The Guam EHDI Story

University of Guam Center for Excellence in Developmental Disabilities Education, Research, and Service (Guam CEDDERS)
State Overview

• QI Team:
  – Initial Screening QI Team
  – Members:
    • EHDI Hearing Screening Facilitator, EHDI Data Coordinator, EHDI Consultant, and Nurse Supervisors from GMHA and GRMC.
  – Aims
    • Aim 1: By September 2016, increase accuracy of family contact information by 10%.
    • By September 2016, decrease the number of refer of OAE by 10%.
State Overview

- **QI Team:**
  - Outpatient Rescreen QI Team
  - Members:
    - EHDI Hearing Screening Facilitator, EHDI Data Coordinator, EHDI Consultant, GEIS Service Coordinators, GEIS Program Coordinator, and DPHSS MCH Administrator

- **Aim**
  - By April 2016, increase the number of children by 5% who receive the outpatient rescreens by 1 month.
State Overview

• QI Team:
  – High Risk Rescreen QI Team
  – Members:
    • EHDI Hearing Screening Facilitator, EHDI Data Coordinator, EHDI Consultant, GEIS Service Coordinators, GEIS Teacher, and GEIS Program Coordinator
  • Aim
    – By April 2016, reduce number of no shows for high-risk re-screening appointments by 5%.
State Overview

• QI Team:
  – DAE/EI QI Team
  – Members:
    • EHDI Coordinator, EHDI Data Coordinator, Audiologist, GEIS Service Coordinators, and GEIS Program Coordinator
• Aims
  – Aim 1: By December 2015, increase by 100% the monitoring services provided by GEIS to all infants pending a DAE.
  – Aim 2: By October 30, 2015, complete DAEs for 80% of all infants needing a DAE that were born from November 2014 – April 2015.
## QI Teams

<table>
<thead>
<tr>
<th>QI Team</th>
<th>Aim</th>
<th>Timeline</th>
<th>Measurement</th>
<th>Strategy</th>
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</table>
| **Initial Screen** | Aim 1: By September 2016, increase accuracy of family contact information by 10%.  
Aim 2: By September 2016, decrease the number of refer of OAE by 10%. | Aim 1: September 2016  
Aim 2: September 2016 | Aim 1: # of families with accurate information/# of children who need follow-up  
Aim 2: # of refer OAE/# of screens | Two-way communication – through phone number, physical and mailing address, and lack of returned mail-out card |
| **Outpatient Rescreen** | Aim 1: By April 2016, increase the number of children by 5% who receive the outpatient rescreens by 1 month. | Aim 1: By April 2016 | Aim 1: # of children who receive rescreen by one month/# of children refer for outpatient rescreen | Hearing screening at home  
Alternate location of screenings  
Increase the frequency of screenings |
| **High Risk Rescreen** | By April 2016, reduce number of no shows for high-risk re-screening appointments by 5%. | April 30, 2016 | # of no shows at first appointment/total # of high risk refers | Track GEIS methods on contacting families and success rates. |
| **DAE/EI** | Aim 1: By December 2015, increase to 100% the monitoring services provided by GEIS to all infants pending a DAE.  
Aim 2: By October 30, 2015, complete DAEs for 80% of all infants needing a DAE that were born rom November 2014 – April 2015. | December 2015 | Aim 1: # of kids pending that are monitored/# of kids pending DAE.  
Aim 2: # of children born between Nov 2014 – April 2015 who receive a DAE/# of children receive a DAE during | Strategy: to provide a toolkit (brochures, books, etc.)  
Pending: kids waiting for DAE that weren’t terminated. |
Success

- Initial Screen Aim 1: Increase accuracy of family contact information by 10%.
  - Aim chosen to increase ability to contact families and thus decrease LTFU at all levels of hearing continuum.

After first initial screening QI team meeting, nurses were able to have the IT Administrator at the largest hospital on Guam electronically transmit physical address as part of the data import to Guam ChildLink – EHDI.
Success

- Initial Screen Aim 2: By September 2016, decrease the number of refer of OAE by 10%.
  - Aim chosen to decrease the amount of screenings using the AABR screener

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<thead>
<tr>
<th></th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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</thead>
<tbody>
<tr>
<td>Total Screened</td>
<td>223</td>
<td>208</td>
<td>212</td>
</tr>
<tr>
<td>Total Referred by OAE</td>
<td>48</td>
<td>36</td>
<td>19</td>
</tr>
<tr>
<td>Total Referred by AABR Screener</td>
<td>28</td>
<td>14</td>
<td>18</td>
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Challenges

- Aim 2: By October 30, 2015, complete DAEs for 80% of all infants needing a DAE that were born from November 2014 – April 2015.
Challenges

• Lack of audiologist contracted by GEIS continues to be major area of concern for infants not receiving a DAE in a timely manner.

• Guam EHDI contracted consultant provided DAEs during this period. As a result, 9 of the 10 of the pending infants were screened.
Lessons Learned & Next Steps

**Lessons learned**

- Continue developing and maintaining working relationships with all partners

**Next steps**

- Continue with QI team meetings and PDSA cycles
Posters/ Products

**2016 Neni Directory**

Emergency Numbers
Government Agencies
Family/Parent Supports
Health Services
Educational Services

**Has your baby’s hearing been checked?**

For a FREE HEARING SCREENING, please contact the:

Guam Early Intervention System (GEIS)
Phone: 300-5771 / 5814
E-mail: ges@gcdo.net / www.geis.gdo.gov

For more information on the newborn hearing screening program and infant hearing and speech development, contact the

Guam Early Hearing Detection & Intervention Program
Phone: 735-1466
Website: www.guamehd.org

**Please keep your baby’s appointments for hearing testing.**

Your baby’s future learning depends on it.

-Renee L. Schmitt, Audiologist

**A Directory of Guam Service Providers for Children Birth to Eight Years of Age and their Families**

Emergency Numbers
Is your baby “At-Risk” for Hearing Loss?

Your baby may be at risk for hearing loss if:

- There is a concern about your baby’s hearing, speech, language or development for any reason.
- Your family has a history of children with hearing loss.
- Your baby spent more than 5 days in the Neonatal Intensive Care Unit (NICU) or had complications while in the NICU (Check with your baby’s doctor).
- Your baby experienced a lack of oxygen after birth.
- Your baby needed a machine to help him/her breathe.
- Your baby was born too early and/or was very little at birth.
- Your baby was given medications that might hurt hearing (Ask your baby’s doctor).
- Your baby needed a special procedure (blood transfusion) to treat severe jaundice (Hypertension).
- Your baby was exposed to infection before birth.
- Your baby’s head, face or ears has a shape or form that’s different from usual.
- Your baby has a condition (neurological disorder) that is associated with hearing loss (Check with your baby’s doctor).
- Your baby had an infection around the brain and spinal cord called meningitis.
- Your baby received a bad injury to the head especially if a hospital stay was required.
- Your baby was given medication for cancer chemotherapy.


Guam Early Intervention System (GEIS)
Call 300-5776/5816
For more information and to schedule your baby’s FREE Well-Baby Hearing Check-Up!

Milestones
of Normal Hearing and Speech Development

If you have any concern about your infant’s hearing or speech development, early assessment is the first step in identifying and helping a child with hearing loss.

0 - 4 Months
- Stops movement or quiets in response to speech.
- Starts to track sounds.
- Moves eyes toward sound sources.
- Assumes sounds from light sleep to sudden loud noises.

9 - 12 Months
- Acquires first true word.
- Initiates sounds.
- Looks at a common object when named.
- Responds to music.
- Understands simple command.

4 - 7 Months
- Begins head turn toward sounds and voices out of sight (4 months) and turns head directly toward the sound source (7 months).
- Smiles in response to speech.
- Looks in response to own name.
- Babbling begins.

13 - 18 Months
- Uses sentence-like information.
- Preserves emotional expressions.
- Uses 3 - 20 words.
- Uses all sounds and consonants in jargon.

7 - 9 Months
- Turns to find a sound source out of sight.
- Gurgles or coos to sounds out of sight.
- Uses imitation patterns heard in speech.
- Comprehends “No.”
- Babble in multiple syllables.

19 - 24 Months
- Uses more words than just jargon.
- Repeats intonation at end of phrase to ask questions.
- Comprehends about 300 words.
- Uses about 50 words.
- Produces animal sounds.
- Combines 2 words into phrases.
- Listens to simple stories.

If you have a concern about the hearing or speech development of your infant, call the Guam Early Hearing Detection and Intervention Project (GEIS) at 735-2466 or visit our website at www.guamehdi.com.
Posters/ Products

Your baby’s hearing is IMPORTANT

To schedule a FREE HEARING SCREENING by six months of age for your baby, contact the Guam Early Intervention System (GEIS) at Phone: 300-5776 / 5816.

Concerned about your child’s HEARING?

FREE HEARING SCREENING services are available.

To schedule an appointment, call the Guam Early Intervention System (GEIS) at Telephone: 300-5776 / 5816

Does your baby need a follow-up hearing screening?

If you are not sure if your baby needs a follow-up hearing screening or if you have any concerns about his/her hearing, consult your family doctor.

To schedule a FREE HEARING SCREENING for your child before he/she turns six months of age, contact the Guam Early Intervention System (GEIS) at Phone: 300-5776 / 5816.
Posters/ Products

2015
Guam EHDI Progress Report
Newborn Hearing Screening At-A-Glance
Posters/ Products

Newborn Hearing Facts
- Approximately 3 in 1,000 babies are born with permanent hearing loss.
- 92% of children with permanent hearing loss are born to two hearing parents.
- Hearing loss is the most common birth defect.
- Most newborns with hearing loss have no signs or symptoms.
- Children with hearing loss in even 1 ear are 10 times more likely to be held back at least 1 grade compared to children with normal hearing.

For more information log on to: www.guamehdi.org
or call 735-2466

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Thank you!