
GOAL 1: Increase the percentage of children meeting EHDI 1-3-6 timelines by strengthening collaboration with screening facilities, medical home, audiologists, and EI.

Objective 1.1: By March 2014, decrease the proportion of children who are LFU/D for screening to 1% (in 2009, LFU/D rate for screening was 2.9%).

- LFU/D for screening decreased from 2.9% in 2009 to 1.4% in 2011. Preliminary data indicates LFU/D was 1.9% for 2012. There were missing screening data from the military hospital that impacted the statewide data and resulted in higher loss to documentation. A list of the children with missing screening information was sent to the military hospital. The screening rate will increase when the data from the military hospital is updated.
- The NHSP contracted four community providers to do hearing screening for home births, starting in November 2012. Preliminary data from January to September 2013 indicates that home birth screening rates increased from 12% (2011) to 31.5% (2012) to 47%.
- Onsite training was provided to screeners at nine birthing hospitals to do two-stage screening. With Advisory Committee input, the NHSP developed written procedural guidelines on two-stage screening and distributed this to all birthing hospitals. All hospitals started to implement two-stage screening in 2013.
- The NHSP staff monitored HI*TRACK records monthly and reconciled birth census data with HI*TRACK records to ensure screening results were entered in a timely manner.
- Upon request from the hospitals, NHSP staff sent reminder calls to parents who missed outpatient rescreening appointments. Over 90% of the parents responded to the reminder calls and completed outpatient screening.

Objective 1.2: By March 31, 2014, decrease the proportion of children who are LFU/D for evaluation to 20% (in 2009, 41.6% were LFU/D for evaluation).

- LFU/D for evaluation decreased from 41.6% (2009) to 32.2% (2010) to 24.6% (2011).
- The NHSP is in the process of establishing a contract with an Otolaryngology (ENT) clinic on Maui that has two audiologists to perform audiologic evaluations. The service is anticipated to start in January 2014.
- Starting January 2014, the NHSP will initiate a twelve month pilot project with an audiologist to provide ABR testing once a month on the island of Hawaii.
- The NHSP has been in discussion with the audiologist at the Children’s Hospital on Oahu to pilot teleaudiology on one of the neighbor islands.
- In the past, infants in the special care unit of the Children’s Hospital might receive in-house diagnostic evaluation and became lost to documentation to the NHSP.
Collaboration was established between the NHSP and the hospital audiologist. NHSP staff listed children who might have stayed in the special care unit and did not have screening or evaluation recorded. If they were evaluated, the audiologist entered the results in HI*TRACK. From HI*TRACK records, the NHSP identified children who missed screening but were found to have hearing loss on in-house evaluation; staff followed-up with the PCP or parents to ensure the child received appropriate services.

**Objective 1.3:** By March 31, 2014, decrease the proportion of children who are LFU/D for intervention services to 6% (7.5% were LFU/D for EI services in 2009).

- The NHSP worked closely with the EI D/HH Specialist to support families enrolled in EI programs. The NHSP sponsored several events (Fall Festivals, Fathers’ Group, IFSP workshop, Music Workshop and Shared Reading Saturdays), plus sponsored tuition for parents attending ASL classes at the School of Deaf and Blind.
- EI changed the eligibility criteria for services and the Administrative Rules were approved effective October 2013. Children at environmental risk no longer qualify for EI; enrollees must have identified developmental delays. Children with permanent hearing loss are considered eligible, even if they do not show developmental delays.
- NHSP staff improved communication with the EI Care Coordinators. The Care Coordinators requested newborn hearing screening results from the NHSP if they were not able to obtain the information from the parents or PCP. The NHSP staff contacted the Care Coordinators to confirm enrollment of children with hearing loss in EI. When the Care Coordinators informed the NHSP staff that the family was discharged from EI, the NHSP would reactivate the case and follow up with the child’s audiologic needs.

**GOAL 2:** Develop a seamless system to support the implementation of Hawaii EHDI program through infrastructure building, training and public education, networking, and data management.

**Objective 2.1:** By March 31, 2014, develop NHSP staffing structure to ensure adequate staffing to support meeting the EHDI 1-3-6 timelines.

- The reorganization of the DOH, Family Health Services Division was approved and became effective in 2012. The NHSP is one of four programs in the new Genomics Section. The three other programs are the Newborn Metabolic Screening Program, the Birth Defects Program, and the Genetics Program. The four programs serve a similar target population. The reorganization will facilitate communication among the program staff and strengthen support to each other.
- The new Family Support/Follow-up Coordinator and Project Specialist positions were approved by the legislature in July 2012. Paper work was submitted to the Human Resources Office to establish the positions in the system.
Objective 2.2: By March 2012, a web-based electronic data transfer system will be in place and fully functional to facilitate timely data sharing between the NHSP and screening facilities.

- A web-based data transfer system is in place and is fully functional. The NHSP will continue to provide technical support and training to hospital newborn hearing screening data input staff.

Objective 2.3: By March 31, 2014, the Hawaii Administrative Rules, which requires reporting of screening and diagnostic audiologic evaluations to the DOH (NHSP), will be established.

- A revised draft of the Hawaii Administrative Rules was prepared in September 2013 and submitted to the Genomics Section Supervisor. A meeting was held to discuss revisions. Some items needed clarification from the Attorney General before further revisions.

Objective 2.4: By March 2014, a quality assurance plan will be in place and implemented to ensure the provision of quality hearing screening and follow-up services.

- A hospital Coordinators’ meeting was held in November 2013. The meeting focused on discussing quality improvement in the hospital screening programs. The audiology consultant presented a screeners competency checklist that she developed for one birthing hospital. The birthing hospitals were encouraged to develop their own newborn hearing screening procedural manuals because each program is unique and hospital infrastructures are different. The manual should include sections on screeners training and program monitoring. The NHSP will provide guidance to support efforts in quality assurance.
- The NHSP generated a report that highlighted the number screened, the number lost to follow-up, and the number with confirmed hearing loss at each hospital. The report was shared at the Coordinators meeting.

Objective 2.5: By December 2013 and as needed, develop MOAs with community early childhood programs or health centers to collaborate on hearing screening activities and identifying hearing loss.

- The NHSP supported the Maui Early Head Start (EHS) Program to perform annual hearing screening on enrolled children. In September 2013, NHSP staff provided on-site training to Maui EHS staff. EHS staff subsequently started the hearing screening program and the NHSP continued to provide technical support. The EHS staff agreed to inform the NHSP of any child found to have hearing loss.
- The NHSP staff met several times with the Parent as Teachers (PAT) Home Visiting program staff to discuss collaboration. The PAT program planned to start a hearing screening program in 2014. An agreement will be developed between the NHSP and the home visiting program. The NHSP will loan screening equipment and provide training and technical support to the PAT program. With parental consent, the PAT program staff will inform NHSP staff of enrolled children identified with hearing loss.
Objective 2.6: By January every year, identify needs and develop a training plan on hearing screening and hearing loss to staff, providers, and parents.

- A training plan was not developed. However, the NHSP Advisory Committee was reorganized and two meetings were held in 2013. Training needs among the physicians, audiologists, and staff were discussed at the meetings and the suggestion to organize a statewide conference was raised. The development of a training plan will remain on the agenda for the next meeting.

Objective 2.7: Starting April 2011 and ongoing, increase public awareness of hearing screening and hearing loss.

- NHSP staff presented at the annual Hawaii Early Childhood Conference to educate the public about the importance of early identification of and intervention for hearing loss.
- In 2013, the NHSP revised the “Can your Baby Hear?” brochure. This brochure is distributed to new parents at the hospital together with their baby’s screening results. The NHSP is in the process of developing a new “Hawaii Newborn Hearing Screening Program” brochure to give to parents before screening. Upon request, both brochures will be available at public education events and/or at physician offices.
- An Advisory Committee work group is in the process of revising a family resource guide, planned to be completed in early 2014. Print copies will be provided to families enrolled in EI. Electronic version will be available on the NHSP website.
- An Advisory Committee work group was assigned to revise the Hawaii Practitioner’s Manual for Early Hearing Detection and Intervention, Healthcare Provider Guide. The purpose of the manual is to increase physician’s knowledge of their roles in EHDI. Major revision are needed and the work group will continue to meet in 2014.

Objective 2.8: By March 2014, the NHSP will examine the opportunities and support the efforts to use telehealth technology for hearing services, focusing on rural areas where resources are limited.

- The NHSP staff attended several breakout sessions at the EHDI conference and learned about the key components of teleaudiology and the procedures to set up such services.
- The Genomics Section Supervisor has been in discussion with the telehealth center at the University of Hawaii and the audiologist at the Children’s Hospital to explore the opportunity to pilot teleaudiology on the neighbor islands.