Rescreening in the Medical Home

Since the publication of the JCIH 2007 statement, an increasing likelihood of OAE rescreening in the physician's office has been noted (Nelson, Bougatsos, & Nygren, 2008). Some primary care physicians have OAE screening devices for use in the medical office, both for the purpose of rescreening newborns (when indicated) and for screening older children. The American Academy of Pediatrics has published guidelines regarding rescreening in the medical home (American Academy of Pediatrics, 2014a), and JCIH supports these guidelines. Specifically, the guidelines for rescreening hearing, when performed in the physician's office, include the following highlights.

- **Rescreening of infants must be performed using an automated physiologic measurement (OAE or AABR), not by assessing behavioral responses to environmental sounds or noises (e.g., using whispered speech or noisemakers).**
- **Physicians who rescreen in the medical office are obligated to report rescreen outcomes (both pass and fail results) to the state EHDI system. Fax to Newborn Hearing Screening Program at 304-558-3510.**
- **The equipment used for rescreening must be calibrated, and annually re-calibrated, by the manufacturer or other entity (e.g., special-instruments distributor or hospital clinical engineering department).**
- **There must be a quiet environment for office-based testing to avoid having children fail the rescreening even if they have normal hearing.**
- **Office-based personnel who perform the rescreening must be appropriately trained in the use of the equipment.**
- **Infants who were hospitalized in the NICU and who did not pass a hospital-based screening should be referred directly to a pediatric audiologist and not rescreened in the medical home, due to the increased likelihood of hearing loss including auditory neuropathy (American Academy of Pediatrics, 2014a).**
- **At the time of rescreening, both ears should be tested, even if only one ear did not pass the screening performed at the hospital.**

Hospital based UNHS programs have proven efficacy due to the ability to standardize processes and procedures through the state EHDI programs, although, some hospitals provide rescreening and some do not. A shortcoming of most hospital record-keeping entries is that the technology used at the time of hospital-based screening is often not recorded in the hospital discharge summary, and the primary care provider may have some difficulty obtaining such information. However, some state database systems are now designed or are being expanded to require identification of the type of equipment used for the birth screen. JCIH does not support providers performing the initial newborn hearing screening in the office, but rather supports the positions summarized that follow, as outlined by a number of AAP publications (AAP, 2014a, 2014b; AAP Committee, 2017). Primary healthcare providers should become very familiar with these guidelines.

The AAP does not support the concept of performing the initial newborn hearing screening test in the medical home rather than at the hospital (American Board of Audiology [ABA], 2016). The responsibility of the medical home is to refer infants for further testing if needed. Newborn hearing screening has been successfully implemented over the past two decades, in part because over 95 percent of newborns are delivered in a hospital and have immediate access to a hospital-based program to perform a physiologic test to screen for hearing. The success of these programs is due in part to the captive audience of newborns and has resulted in an efficient, cost-effective

implementation with greater standardization of protocols, technology, and accuracy. In addition, the hospital-based institutional commitment to equipment calibration and oversight by qualified audiologists in the hospital setting allows for a quality standard that may be difficult to duplicate when screening is performed in the medical office setting.

The AAP recommends the first newborn hearing screening test be completed at the birthing hospital (AAP, 2014a); however, there may be an occasional situation when this is not possible. Examples include infants born at home and not screened by the midwife or birth attendant, infants whose parents decline hospital-based screening but later realize the merits of screening and consent to office-based screening, and infants who were inadvertently missed at the hospital for any reason. If, on these rare occasions, the first newborn hearing screen is performed in the medical office, all of the guidelines concerning equipment needs, screening techniques, follow-up, and reporting of results to state entities would apply (AAP, 2014a, 2014b).