2013 Physicians Survey

Guam Early Hearing Detection & Intervention
A presentation to the
Guam EHDI Advisory Committee
December, 2013
PURPOSE

The Guam EHDI Physicians Survey was conducted for 3 primary purposes, as part of:

1. the annual Project Evaluation process for Project Rikohi, the current HRSA 3-year funding cycle that is entering its 2\textsuperscript{nd} year.

2. the Quality Assurance data collection effort to assess Guam EHDI’s service and data systems to insure highest levels of performance in meeting National EHDI Goals.

3. the effort to Assess Areas of Need for improving Guam EHDI performance through data-driven needs assessment for primary care physicians and the Medical Home.
The Guam EHDI Physicians Survey Was Used.....

• To measure Guam EHDI’s effectiveness in developing awareness among pediatricians of the EHDI program goals and objectives
• To survey physicians in supporting identification and follow up services for young children with suspected or confirmed hearing loss and their awareness of the newborn hearing screening initiative, and services available under Guam EHDI
• To gather physicians opinions of newborn hearing screening and follow up
• To gather information from physicians on needs and services to support families with infants and young children with hearing loss.
Structure of the Physicians Survey

- 3-pages long
- 13 items
- Physicians used check boxes, rating scales, and answered 1 open-ended question where narrative comments could be made
- A total of 38 surveys were sent out to pediatricians at birth sites, clinics, and medical centers.
- A total 18 surveys were returned, or a 47% return rate.
- Blank copies are available for review
- Generalizations based on this survey must be used with caution
Using the data from demographics, the typical respondent to the survey was a pediatrician with 15 years of experience on Guam and a clinical load where 41 to 60% of their patients are children between birth to 3 years old.
Survey Results
What percentage of Guam babies do you think are being screened for hearing loss before discharge from the hospital/birthing center?

*Purpose:* Do physicians know that all babies should be screened for hearing loss prior to discharge from the birth site? Has Guam EHDI succeeded in making physicians aware of newborn hearing screening, National Standard #1?

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Number of Doctors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10-25%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26-40%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>40-60%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>61-80%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>81-100%</td>
<td>18</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Interpretation:* All doctors who returned surveys know babies born on Guam should be screened for hearing loss before discharge from the birth site. Doctors are aware of the National standard to screen all babies born on Guam and prior to discharge. Guam EHDI has succeeded in getting the information to physicians on initial (inpatient) hearing screening prior to discharge.

A+
For newborns in your practice, estimate the percentage of initial newborn hearing screening results you have received.

Purpose: Are physicians receiving hearing screening results so they can support parents for follow-up needs and services?

**Interpretation:** 61% of physicians surveyed are receiving between 81-100% of hearing screening results for newborn patients. While more than half are receiving hearing screening results, there is still a significant 39% who are receiving results only 80% or less of the time. A very critical 11% are receiving results for 10-25% of newborn patients.

While progress has been made in this effort, Guam EHDI needs to monitor this more closely and develop strategies for physicians to receive timely hearing screening results.
Estimate the number of children with hearing loss you have had in your practice annually.

Purpose: To determine an estimate of the number of young children with hearing loss, doctors are treating in their practice/clinics each year.

Estimate of Number with Hearing Loss

Interpretation: Most doctors surveyed are seeing at least 1 child with a hearing loss in their practice, with a significant number of doctors seeing 4 or more children with hearing loss.
How would you rate your understanding of the **inpatient** newborn hearing screening process?

**Purpose:** To determine if Guam EHDI has been successful in developing doctors’ awareness of the inpatient newborn hearing screening process.

**Interpretation:** 78% of doctors are clear or very clear in their understanding of inpatient newborn hearing screening, however there are still 22% who somewhat clear. Guam EHDI has been successful in reaching a large number of physicians, but continued work is needed for the 22% who may need a little more orientation and training regarding inpatient newborn hearing screening.
How would you rate your understanding of the **outpatient** newborn hearing screening process?

**Purpose:** To determine if Guam EHDI has been successful in developing doctors’ awareness of the outpatient newborn hearing screening process.

**Interpretation:** 72% of doctors are clear or very clear in their understanding of outpatient newborn hearing screening, however there are still 11% who somewhat clear, with a significant 17% not clear or not clear at all on outpatient screening. Guam EHDI has been successful in reaching a large number of physicians, but continued work is needed for the 28% who need more orientation and training regarding outpatient newborn hearing screening.
Purpose: To determine physicians' opinion of newborn hearing screening as a necessary part of newborn child care and to determine if Guam EHDI has been successful in developing awareness among physicians of its importance to preventive child care.

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Number of Physicians</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>An important aspect in newborn child care</td>
<td>18</td>
<td>100%</td>
</tr>
<tr>
<td>Helpful towards facilitating cognitive and communication development</td>
<td>15</td>
<td>83%</td>
</tr>
<tr>
<td>An unnecessary cause of worry to parents of newborns</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>An unnecessary financial burden to parents of newborns</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other (describe)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does a good job in Guam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: Physicians surveyed clearly acknowledge the importance of hearing screening in newborn child care and are aware that it an important part of later development of cognition and communication. Guam EHDI has been successful in developing awareness of the importance of newborn hearing screening.
What do you typically do when a baby who did not pass the hearing screening test in the hospital/birth center, comes to your office?

Purpose: To assess how physicians are handling babies who do not pass hearing screening tests when they come to the doctor’s office; to determine training needs for physicians; and to assess Guam EHDI’s success in orienting physicians to support follow-up hearing assessments.

<table>
<thead>
<tr>
<th>Action Taken</th>
<th>Number of Physicians Responding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I tell the parents to follow up with additional screening/diagnostic testing as soon as possible.</td>
<td>17</td>
<td>94%</td>
</tr>
<tr>
<td>I tell the parent to wait a few weeks to see how the baby is doing before they do any more testing</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>I do a behavioral test of the baby myself (i.e. Make various sounds to see how the baby responds) and advise the parent based on those results</td>
<td>4</td>
<td>22%</td>
</tr>
<tr>
<td>I don’t usually know the results of the hospital-based/birth-center based hearing screening test.</td>
<td>2</td>
<td>11%</td>
</tr>
</tbody>
</table>

Interpretation: The majority of physician surveyed are providing the needed support to families on the need for follow up, however a significant 44% are recommending options that are not in line with National EHDI recommendations for immediate follow up. Guam EHDI has done an excellent job in this area, but further physician training is needed to support those physicians who need to advise parents appropriately.
During a well-baby checkup, the mother of a 6 month old who passed the newborn hearing screening expresses concern because her baby is not responding to loud sounds. The baby is healthy and has no signs of a middle ear infection. What would you do in this scenario? Check all that apply.

**Purpose:** To determine action physicians will take when a parent is concerned about a baby’s hearing.

<table>
<thead>
<tr>
<th>Action Taken</th>
<th>Number of Physicians Responding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask parents to monitor responses and bring baby back in 6 months</td>
<td>4</td>
<td>22%</td>
</tr>
<tr>
<td>Refer to an audiologist</td>
<td>7</td>
<td>39%</td>
</tr>
<tr>
<td>Refer to Guam EHDI</td>
<td>8</td>
<td>44%</td>
</tr>
<tr>
<td>Refer to GEIS</td>
<td>6</td>
<td>33%</td>
</tr>
<tr>
<td>Other: &gt;May sure no impacted cerumen</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>&gt;Screen with testing in office with machine from EHDI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** 44% of the physicians indicated that they would refer the baby to Guam EHDI. The 2nd highest response was to refer the baby to an audiologist or refer to GEIS. 22% would ask parents to wait another 6 months, and while this was a smaller number, the implications for follow-up are significant. Guam EHDI needs to convey to physicians that referral should be made to GEIS and not to wait as critical time is lost due to this delay in referral. Guam EHDI must consider further training for physicians in this area.
Question #9 had 4 parts which asked physicians: to indicate at what age a newborn/child:

a) not passing the hearing screening should receive additional testing?

b) can be definitively diagnosed as having a permanent hearing loss?

c) can begin wearing hearing aids?

d) with hearing loss should be referred to early intervention?

Here are the results.....
9a. At what age do you think a newborn/child not passing the hearing screening should receive additional testing?

**Purpose:** To determine if physicians are aware that any newborn/child not passing hearing screening test should be referred for further testing as soon as possible.

**Interpretation:** Most physicians-56% indicated that further testing should be done between birth to 4 weeks of age. A staggering 33% indicated further testing should be done between 2-6 months, and 12% indicated as soon as possible or at any age. These findings underscore the need for physicians to receive training on the importance of immediate follow up referral for infants who do not pass hearing screening. It is possible that the 1-3-6 information may cloud the understanding that the sooner an infant receives follow up testing, the sooner early intervention services can begin if the baby has a permanent hearing loss.
9b. At what age do you think a newborn/child can be definitely diagnosed as having a permanent hearing loss?

**Purpose:** To determine if physicians are aware that a newborn/child can be diagnosed with a permanent hearing loss as early as 3 months or younger.

<table>
<thead>
<tr>
<th>Age Indicated</th>
<th>Newborn</th>
<th>0-3 Months</th>
<th>4-6 Months</th>
<th>1-2 Years</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Physicians</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Other Comments</td>
<td>1</td>
<td>After doing additional testing</td>
<td>?</td>
<td>?</td>
<td>Few months Any Age</td>
</tr>
</tbody>
</table>

**Interpretation:** Only 5 or 28% of doctors clearly indicated that a confirmed diagnosis for permanent hearing loss can be done by 3 months or earlier. 4 or 22% indicted between 4 to 6 months, and 3 or 17% indicated between 1 to 2 years of age. A total of 39% indicate a confirmed loss can be completed by 4 months or later. 6 doctors made written comments, with 2 responding with a question mark which was interpreted as “I don’t know” and 2 doctors said a few months and one said, “any age”. One respondent only indicated a 1 and it was unclear if this meant 1 month or 1 year. Based on these results doctors need much more information on the age at which a child can be diagnosed with a permanent hearing loss.
9c. At what age do you think a newborn/child can begin wearing hearing aids?

Purpose: To determine if physicians know that babies and young children can be fitted with hearing aids.

<table>
<thead>
<tr>
<th>Age Indicated</th>
<th>Newborn</th>
<th>1-3 Months</th>
<th>4-6 Months</th>
<th>7 months &amp; older</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Physicians</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>*Other Comments</td>
<td>? Early</td>
<td>?</td>
<td>Few months</td>
<td>Any Age</td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: A significant 50% or 9 doctors indicated that the earliest a child can wear hearing aids is by 7 months or older with one doctor indicating by 4 years old. Other comments indicated ambiguity or were unclear. Physicians need information on when a child can wear hearing aids, most doctors do not know that babies and very young children can be fitted with hearing aids.
9d. At what age do you think a newborn/child with hearing loss should be referred to early intervention?

**Purpose:** To determine if physicians know that babies with hearing loss should be referred for early intervention by 6 months or earlier

<table>
<thead>
<tr>
<th>Age Indicated</th>
<th>ASAP</th>
<th>0-2 Months</th>
<th>3-6 Months</th>
<th>7-12 Months</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Physicians</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Interpretation:** 50% of physicians indicated that babies with hearing loss should be referred to early intervention ASAP. Physicians are knowledgeable that immediate referral is needed for any baby found with a hearing loss. Both Guam EHDI and GEIS have been successful in informing doctors of the need for immediate referral to early intervention services, but there are still 50% who may wait or wait too long to make the referral indicating the need for more awareness.
Question #10 had 4 parts which asked physicians: Does the universal newborn hearing screening program at the hospital/birth center........

a) Do a good job of involving physicians  
b) Do a good job of educating physicians  
c) Do a good job of dealing with parents needs/concerns  
d) Give doctors an opportunity to express needs and concerns

Physicians used a 5 point scale to rate each item

Here are the results.....
10a. Does the universal newborn hearing screening program at the hospital/birth center do a good job of involving physicians?

Purpose: To gain insight on how physicians perceive their involvement in the newborn hearing screening effort at the birth sites.

**Interpretation:** 8 doctors or 44% indicated agreement or strong agreement that physicians are involved in the newborn hearing screening effort. 7 or 39% were neutral about their involvement and 1 doctor strongly disagreed that physicians were involved at all. 2 doctors or 11% did not respond to the item. With less than half of physicians perceiving that they’ve been involved, there continues to be a perception that doctors may not be as involved as they would like to be indicating the need to monitor physicians participation more closely and develop activities or training where they can be more involved in newborn hearing screening at the birth sites.
10b. Does the universal newborn hearing screening program at the hospital/birth center do a good job of educating physicians?

**Purpose:** To determine if physicians feel they are being provided sufficient information on newborn hearing screening and follow up.

**Interpretation:** 7 or 39% of doctors agreed or strongly agreed that the hearing screening program at the birth sites were doing a good job of educating physicians, with 6 doctors being neutral about their being educated on the newborn hearing screening program. 2 doctors or 11% did not respond to the item, while 3 or 17% disagreed or strongly disagreed that the program was doing a good job of educating doctors on newborn hearing screening. If the neutral doctors and combined with those that disagreed, a significant 50% continue to feel the need for more education on the program.
10c. Does the universal newborn hearing screening program at the hospital/birth center do a good job of dealing with parents needs/concerns?

Purpose: To determine if physicians feel that parents are being well served in the newborn hearing program.

Interpretation: The majority of doctors (56%) feel that the birth sites are doing a good job of dealing with parents needs and concerns, while 17% were neutral, indicating that improvement could be made, and 1 doctors in total disagreement that birth sites were doing a good job of serving the needs of parents. 2 doctors did not respond to this item.
10c. Does the universal newborn hearing screening program at the hospital/birth center give doctors an opportunity to express needs/concerns?

Purpose: To determine if physicians feel they have been given an opportunity to express their needs and concerns in newborn hearing screening.

Interpretation: 6 or 33% of doctors agreed that the hearing screening program at the birth sites were affording opportunities for them to express their needs and concerns. 5 or 25% were neutral on this item indicating the need for improvement, and a significant 17% felt that there has been opportunities for expressing their needs and concerns about the newborn hearing screening program.
10d. Does the universal newborn hearing screening program at the hospital/birth center do a good job of educating physicians?

Purpose: To determine if physicians feel they are being provided sufficient information on newborn hearing screening and follow up.

Interpretation: 7 or 39% of doctors agreed or strongly agreed that the hearing screening program at the birth sites were doing a good job of educating physicians, with 6 doctors being neutral about their being educated on the newborn hearing screening program. 2 doctors or 11% did not respond to the item, while 3 or 17% disagreed or strongly disagreed that the program was doing a good job of educating doctors on newborn hearing screening. If the neutral doctors and combined with those that disagreed, a significant 50% continue to feel the need for more education on the program.
11. Check any of the following where you think physicians need more assistance or information about newborn hearing screening and follow up (check all that apply).

**Purpose:** To identify areas where physicians would like more assistance and information

- Summaries of research about feasibility and benefits of hearing screening
- Materials to give parents to encourage follow up.
- Information about family support groups for children with hearing loss
- Physicians round-table discussions focused on hearing loss in children under 3 years
- Obtaining feedback from referral sources such as audiologists and early intervention
- Other (please specify)

Results on the next slide
Physicians need......

Number of doctors

- Summaries of research: 14
- Materials for parents: 15
- Information on Support Groups: 9
- Round-Table Discussion: 4
- Obtaining Feedback: 14
- Other

Interpretation: Doctors have 3 major needs: Materials for parents; feedback from referral sources, and information on support groups for parents. Doctors are not very interested in a round table discussion or in research summaries. Comments on doctors who checked OTHER is on the next slide.
Other Needs Indicated by Doctors

1. “Providing speech therapy-PEDS/Preschool program”
2. “Education about referral locations/systems”
3. “Instead of giving materials to patients schedule the follow up whenever possible (M-F) and perhaps attempt call back to those discharged over the weekend.”
12. Written comments made by doctors in the open-ended question asking for recommendations, concerns, and areas for growth for continued support to doctors

Purpose: Provide doctors with open-ended item to collect any information not included or covered in the survey.

Out of 18 surveys returned, no doctor provided any written comments on the survey form for item #12.

Interpretation: This could mean:

1. Doctors felt issues and concerns were covered in the survey.
2. Doctors do not have time to write narrative comments
3. There were no areas where recommendations, concerns, or areas for continued support was needed
Demographics of the Physicians Who Responded to the Survey
How long have you been a physician on Guam?

**Purpose:** To determine the average number of years the doctor has served on Guam.

**Results:** The average number of years as a physician on Guam ranged from 3 years to a maximum of 36 years, with an average of 15 years for the 16 physicians who responded to this item on the survey.
What percentage of your clinic load are children under the age of 3?

• **Purpose:** Are the physicians surveyed serving a population of children under the age of 3 years?

![Percentage of Clinical Load Serving Birth to 3 Years](image)

- 7 doctors indicated less than 10%
- 4 doctors indicated 10-25%
- 5 doctors indicated 26-40%
- 2 doctors indicated 41-60%

• **Results:** 67% of the doctors indicated that the number of children between birth to 3 years old ranges from 26% to 60% of their clinic loads, with 7 (39%) doctors having a clinic load between 41-60% serving children 3 years and younger.
Physician’s Area of Specialization

Purpose: To determine the medical expertise of the physicians survey.

Results:  6 physicians were in Family Practice
          12 physicians were in Pediatrics
Which of the following types of patients do you (or your clinic) accept?

**Purpose:** What type of coverage does the physician/clinic accept?

**Results:**

<table>
<thead>
<tr>
<th>Payment Plan</th>
<th>Number of Doctors</th>
<th>% of 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMO</td>
<td>18</td>
<td>100%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>9</td>
<td>50%</td>
</tr>
<tr>
<td>Self-Pay</td>
<td>14</td>
<td>78%</td>
</tr>
</tbody>
</table>