Newborn Hearing Screening in Island Nations:

GOOD NEWS – and Not just for Babies!

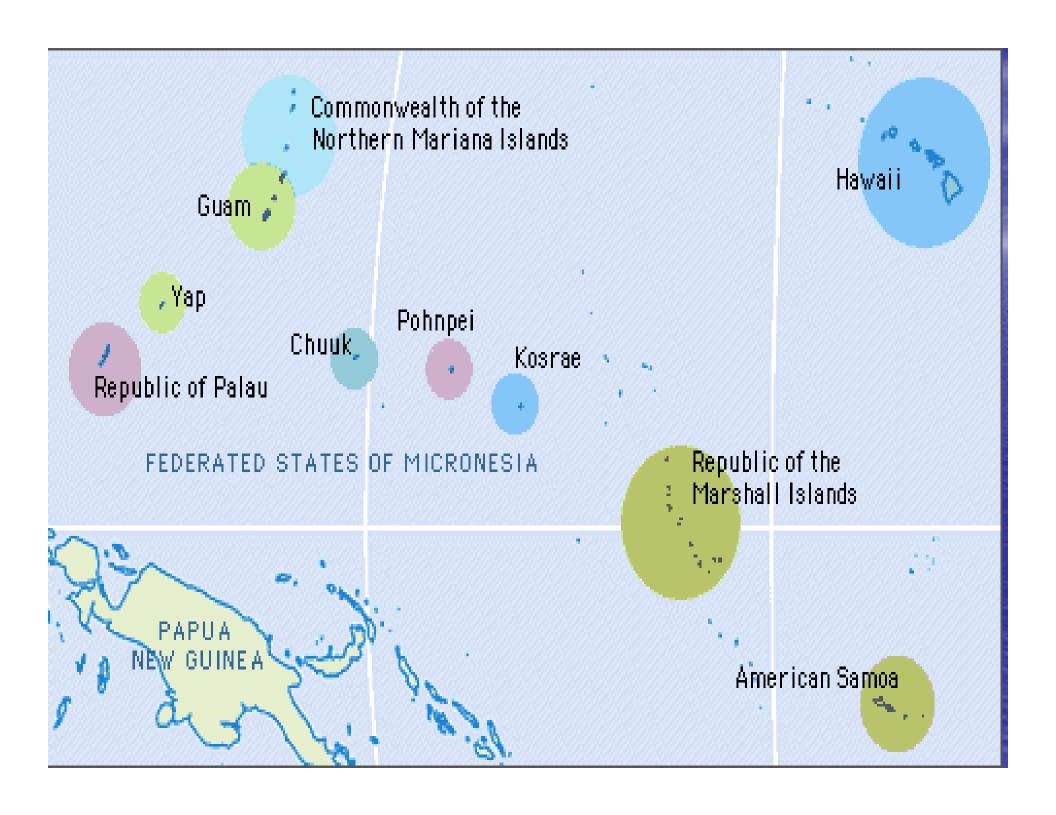
13th Annual EHDI Meeting Jacksonville, Florida

April 15, 2014

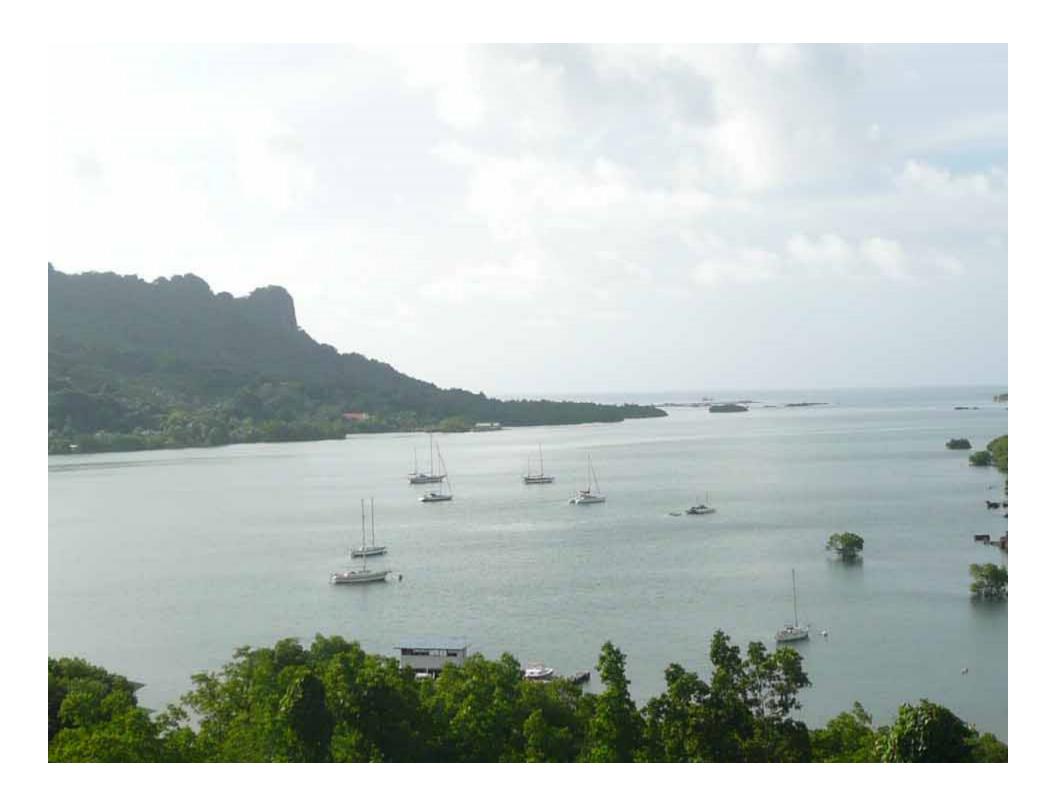


Island Nations/Territories

- Republic of Palau
- Federated States of Micronesia
- Republic of the Marshall
 Islands
- Territory of American Sāmoa









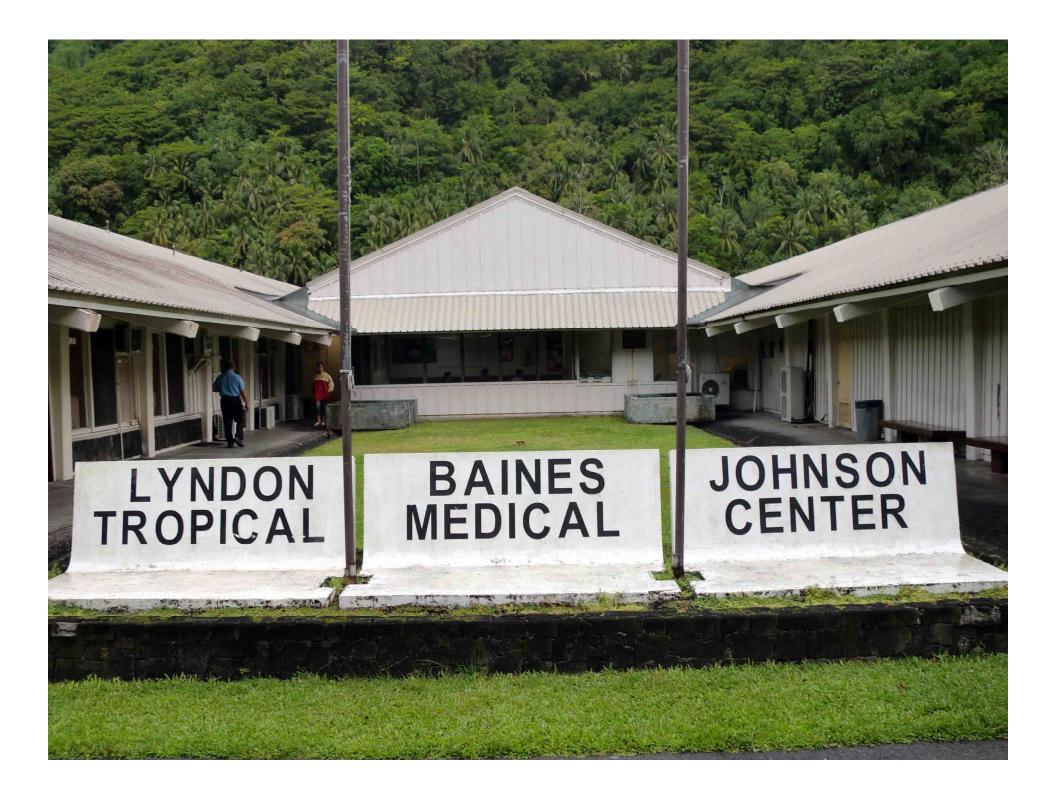








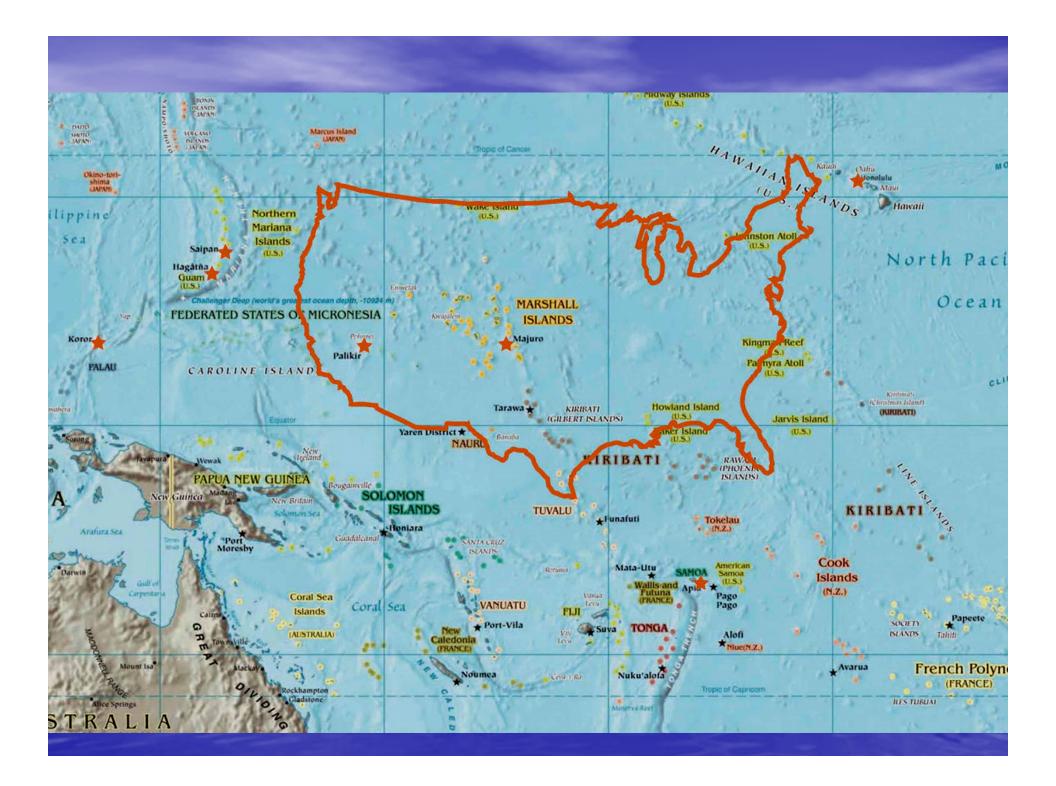


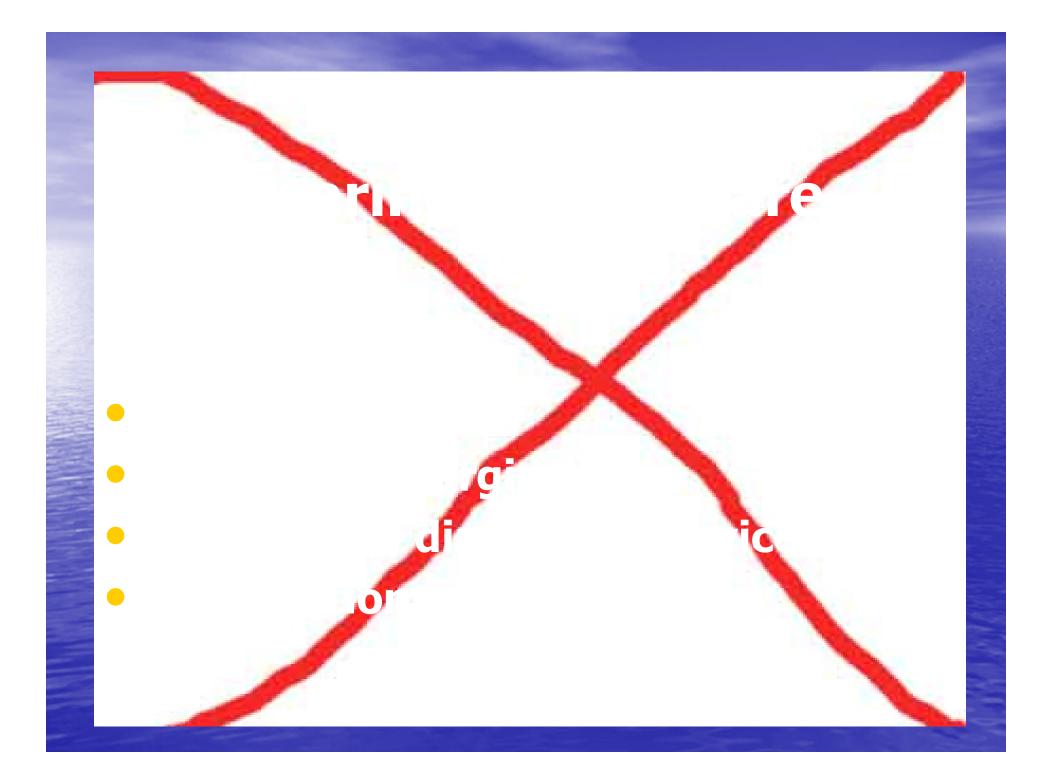


Hearing Health Care

- Identification
- Medical and surgical care
- Audiological diagnostic services
- Intervention services







Because, this area has . . .

- No ENT specialist
- No audiologist
- No speech-language pathologists
- No early intervention program
- No system for providing amplification
- Not a single cochlear implant

JCIH Recommendations

- Screened by one month of age
- Evaluated by three months of age
- If a hearing loss is present, amplification fitted within one month of diagnosis
- Early intervention by six months of age

Identification

- Public awareness
- Newborn hearing screening
- Screening of school age children
- Prevention programs





Screening Status in the Pacific Islands

Palau	2006	99.2%
		(2012)
American	2008	99.9%
Sāmoa		(2011)
Federated States	2009	93.0%
		(2012)
Marshall Islands	2009	96.0%
		(2012)







Ear disease rampant in RMI

The Early Hearing Detection and Intervention (EHDI) team of visiting doctors were super busy with 40 child patients over a four-day period earlier this month. Of the total. 27 went for ear surgery.

Surgeries were conducted by ear-nose-throat (ENT) specialist Dr. Richard Wagner, who was brought in by the University of Hawaii program. "Ear disease is very high here," said Dr. Jean Johnson, who manages the EHDI at the University of Hawaii in

Johnson said the youngest patients were four to six month old babies with serious problems. And the worst case was with a 10 year old who needed to undergo a mastoidectomy with cholesteatoma. a "life threatening problem," said Johnson. "This problem can affect the brain, and it is treatable "

Most of the patients who went to see the team were walk-in patients brought by their parents, meaning they did not have any previous appointment but heard about get their children tested. The test included screening at the \$50,000 value auditory booth (room) built by EHDI that is located at the outpatient area of Majuro's hospital.

Tests were conducted by pe-Weirather. Local counterparts EHDI Coordinator Chinilla Tafaoata Pedro and nurse Agnes Flood joined efforts with the team to provide assistance. The tests use a children's play device that makes a game out mitted through test equipment.

Johnson said the goal is to identify any hearing problems

Health team here to help

stage possible before they worsen with age. She said signs of ear problems include children poking their ear, pulling it, increase in fever, drainage, foul odor, or hearing loss.

She emphasized that ear problems can be prevented. Children must avoid exposure to smoke and babies need to be breast fed for a year. When given bottles to babies, they must not lay flat but need to have their head elevated because the inner canal in habies' ears is lateral to the nose and mouth, which can easily allow milk or water to enter ear and

Johnson also encourages people not to use Q-tips, bobby pins, feather, or part of a coconut leaf to clean inside the ear because it may damage it. It is good and safe to use a soft cloth to clean the outer part of the ear. Wax inside the ear is good because it prevents insects from entering.

In some cases O-tips can push wax inward toward the eardrum, compacting and hardening the wax, which creates another problem.

Q-tips or other small objects that can fit into ear may poke the eardrum, causing damage.

EHDI is in its second of a three-year project in the Mar-US federal grants. After spending time in Ma-

juro screening and treating young patients, the EHDI team went to Ebeye to provide similar services. This is their second visit to Ebeye since starting the program there last year. The EHDI team plans to return in August.



Richard Wagner, by the University of Hawaii program treats a young assisted by nurse Agnes Flood, "Enr disease is very high told the Journal.

Baby to be sent to Kapiolani

A four-month-old baby experienced a serious ear problem in Majuro earlier this month that could affect the brain. The baby was screened on Friday and was Majuro later the same day.

quality photos of the lump that had developed on the back of the baby's head to the ENT doctor in Hawaii

Johnson said the baby developed Specialist Dr. Wagner before he left the doctor's departure. The mother The following day, the parents a problem because he kept pulling hospital can handle. brought him back and saw Dr. Aina at his ear. A lump was found behind Garstaing. Dr. Jean Johnson called the baby's left ear near the mastoid the Journal for photo assistance area. The pictures were emailed Center in Hawaii for further treatbecause they needed to send high- to Dr. Wagner for his review and ment on Wednesday this week.

diagnosis Meanwhile the baby admitted to the hospital

Dr. Johnson said when the baby was four weeks old, he had an ear problem that went away in a short said to be in good condition by ENT a serious problem overnight after time. But two weeks later, he developed another problem. Now his said she realized her baby son had situation is beyond what the local

Health authorities were working send the child to Kapiolani Medical



Top-notch care for dozens of Majuro patients

Ear surgery valued at \$1,500 was provided free at Majuro hospital last week. I was among a number of patients who went through the treatment. To be ready for it I needed to fast, starting from midnight, until after the surgery. This was done last Friday.

I got myself into the situation after interviewing Early Hearing Detection and Intervention (EHDI) Professor Jean Johnson for a story in the newspaper. I told Johnson about my ear perforation and I was invited to see ENT specialist Dr. Richard Wagner.

After examining me, Dr. Wagner confirmed a problem and advised the solution would be a fat graft, which is also known as a tympanoplasty (eardrum repair). So I was out on the surgery schedule.

When I arrived I was the last in line after a number of children. Each had a different problem. In some cases tubes were given. Others had small parts of earrings, a piece of a broken comb, or tiny rocks pulled out from ear canals. My case took Dr. Wagner about 20 minutes to do the job. I felt like I had a good nap with anesthesia. I didn't know until afterward that Dr. Wagner made an incision made behind my:right ear.

The important part is the healing process. This is the patient's part.

The eardrum crafting is fragile. Things NOT to do: Equalize ear pressure, blow nose, sniff, yawn, cough, lifting heavy objects and engage in physical activity. When eating, try not to chew hard. Try not to get water in ear when taking shower, put Vaseline on a cotton ball and place it in the ear. Also do not bend at the waist to pick up something. Instead, bend knees when reaching down. This is good advice from topnotch doctors to help get our ears back in good condition.

SWIRE SHIPPING World-wide Service One Flag, Multiple Solutions. MY CARGO THE ANY PLACE IN MAJURO

Audiological Services

Diagnostic services

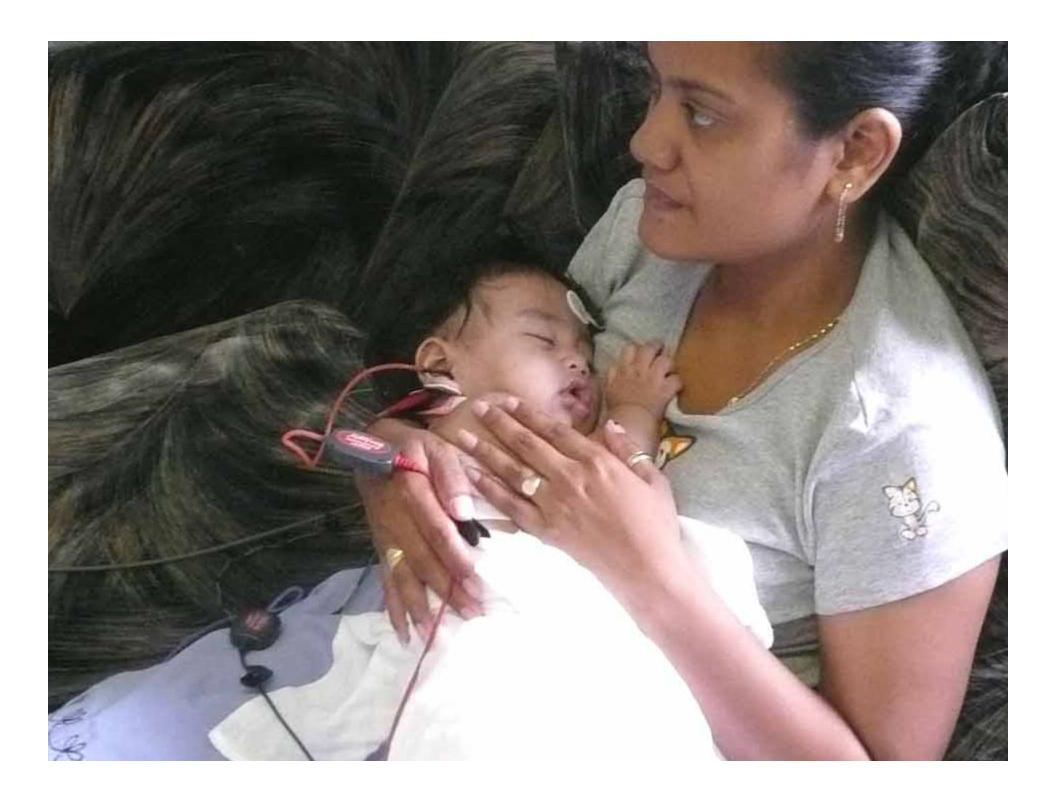
Provision of amplification

Aural rehabilitation services













Medical and Surgical Care

Availability of primary care

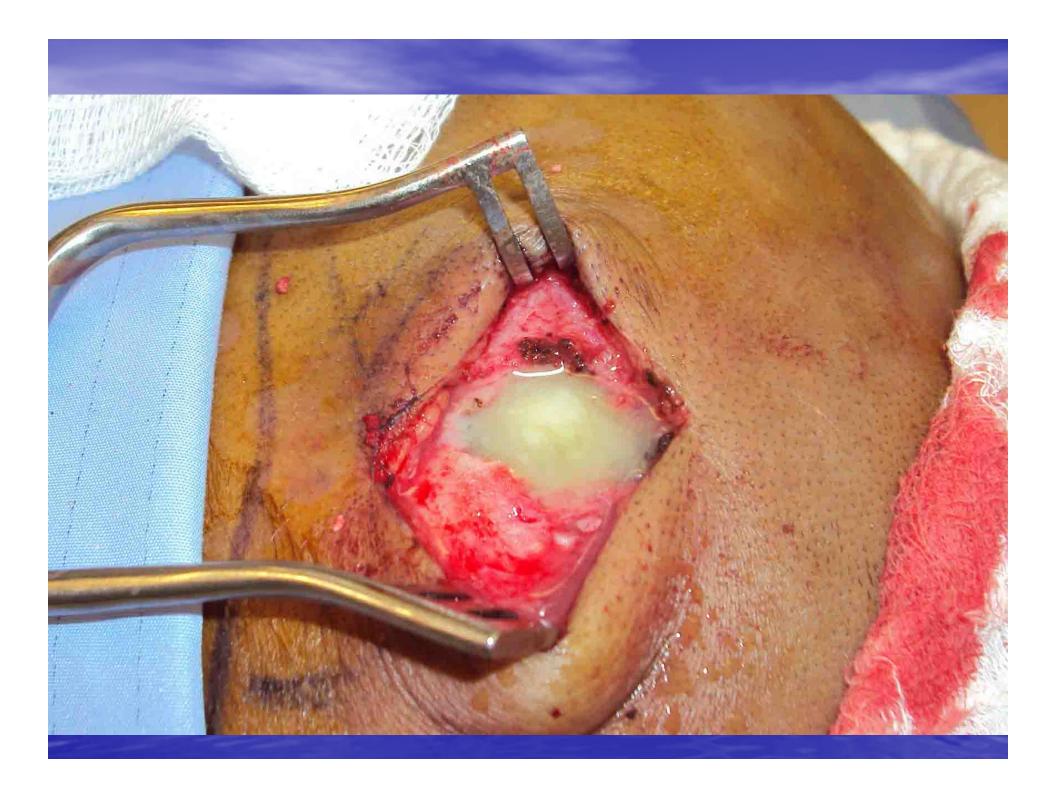
Resources for ENT specialty care

Cochlear implants











Intervention Services

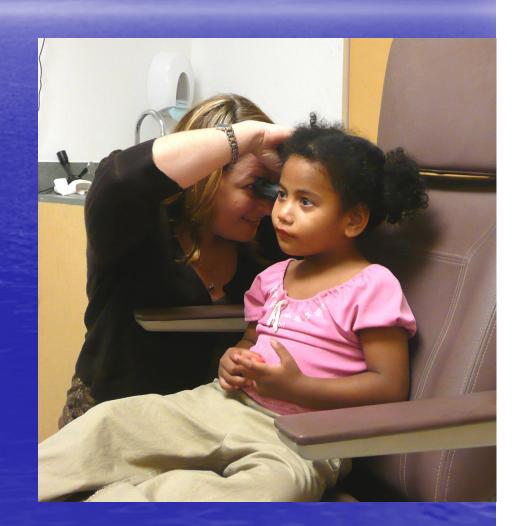
- Early intervention for infants
- Speech-language therapy
- Specialized educational services
- Access to sign language
- Support for families

Unavailable Technology

Hearing Aids

Cochlear Implant

Assistive Devices



Amplification Challenges

Distribution and support system

Cost

 Environment – humidity, heat, and rain play havoc with hearing aids

Take Home Message

- Good news: available federal resources are being used to expand hearing health care for everyone!
- Bad news: the needs far exceed the available resources.

The goal of sustainability remains elusive!

