and Head Start programs are found in every state, each of which is required by Head Start Performance Standards to ensure that every child receives an annual hearing screening using an evidence-based method. A precise screening methodology is not specified, permitting for changes in best practice to evolve over time without the need for updating the Standards. Given this, the involvement of state and local experts in operationalizing the Performance Standards is critical, especially in technical areas like hearing screening.

Early Intervention programs operated under Part C of the Individuals with Disabilities Education (IDEA) Act. These programs not only serve children 0 – 3 years of age already identified as deaf or hard of hearing, often from the EHDI system, but also actively engage in “Child Find” efforts of their own. Hence, Part C represents not only an opportunity to link previously identified children with early intervention services, but also exists as a system that can actively help to identify additional children with late onset or progressive hearing loss or children who were lost to follow-up after newborn screening.

Children who are manifesting a range of developmental delays or behavioral issues may be referred to the Part C system for evaluation to determine their eligibility for enrollment.

It is important to remember, and to remind programs, however, that children who have an unidentified hearing loss will not necessarily present with indicators that would cause parents or professionals to suspect hearing as a primary source of concern. There is evidence that not all children entering Part C early intervention programs receive a hearing screening, despite Part C regulations that stipulate this. This may be true even when children present with concerns about speech and language development, one of the most common reasons for referral to Part C.

3. If an early childhood program has State-level leadership or representation, meet with the representative to:

- Learn about program organization and infrastructure and any existing guidelines that inform hearing screening practices.
- Share information about evidence-based hearing screening practices, EHDI goals, and State EHDI/ECHO Initiative resources.
- Explore what is/is not known about the hearing screening capacity of local programs, their needs for Training and Technical Assistance (TA) and how to effectively make contact with local Coordinators to further collaborate on initiating, sustaining or expanding quality screening practices. You may also want to explore reporting and data sharing agreements.

The ECHO Initiative can be considered a partner in your efforts. In addition to offering an array of online early childhood hearing screening Technical Assistance and Training resources (KidsHearing.org), the ECHO Team has been actively engaged in providing training and technical assistance to EHDI program staff, and various early care and education providers are the local level across the country, including in Early Head Start, Head Start, Part C and home visiting programs. If you are interested in knowing which programs in your state have already received training from the ECHO Initiative, we can provide this information. Contact us at: echo.ncham@usu.edu.

The following information and links will help you to get better acquainted with Early Head Start and Part C representation at the State level:

Early Head Start. Each local Early Head Start grantee (program) is a direct recipient of federal Office of Head Start funding. Before making contact with individual programs within a State, it can be helpful to first contact the Head Start State Collaboration Office (HSSCO). This Office coordinates with other state systems and may assist you in disseminating information and establishing connections with individual community-based programs. While HSSCO's do not have oversight authority pertaining to individual Early Head Start or Head Start programs at the local program level, they can help you learn about the Head Start infrastructure, programmatic components, how to locate various programs in your state and to facilitate connections. They may also help establish any formal collaboration agreements you may wish to enter into with the individual community programs.

The [Head Start Center Locator](#) can help you locate all of the local community-based programs within a State or community. Every program has its own local Health Services Advisory Committee (HSAC) that, among other things, provides guidance on screening methods to be used in the program. It is important to note that relatively few HSACs include a pediatric audiologist to help determine hearing screening practices. As a result, programs within a state may not all use the same method and some may not use methods considered current or evidence-based. The ECHO Initiative, which began in 2001, was established as a Technical Resource Center to provide up-to-date information and practical resources to support evidence-based hearing screening practices across all Early Head Start/Head Start programs. While many local programs have adopted evidence-based hearing screening practices as a consequence, not all have, and sustaining quality practices is an ongoing challenge. State EHDI programs have a potential role in updating screening practices across all Early Head Start programs and, if desired, in establishing data and information sharing agreements that will enhance the overall quality of follow-up services provided to children identified from these screening efforts.

Part C Early Intervention Programs. Part C of the Individuals with Disabilities Education (IDEA) act provides for a range of services for children birth to three years of age with disabilities (or at risk for disabilities). The EHDI system has a two-pronged connection with the Part C system:

- a. Children identified as being deaf or hard of hearing as a result of newborn hearing screening and follow-up are referred to Part C to access early intervention services; predominantly children with congenital hearing loss.
- b. Children referred to Part C from other systems who are evaluated and identified as being deaf or hard of hearing as a result of the Part C intake and evaluation process and then referred to the EHDI system to obtain additional support and information for families; predominantly children with late-onset or progressive hearing loss, or children who did not receive a newborn hearing screening or were lost to follow-up.

Each state has a [Part C Coordinator](#) and EHDIs will want to take the time to meet the State Part C Coordinator to discuss relevant regulations and practices, keeping in mind the two-pronged connection between EHDI and Part C. Prior to meeting, it is helpful to learn more about [Part C regulations](#) especially as they relate to [multidisciplinary evaluation and assessment](#).

The ECHO Initiative recently sought guidance from the Office of Special Education program specifically with regard to the second prong regarding hearing screening requirements within Part C.

- Read the [Guidance Request and Response](#).

It would be helpful for EHDI leaders to address the following questions with State Part C Coordinators:

- Where in the eligibility determination/intake process does a hearing evaluation/screening occur for all children? How might this vary from program to program?
- What hearing screening method(s) are used and what follow-up protocol is implemented?

- Do all children entering Part C service receive a hearing screening/evaluation and, if not, what criteria is used to determine who does?
- What are the current needs for technical assistance or training to ensure evidence-based practices are being used for hearing screening/evaluations of children in Part C?

4. Engage in Local Program-level Partner Outreach, TA and Training. With a general understanding of the organizational structure and the existing guidelines shaping local approaches to service provision and screening, consider reaching out to some or all Early Head Start and Part C programs serving children 0 - 3 years of age within your State to learn about existing screening methods and to offer Technical Assistance and Training.

- **Outreach.** In addition to providing general awareness information such as described above, outreach activities may specifically target early care and education providers with information aimed at helping them move forward in developing evidence-based screening and facilitating their access to technical assistance and training. This level of outreach would inform programs about available support in terms of identifying a local pediatric audiologist to assist with program development, assistance with planning hearing screening programs, guidance for accessing training, and information about ongoing available technical assistance.

Initial contact might be made through email, phone calls and/or through the ECHO Initiative *Instant TA Tool* which asks programs to provide basic information about their about current hearing screening practices and then provides respondents with an automatic response providing links to helpful resources based on their responses. The *Instant TA Tool* can be tailored for any State. The state EHDI team can send the link for the Instant TA Tool to any specific provider group such as all Early Head Start programs or all Part C evaluation teams. Give the *Instant TA Tool* a test-run by answering the questions as a program would, then watch your email for an example of the type of information a respondent will receive.

- **Planning.** When a program or provider indicates a serious commitment to developing evidence-based hearing screening practices, the first step is to complete a set of planning activities. Rather than starting with training, planning activities ensure that appropriate groundwork has been prepared prior to training so that the actual training is immediately followed by implementation. Planning activities supported by an EHDI coordinator, pediatric audiologist, or experienced screener is recommended. Periodically, the ECHO Initiative offers training to individuals desiring to support local programs in planning and implementing OAE screening. One of the ways EHDI leadership can assist local, community-based programs is in locating local pediatric audiologists with whom they can consult when developing screening activities, selecting equipment, and obtaining training. During the planning phase EHDI leaders can also explore what data sharing agreements, if any, they would like to have with the program and establish systems for facilitating this. Keep in mind, you are exploring partnerships with existing programs that may already have requirements related to data sharing. The ECHO Planning Checklist for Implementing an OAE Screening Program can be useful in helping programs think through the most critical planning components.

- **Training.** Once planning has been completed, training in evidence-based hearing screening can be obtained in a variety of ways via the ECHO Initiative and resources available online at www.kidshearing.org as well as from local experts. State EHDI staff can play a helpful role in directing programs toward available training opportunities and identifying local audiologists who can provide support or consultation. The three most common training options are:
 - *Web Class Training.* Participants from a program attend a live web-class that includes four, one-hour web-based class sessions each of which is followed by a hands-on practice activity producing a certificate of completion. This approach is best when a pediatric audiologist or expert screener assists participants in registration and also with live, hands-on training time screening children (after class session #3).
 - *Self-Guided Learning.* Participants from a program complete the training in a self-guided manner by viewing all of the [OAE Video Tutorial Modules](#) on kidshearing.org and the practice activities which produce certificates of completion. This approach works best if, at a minimum, a trainer meets with participants for the live, hands-on training time screening children (after completing video module 9 that corresponds with class session #3). Occasionally, the ECHO Initiative offers a single, one-hour “launch webinar” to get participants started on the self-guided instruction, representing yet another training option to consider.
 - *Trainer Facilitated.* Participants from a program attend a full training from a live trainer who uses kidshearing.org [OAE Video Tutorial Modules](#) and implementation tools, and also provides live, hands-on training time screening children.

State Leaders can facilitate any of the above options and/or serve as the trainer if s/he has the skills to do so.

- **Technical Assistance (TA).** Once implementation of evidence-based hearing screening practices is underway, a TA provider or trainer can assist participants with various elements of their screening program including:
 - ✓ Screening techniques
 - ✓ Tracking process and adherence to follow-up protocol steps
 - ✓ Monitoring program quality including initial pass/refer rates

State Leaders can facilitate any of the above TA options and/or serve as the TA providers or trainer if s/he has the skills to do so.

Rarely are all programs in a state at the same place in developing and implementing evidence-based screening. Therefore, the outreach-planning-training-technical assistance process is completed either for one program at a time, or in small cohorts of programs and then the process is replicated with another program or group of programs, allowing the leadership to refine its process over time. This process also allows leadership to explore how experience with one provider group, such as Head Start, may inform replication activities in another provider group such as Part C Early Intervention evaluation teams. Note that all of the primary

training and technical assistance resources on kidshearing.org were designed for easy adaptation across program settings and contexts. Also be aware that staff turn-over is a reality in nearly every early childhood system. This means that it is usually essential to repeat these processes, in part or in entirety, with programs on an as-needed basis.

Resource Links

ECHO

Home Page: <http://www.infanthearing.org/earlychildhood/>

Spread the Word: <http://www.infanthearing.org/earlychildhood/spread-the-word.html>

Considerations in evaluating program capacity for screening:
<http://www.infanthearing.org/earlychildhood/docs/Contextual-Conditions.pdf>

Instant TA Tool: kidshearing.org/instant-ta-tool-tester

Program Planning Checklist: <http://www.infanthearing.org/earlychildhood/docs/Planning-Checklist-for-OAE-Screening.pdf>

Head Start

Performance Standards: <http://www.infanthearing.org/earlychildhood/docs/New-Performance-Standards-on-Hearing-Screening.pdf>

Collaboration Office: <https://eclkc.ohs.acf.hhs.gov/programs/head-start-collaboration-offices-state>

Center Locator: <https://eclkc.ohs.acf.hhs.gov/center-locator>

Part C

Eligibility for enrollment:
https://www.govregs.com/regulations/expand/title34_chapterIII_part303_subpartD_subjgrp115_section303.321#title34_chapterIII_part303_subpartD_subjgrp115_section303.321

Coordinator: <https://ectacenter.org/contact/contact.asp>

Regulations: <https://sites.ed.gov/idea/regs/c/a/303.21/a/1>;
https://www.govregs.com/regulations/expand/title34_chapterIII_part303_subpartD_subjgrp115_section303.321#title34_chapterIII_part303_subpartD_subjgrp115_section303.321