
“Guidelines for Transitioning” applied with young, deaf children following cochlear implantation



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The Promise of 1 - 3 - 6



- Early identification of hearing loss
- Initiation of interventions & family supports
- Prevention of delay in language acquisition

Early Intervention

- Infants with congenital hearing loss
 - Early amplification & support for acquisition of aural-oral language
 - Early access to Sign Language & support for acquisition of visual-manual language
 - Family focused supports
 - Preventing delays in language acquisition
 - Delays... no longer “inevitable”



The KEY – Language Access

- Early, consistent access to language
- Viable modality (or combination)



Signing for deaf children...

- Sign Language *can be* an important component of communication intervention for many children who are deaf



Sign Language *may...*

- - provide a *platform* for communicative interaction using symbolic language



Sign Language *may...*

- - become a *bridge* for meaningful transition to novel modality – fostering comprehension of spoken language



Sign Language *may...*

- - remain the *primary language* of instruction and interaction for some children with CIs



Post – Cochlear Implantation



- Optimize opportunities for auditory access
- Aural/oral habilitation
- Signing may still be incorporated

Following adjustment to CI

- Rapidly, or gradually, as child transitions to aural/oral reception/expression of language



Study re: Communication Modality - Children's Hospital Boston - 2004

- N=95 children implanted CA < 36 mo
- Subset of children using Sign Language
 - 32 were signing pre-implant
 - 73% of those children had no add'l risk factors
 - No evidence of detrimental effects on "outcome" measures (including oral language)



– Communication modality: Predictors of Outcome after Cochlear Implantation ~

Jennifer Johnston, Betsy Kammerer, Terrell Clark, Margaret Kenna

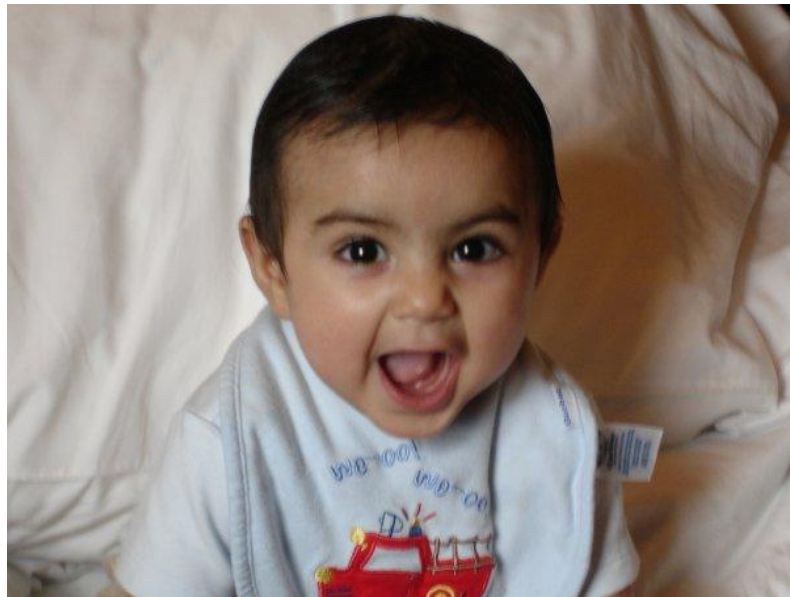
Conclusions from study...

- Regardless of modality/language:
 - Children “on target” with language pre-implant continued to be age appropriate
 - Children “severely delayed” in language acquisition remained significantly delayed in language development
 - Assuring access to language is essential to maximizing eventual linguistic proficiency & competency



The KEY – Language Access

- As child demonstrates comprehension of spoken language, primary communication modality shifts



The question ...

- When is a shift in communication strategies indicated/appropriate for a given child?



Child-led NOT Device-driven

- Demonstrated preferences & competencies of the child



- May be gradual transitional process
- Amount of therapeutic and communicative support needed & available to child

Purpose of the Guidelines

- Address the needs of deaf children who receive CIs and who relied on a visual language system as their primary means of communication when implanted.



Purpose of the Guidelines

- Facilitate discussion and decisions by families and professionals regarding appropriate habilitative & educational intervention for children with cochlear implants.



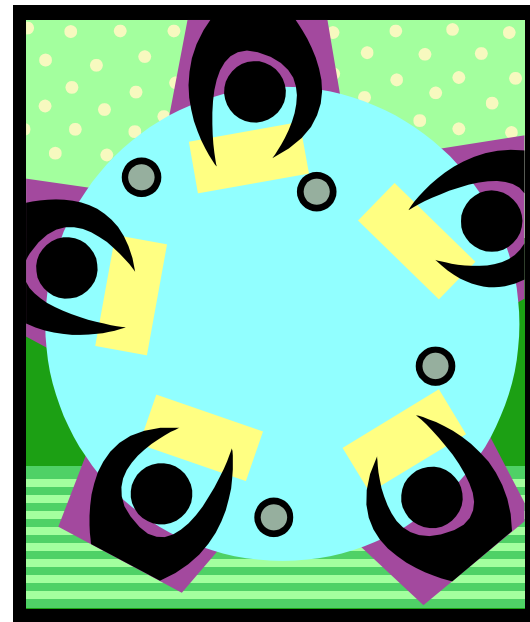
The Guidelines

- Cover the following areas:
 - Oral Receptive and Expressive Language
 - Additional areas of consideration
 - Social Emotional, Academics, Self Concept, Attention
- Different age groups separately



Deliberations over the “Guidelines”

- Cross-disciplinary involvement 50 professionals
- Collaborative process over 2 years
- Challenges during the process
- Product/Outcomes



Who were involved in developing the guidelines?

- Representatives from hospital clinics, agencies, schools, & private practice

Audiologists
Speech-Language Pathologists
Psychologists
Educators
Administrators

- Programs using all modalities & approaches

American Sign Language, Auditory/oral,
Signing Exact English, sign- supported spoken English



Use of Guidelines in making transition decisions

- Facilitate/focus discussion
- Guide decision making process
- Use in conjunction with clinical assessment data & consultation by qualified professionals
- Individualize decisions



Checklist for young children under the 5 years of age



Competencies for Transition from Manual To Oral Instruction The Child With a Cochlear Implant Under 5-Years of Age Page 1 of 2

Oral Receptive Language

Evaluate in a quiet setting and with background noise.

Child...	Frequently	Sometimes	Never
_ understands connected speech used by adults in the proposed educational setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ comprehends and follows spoken directions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ understands the language of instructional activities and possesses an oral language base strong enough to learn topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ consistently accesses and understands real-world information as assessed by appropriate participation in typical preschool activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ participates in conversation interactions with one peer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ attends to group conversation auditorally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ demonstrates incidental auditory learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Oral Expressive Language

Child...	Frequently	Sometimes	Never
_ is understood by familiar adults when speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ is understood by peers in routine/predictable events and in social conversations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ is able to express ideas and convey a meaningful message with connected spoken language, including real-world information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_ uses and understands pragmatic language (see glossary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Example:

Receptive Spoken Language

- Evaluate in a quiet setting *and* with background noise
- **Child...**

Frequently	Sometimes	Never
● understands connected speech used by adults in the proposed educational setting		
● comprehends and follows spoken directions		
● understands the language of instructional activities and possesses an oral language base strong enough to learn topics		
● consistently accesses and understands real-world information as assessed by appropriate participation in typical preschool activities		
● participates in conversation interactions with one peer		
● attends to group conversation auditorally		
● demonstrates incidental auditory learning		



Use of Checklists



- Majority in “NEVER” column = may not be ready for transition
- Majority in “SOMETIMES” column = emerging skills → transition
- Majority in “FREQUENTLY” column = may be ready for transition

Demonstrated needs of the child

- Should guide design of:
 - habilitative plan
 - decision making
 - language of instruction
 - modality of communication
 - goals of therapy
 - programming decisions



Periodic review

- Make modifications in programming, instructional techniques, and primary communication modality according to demonstrated progress/competencies of the child
- Rate of developmental changes may vary (rapid or gradual)
- Again – NOT device-driven



Further Considerations

- Physical accommodations
- Classroom strategies
- Additional services
- Necessary equipment considerations



Strategies & Glossary

- Modifications – considerations – accommodations – strategies
- Terms defined/explained in Glossary
- Resources



Accessing the Guidelines

- www.ChildrensHospital.org
 - Deaf and Hard of Hearing Program
 - Transitional Guidelines
- May be printed/photocopied



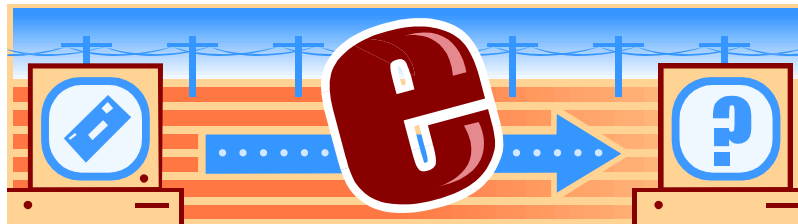
2003 edition updated 2010

- Survey – eliciting feedback and critique → current version



Reviews: What did respondents say about the “Transition Guidelines”?

- “... we have shared this comprehensive and user friendly document at professional training sessions throughout the US.”
- “The Guidelines are superb and relevant to all students with hearing loss.”
- “ALL OF IT.” – In response to what aspects of the guidelines have been found useful.



THANK YOU

With appreciation for all who contributed to creating these Transition Guidelines

With appreciation to colleagues in the Department of Otolaryngology and Communication Enhancement of the Children's Hospital Boston



Most especially, with appreciation to the children and families from whom we learn