When a Newborn Doesn’t Pass the Hearing Screening

How Health Professionals Can Encourage Follow-up Hearing Evaluations for Newborns

Each year, approximately 12,000 babies are born with hearing loss in the United States. If hearing loss is discovered during the “critical period” for children to develop their speech and language skills—from birth to the first two to three years of life—they will have a much better chance of keeping up with their peers in learning language and speech skills. If they miss this critical period of development, they can fall far behind their peers in these areas. This delay, in turn, can affect a child’s ability to learn and interact socially.

Medical and allied health professionals across the United States have played a vital role in helping identify hearing loss during a child’s first months of life. As of July 2003, mandatory newborn hearing screening programs have been implemented in 38 states and the District of Columbia. As a result, roughly 86.5 percent of all infants are now screened for hearing loss, usually before they leave the hospital.

But screening is only the beginning of a successful path for infants who are deaf or hard-of-hearing. Newborns who don’t pass the screening should receive an audiometric evaluation and medical diagnosis before the child is three months of age. An audiologist is a health professional who conducts a series of tests to determine whether the child has a hearing problem and, if so, the type and severity of that problem. An otolaryngologist, or ear, nose, and throat doctor, will try to find out the reason behind a hearing loss and offer treatment options. These professionals will help direct parents or other caregivers to resources that can help them. (See the NIDCD fact sheet Speech and Language Developmental Milestones.)

In the year 2000, only approximately half of the children who were referred for a follow-up examination were brought back for one. Parents of deaf or hard-of-hearing children in this group were much less likely to take advantage of the many resources that could give their children the best start possible and the best long-term outcome.

Why don’t some parents return for a follow-up examination?

A working group of the National Institute on Deafness and Other Communication Disorders (NIDCD) identified several important factors regarding why some parents do not bring their child back for a follow-up examination.
They concluded that the number of children who return for the follow-up examination could be increased if:

- Parents fully understood their child’s screening results.
- Parents fully understood the importance of the diagnostic evaluation.
- Parents were provided with necessary contact and resource information.

A few of the most commonly cited reasons for the low response rate are included below, along with communication initiatives that you, the medical professional, can implement to help improve the outcome.

“With so many people involved in the process, it’s difficult to be sure that the information is being relayed to parents.” —Charles

- Take responsibility.
  This is particularly true if the child is sent to the neonatal intensive care unit (NICU). A NICU physician may not see the parents again until several days after the child is born, if ever. A person on the medical team should be responsible for understanding and being able to interpret and carefully explain to parents the infant’s screening results. It is extremely important that this individual be able to explain to parents why a follow-up examination is needed. Outdated wisdom that “parents can check back in a year to see if there is a change” is shortchanging children who could benefit from early intervention services.

- Develop a protocol.
  Develop a protocol to ensure that all parents receive the same information during their baby’s birth and hospital stay. The more consistent the procedure and message, the less likely that a family will leave the hospital without understanding the next steps they need to take and why. With shortened maternity stays, this protocol becomes even more critical.

“There’s no system in place to make sure that parents make and keep the follow-up appointment.” —Jocelyn

- Obtain the family’s contact information.
  Medical staff should check in with families after they leave the hospital to make sure they’ve taken their child to the diagnostic evaluation. To facilitate ongoing communication, ask families to complete a discharge questionnaire before they leave the hospital, including names, addresses, phone numbers, e-mail addresses, and any other useful contact information.

- Connect the child with a “medical home.”
  As soon as a child is born, the family should be linked to a “medical home,” a term that, according to the American Academy of Pediatrics (AAP), refers to healthcare services that are coordinated, comprehensive, family-centered, and accessible, among other things. This centralized system makes it easier for medical staff to track a child’s medical visits, recognizing immediately from his or her records whether the follow-up examination has been completed.
To learn more about the “medical home” concept, and how your role and the role of your staff would be affected, contact the AAP for possible training sessions in your state or region at www.aap.org.

• **Give office staff a lead role.**
  Office staff should help families navigate the healthcare system, which can be quite complicated for individuals who are unfamiliar with it or who have difficulty reading or understanding the English language. By providing easy-to-read checklists and contact information, volunteering to schedule the follow-up appointment, and checking in with families to make sure that the appointment has been kept, office staff can help provide the needed push to ensure that this important task is completed.

• **Offer broad-based institutional support.**
  When feasible, hospitals should develop a support structure that will help medical staff better perform their duties in this area. This might include:
  
  - Modeling the hearing screening and diagnostic evaluation after an already-established program, such as metabolic screening.
  
  - Integrating health information systems to ensure that each child’s records are readily available to all health professionals who need to access them.
  
  - Coordinating the billing for hospital services with the receipt of all follow-up information.

“**There aren’t enough people or resources available to handle the screening and follow-up process.**” —Miguel

• **Cross-train staff.**
  In communities where resources or staff are lacking, hospitals could cross-train medical staff to perform screening and follow-up testing. With adequate supervision, technicians, paramedics and emergency medical personnel, volunteers, nurses (as well as nurse aides and assistants), lab technicians, and respiratory therapists can be trained to perform some of these tasks on an as-needed basis.

“**Parents don’t seem to understand the importance of the follow-up exam.**” —Deborah

• **Communicate accurately and carefully.**
  Parents need to be told plainly what their child's screening results mean and why the follow-up examination is important. A flier or brochure, no matter how well written or designed, is not enough on its own: some parents may have difficulty reading it or comprehending certain medical terms. Or they may toss it away without a glance. Assign the “communicator” role to a designated staff person, making sure that parents are encouraged to ask questions. To further guarantee their understanding, have parents explain in their own words the next step they need to take and why. If you’d like to give parents something in writing at the end of the sit-down meeting, the NIDCD fact sheet *What to Do if Your Baby’s Screening Reveals a Possible Hearing Problem* is available at the NIDCD Web site.
• Be sensitive to cultural and other differences.
Your message can be filtered or even skewed by a number of factors, such as a parent’s culture, ethnicity, race, and socioeconomic background. For example, concepts that are generally accepted by some groups may be entirely unfamiliar to others. When communicating with parents, pay attention to these differences, and avoid using terms or expressions that may be easily misinterpreted.

• Explain how a hearing loss can hamper a child’s speech and language development.
Parents may not understand how a possible hearing loss might impact their life and the life of their child. Furthermore, they may mistakenly think that little can be done about it. For these reasons, it’s important to explain to parents how detecting a hearing loss early—before their child reaches three months of age—and introducing intervention by the time the child reaches six months of age can keep a child on the right track developmentally and ensure he or she achieves the appropriate milestones for successful school, work, and social experiences.

“Returning for an appointment can be burdensome for some parents.” —Tia

• Use incentives, when appropriate, such as travel vouchers.
Transportation can present a problem for families, particularly those who live in rural areas or who use public transportation. If possible, provide incentives such as free travel vouchers to help defray the cost. Another suggestion is to offer an instant photograph of the child at birth, at the follow-up examination, and during intervention.

• Perform the follow-up exam while parents are still at the hospital.
If an audiologist is on site, explore ways for infants who don’t pass the screening to receive a definitive auditory brainstem response (ABR) test before they leave the hospital. The ABR involves attaching electrodes to the head and recording electrical activity in the brain when a sound is generated.

• Combine follow-up exam with well-baby check-ups.
Families who are unable to transport themselves to a medical facility may rely on home health nursing to conduct their well-baby check-ups. In these cases, an audiologist may be able to provide follow-up testing during one of the home visits.

“Parents sometimes feel powerless and ‘out of the loop’ regarding their child's health care.” —Gavin

• Involve the entire family in the screening.
When possible, make the infant’s hearing screening an interactive experience for the family by checking several family members’ hearing at the same time. The more involved a family is, the greater their appreciation for the importance of the screening and follow-up evaluation.

• Equip parents with information for decision-making.
When a child is found to be deaf or hard-of-hearing, parents and other family members must make a difficult and highly personal decision regarding how the child will communicate. For example, the child may use a combination of oral and auditory skills together with assistive
or augmentative devices, such as hearing aids, cochlear implants, FM transmitters, and other technologies. Or the child may learn American Sign Language (ASL), speechreading, cued speech, or a combination of oral and manual measures. Medical and other health professionals can provide information that enables parents to explore communication options, research findings, and informal support mechanisms before making their choice. (See the NIDCD fact sheets What Are the Communication Considerations for Parents of Deaf and Hard-of-Hearing Children? and Silence Isn’t Always Golden.)

• Use a family-centered approach.
During office or home visits, physicians should involve the child’s family. In this way, families are trained to serve as the first line of care for their infants and are empowered to make sure that their child receives the best health treatment possible.

What all parents need to know before they leave the hospital

• The time frame in which parents need to respond:
  - Parents should have their babies screened by 1 month of age.
  - If the baby does not pass the screening, parents should take him or her to a follow-up evaluation by 3 months of age.
  - If hearing loss is confirmed, parents should have their child enrolled in some type of intervention by 6 months of age.

• Speech and language developmental milestones and how hearing loss affects their child’s ability to achieve these milestones. (See the NIDCD fact sheet Speech and Language Developmental Milestones.)

• The results of their child’s hearing screening and what the results mean. (See the NIDCD fact sheet Has Your Baby’s Hearing Been Screened?)

• For parents of children who do not pass the screening: Why a follow-up examination is necessary and how to go about getting one. (See the NIDCD fact sheet What to Do if Your Baby’s Screening Reveals a Possible Hearing Problem.)

• Contact information for making the follow-up appointment for a diagnostic evaluation. This might include a list of certified audiologists and otolaryngologists in the area along with addresses and phone numbers. Office staff may also volunteer to make the appointment for the parents.

• State, federal, and nonprofit resources available to them if their child should have a hearing problem (see list below).
Free publications from the NIDCD

The following titles are just a sample of those available for free on the NIDCD Web site. Spanish versions are also available for each of the titles below. Hard copies can be ordered from the NIDCD Information Clearinghouse and reproduced free of charge.

- What Are the Communication Considerations for Parents of Deaf and Hard-of-Hearing Children?
- Speech and Language Developmental Milestones
- Silence Isn't Always Golden
- What to Do if Your Baby's Screening Reveals a Possible Hearing Problem
- Has Your Baby's Hearing Been Screened?

The NIDCD Information Clearinghouse has additional information on speech and language development, communication options, cochlear implants, hearing aids, American Sign Language, and other topics covered in this fact sheet. See the “Where can I get more information?” section for our contact information.

Where can I get more information?

The NIDCD maintains a directory of organizations that provide information on the normal and disordered processes of hearing, balance, smell, taste, voice, speech, and language. Please see the list of organizations at www.nidcd.nih.gov/directory.

Use the following keywords to help you search for organizations that can answer questions and provide printed or electronic information on how health professionals can encourage follow-up hearing evaluations for newborns:

- Newborn hearing screening
- Early identification of deafness in children
- Hard-of-hearing
For more information, additional addresses and phone numbers, or a printed list of organizations, contact:

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