About Guam EHDI

The Guam EHDI Project was established in 2002 through a federal grant awarded to the University of Guam Center for Excellence in Developmental Disabilities Education, Research, & Service (Guam CEDDERS). The Guam EHDI Project receives support through a Cooperative Agreement between the U.S. Health and Human Services (HHS), Health Resources and Services Administration (HRSA), and the Centers for Disease Control and Prevention (CDC) to support Universal Newborn Hearing Screening on Guam by implementing Guam ChildLink-EHDI, an integrated data tracking & surveillance system to support the Guam EHDI Project.

Through the efforts of this Project, the Universal Newborn Hearing Screening and Intervention Act, Public Law 27-150, became law in December 2004. Guam’s local legislation aligns with national goals and assures an upgraded standard of care for all babies born on Guam.

The goals of the current Guam EHDI Project are to assure that:

• all babies born on Guam are screened for hearing loss by 1 month of age;
• babies with hearing loss are diagnosed by 3 months of age;
• quality early intervention services they need are initiated by 6 months of age.

This is also known as the "1-3-6 Plan."

Early identification of hearing loss is important because:
• Hearing loss is the most frequent birth defect.*
• Undetected hearing loss has serious negative consequences.
• There are dramatic benefits associated with early identification of hearing loss.

*Source: National Center on Hearing Assessment & Management (NCHAM), Utah State University.

Project Achievements

• Benchmarks (target goals) were met for hearing screening performed on newborns at the civilian birthing sites before 1 month of age.
• Benchmarks were met for infants needing outpatient rescreen.
• Benchmarks were met for the first time for infants needing a high risk rescreen.
• Strategies used to reduce the number of infants lost to follow-up in the outpatient rescreen category included:
  1. Scheduling and giving hearing screening outpatient appointments at the birthing sites before discharge.
  2. Offering flexible hearing screening appointment dates and sites.
  3. Making reminder calls about appointment date and time.
• Public awareness on the importance of early detection of hearing loss through the screening and evaluation processes was greatly enhanced by the Project’s participation in 10 community outreach events during the year.
• Guam EHDI and the Department of Public Health and Social Services (DPHSS), in collaboration with the University of Hawaii Telecommunications and Social Informatics (TASI) Research Program, continued to collaborate on the efforts toward interoperability between the Electronic Health Record (EHR) and Guam ChildLink - EHDI.
• Efforts continued to strengthen the data collection and reporting system in preparation for the long-term goal of turning ChildLink - EHDI to system partners.

For more information, visit www.guamehdi.org

Guam EHDI Project

Phone: 735-2466 TTY: 734-6531 • Email: nenihearing@guamcedders.org

Location: Dean Circle House 22, University of Guam
Office Hours: Monday - Friday, 8am - 12 noon; 1pm - 5pm

Project Period: July 1, 2016 - June 30, 2017

Benchmarks (targeted numbers) were met for hearing screening performed on newborns at the civilian birthing sites before 1 month of age.

Benchmarks were met for infants needing outpatient rescreen.

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*Source: National Center on Hearing Assessment & Management (NCHAM), Utah State University.
There were 92 infants identified with a hearing loss since the Guam EHDI project began in 2002. These infants were all offered early intervention services through the Guam Department of Education, Guam Early Intervention System (DOE-GES).

**Types of Hearing Loss Identified from November 2002-Present**

Conductive1 58
Sensoneural2 27
Mixed3 7
Total: 92

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**Initial Screening**

- *Initial Screening - Screening of infants for potential hearing loss prior to discharge from the birthing site.*

The Guam EHDI project has maintained a 99% initial hearing screening rate at all civilian birthing sites. Guam Regional Medical City data is included in the 2015 and 2016 screening rate.

**Percent Screened**

- Benchmark: 10%
- 2014: 99%
- 2015: 99%
- 2016: 99%

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**Percent Lost to Follow Up at Outpatient Rescreen**

- Benchmark: 10%
- 2014: 10%
- 2015: 10%
- 2016: 10%

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**Percent Lost to Follow Up at High Risk Rescreen**

- Benchmark: 10%
- 2014: 10%
- 2015: 10%
- 2016: 10%

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**Diagnostic Audiological Evaluation (DAE)**

*Participants who do not pass a follow-up rescreen, receive a DAE to determine whether or not a hearing loss is present and its type, level, and nature of the hearing loss.*

**Note:**

- Guam EHDI, the tracking system for the Guam EHDI project, was piloted.
- Guam Regional Medical City (GRMC). Note: Data is from infants born at civilian sites: Guam Memorial Hospital (GMH), Guam Regional Medical City (GRMC), and Guam Regional Medical City (SMBC).
- Initial hearing screening has not been conducted efficiently through the outer ear canal to the inner ear.
- Mixed Hearing Loss: Type of hearing loss that is a combination of conductive hearing loss and sensorineural hearing loss.

**Benchmark**

- Percent Screened: 100%
- Percent LFU for High Risk Rescreen: 2%
- Percent LFU for Outpatient Rescreen: 5%
- Percent Lost to Follow Up (LFU) for High Risk Rescreen: 10% for that year.

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**Types of Hearing Loss**

Conductive Hearing Loss - Type of hearing loss where sound is not conducted efficiently through the outer ear canal to the inner ear and can often be medically or surgically corrected.

Sensorineural Hearing Loss - Type of hearing loss that is a combination of conductive hearing loss and sensorineural hearing loss.

Mixed Hearing Loss - Type of hearing loss that is a combination of conductive hearing loss and sensorineural hearing loss.

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**Diagnostic Audiological Evaluation (DAE)**

- Guam EHDI continues to focus efforts on decreasing LFU for infants needing diagnostic audiological evaluation. Guam EHDI’s audiologist/consultant is assisting the project with quality improvement activities at this level.

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**Note:**

- Guam Early Intervention System (DOE-GES). Guam Regional Medical City (SMBC) & GMHA starts billing for screening services.
- Guam ChildLink - EHDI system established to Guam ChildLink - EHDI.
- Guam ChildLink – EHDI system to monitor and surveil data.
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