



Clarifying the JCIH 2007 Clarification Statement

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Joint Committee on Infant Hearing 2007 Position Statement JCIH.org

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Update on the Joint Committee on Infant Hearing Activities

EHDI Conference 2009
Addison, TX

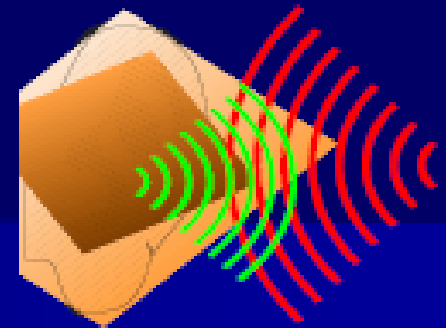


Judith Widen - University of Kansas Medical Center - Kansas City, KS
Judith Harrison, AG Bell Association – Washington, DC
Al Mehl, Betty Vohr, Brandt Culpepper, Michelle King,

Risk Factors for Hearing Loss: JCIH 2006

- Caregiver concern* regarding hearing, speech, language
- Family history* of permanent childhood HL
- NICU care of >5 days, or any of following regardless of length of stay : assisted ventilation, ototoxic medications (gentamycin, tobramycin, loop diuretics), hyperbili/exchange transfusion, and ECMO*
- Intra-uterine TORCH infections, particularly CMV*
- Craniofacial anomalies, especially those involving the pinna, ear canal, ear tags, ear pits, and temporal bone anomalies
Physical findings associated with a syndrome known to include permanent HL
- Syndromes associated with progressive HL such as NF, osteopetrosis, Usher's syndrome
- Neurodegenerative disorders*, such as Hunter syndrome
- Postnatal infections associated with SNHL especially bacterial meningitis*
- Head trauma requiring hospitalization
- Chemotherapy*

Prevalence of PCHL



- 1 / 1000 children born deaf (severe to profound bilateral SNHL)
- 2-4 / 1000 children with permanent childhood hearing loss 30 dB HL or greater
- 95% of children with substantial bilateral hearing loss are born to hearing parents
- Up to 60% of congenital hearing loss is genetic

Neonatal Intensive Care Unit

- About 10% of all newborns will be special care babies
- About 1 /100 from SCN will have Permanent Childhood Hearing Loss



Screening: NICU

- **10-15% of the newborn population**
 - Level I: basic care, well-infant nurseries
 - Level II: specialty care by a neonatologist for infants at moderate risk of serious complications
 - Level III: a unit that provides both specialty and subspecialty care including the provision of life support (mechanical ventilation)

Definition of Targeted Hearing Loss

Expanded

- From congenital bilateral and unilateral sensory or permanent conductive HL
- To include neural hearing loss (auditory neuropathy/dyssynchrony) in infants admitted to the NICU \geq 5 days.

Hearing Screen Protocols

- Separate protocols are therefore recommended for NICU and well baby nurseries.
- Infants > 5 days in NICU are to have AABR included as part of their screen so that neural HL will not be missed

Clarification

- Rationale for different protocols
- Where did the 5 days in the NICU come from?
- One of the considerations was the cost of making the change for all NICU babies which represent 10% of all newborns.
- All others can be screened with either OAE or ABR.
- JW comment: *automated ABR?*

Clarification: Follow up for risk factors

- Previous recommendation for every 6 months
 - too great a burden on system
 - infants with “unknown risk factors” develop delayed-onset HL

Thus responsibility for surveillance shifted to PCP with referral to audiologist > Risk factor list

Low risk – another assessment by 24-30 months

New concern – assess immediately

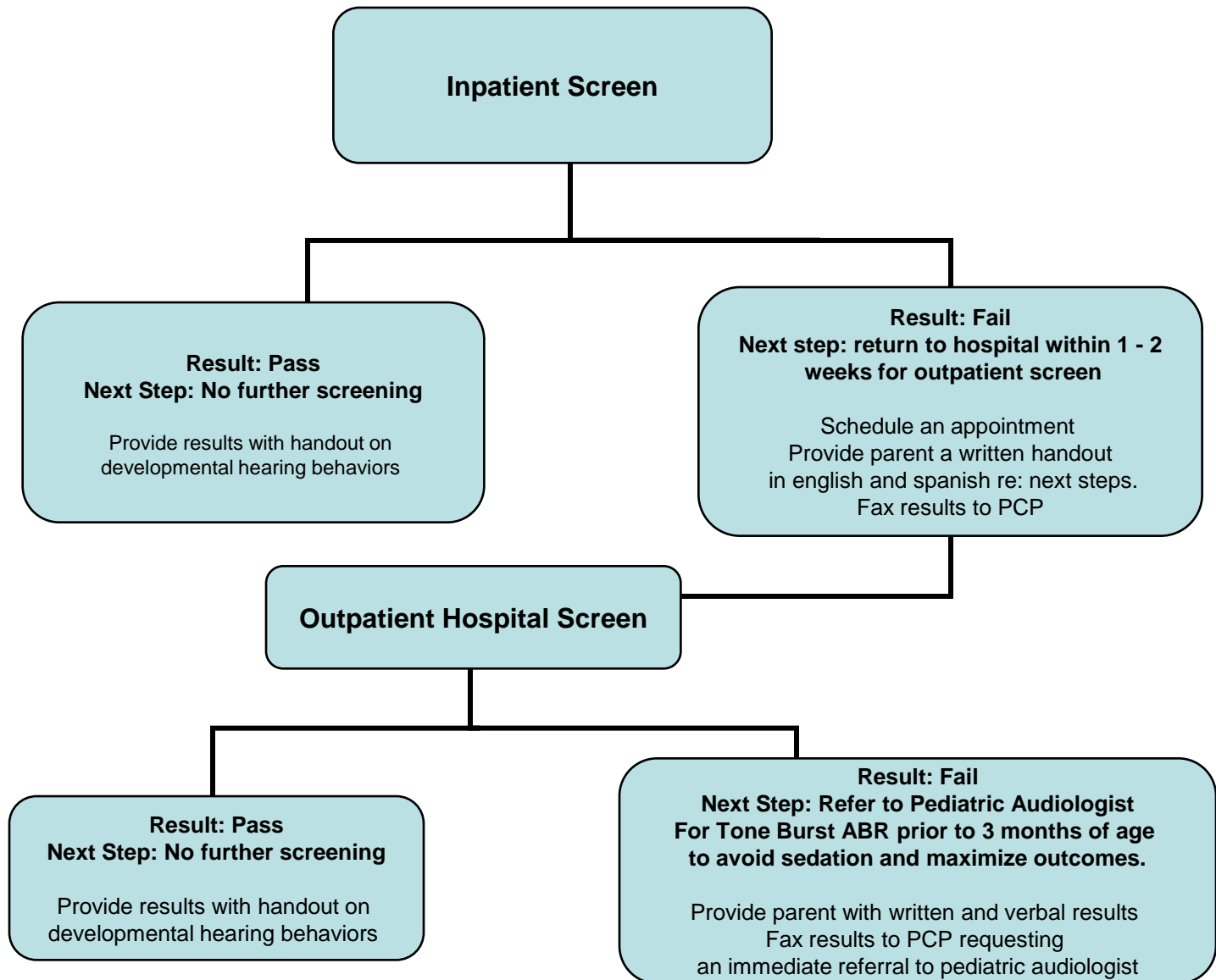
* risk for delayed onset - earlier & more frequent re-assessment

Clarification

- Recommendations regarding ototoxic medications
To be consistent with the intent of simplifying the referral process to NICU > 5 days, the recommendation has been reworded:

All infants with or without risk factors requiring NICU care of >5 days, including any of the following: ECMO,* assisted ventilation, exposure to ototoxic medications (gentamycin and tobramycin) or loop diuretics (furosemide/lasix). In addition, regardless of length of stay: hyperbilirubinemia requiring exchange transfusion.

Well Baby Follow-up



NICU (< 5 Day Stay) Follow-up

Inpatient Screen

Result: Pass with Risk Indicator
Next Step: Audiological Follow-up
between 24-30 months of age.

Provide results with handout with follow-up recommendations and developmental hearing milestones

Result: Pass with Risk Indicator for Late Onset/progressive HL
Next Step: Audiological Follow-up
Between 6- 9 months of age.

Provide results with handout on follow-up recommendations and developmental hearing milestones

Result: Fail
Next step: Return to hospital
within 1-2 weeks
for outpatient hospital screen.

Schedule an appointment, provide parent a written handout in english and spanish re: next steps. Fax results to PCP

Outpatient Hospital Screen

Result: Pass without risk indicator
Next Step: Audiological Follow-up
Between 24-30 months of age

Provide written handout with results, recommendations and developmental hearing milestones. Fax results and recommendations to PCP

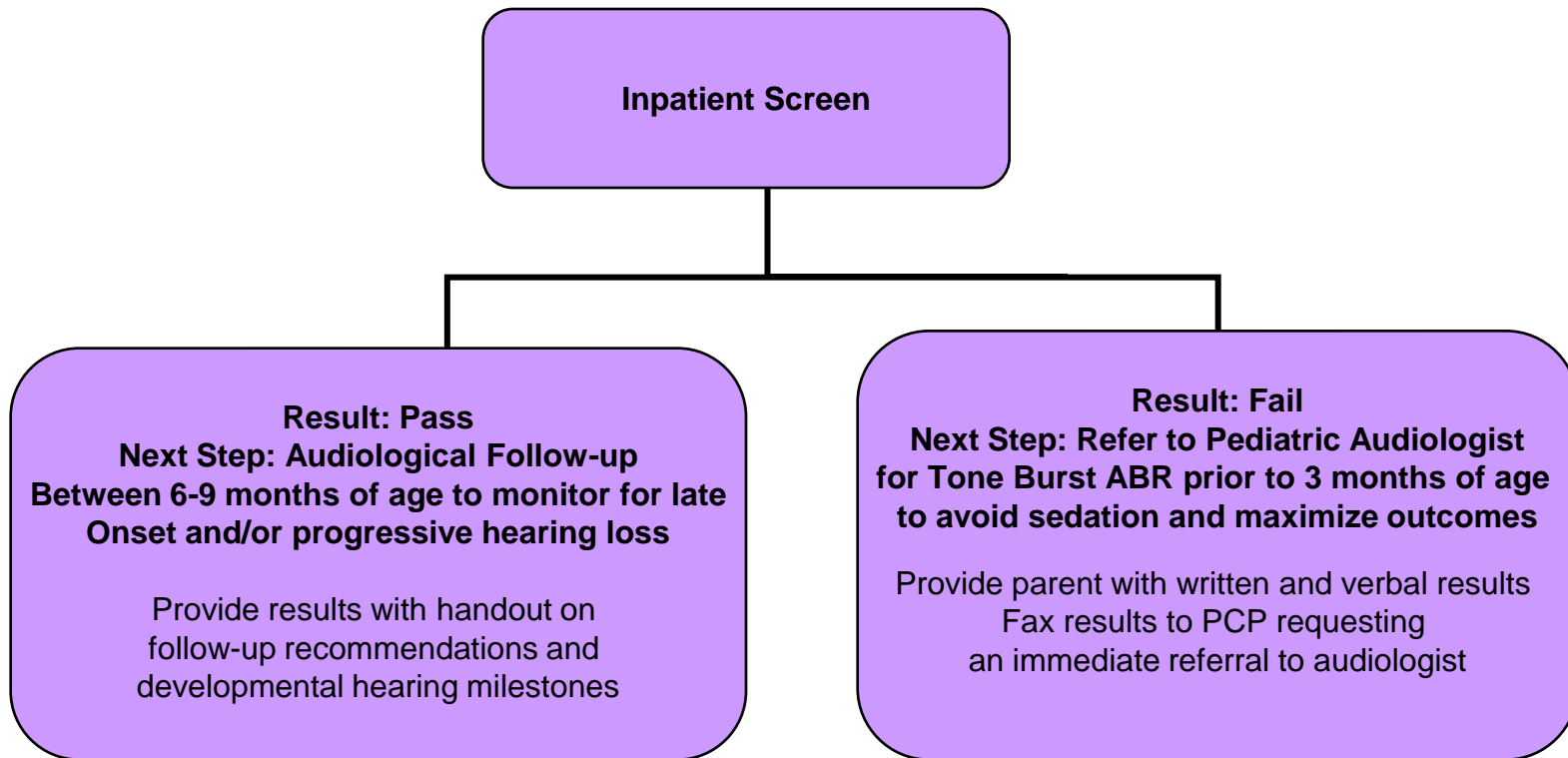
Result: Pass with Risk Indicator
Next Step: Audiological Follow-up
Between 6- 9 months of age.

Provide results with handout on Follow-up recommendations developmental hearing milestones

Result: Fail
Next Step: Refer to Pediatric Audiologist
for Tone Burst ABR prior to 3 months of age
to avoid sedation and maximize outcomes.

Provide parent with written and verbal results Fax results to PCP requesting an immediate referral to audiologist

NICU (> 5 Day Stay) Follow-up



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