

California's Cochlear Implant Program for Children: Trends from the EHDI Program

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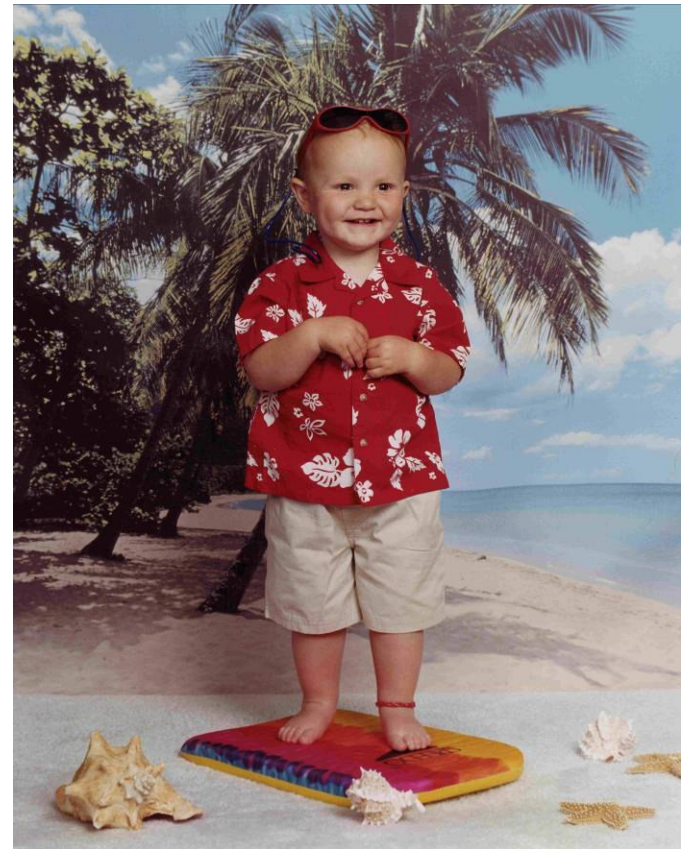


California Children's Services

- Title V Children with Special Health Care Needs Program
 - Medical eligibility includes hearing loss.
 - Benefits include authorizations for diagnostic evaluations, hearing aids, speech therapy, rehabilitation, and cochlear implants.
 - Works next to EHDI program as one option for the treatment of hearing loss, but does not counsel family directly regarding choice of communication method nor advocate for one specific method of communication.

California Cochlear Implants: Background

- 1957: Cochlear implants were introduced to the US by William House of Los Angeles and Robin Michelson of UCSF.
- 1996: Cochlear Implants became benefit of California Children's Services, or CCS.
- 2008: CCS benefits refined and expanded to include bilateral implantation.



Cochlear Implant Process - Evaluation



- Cochlear implant evaluation
 - Referred by any provider to CCS for case review and approval, then to one of 6 CCS Cochlear Implant Centers.
 - CI center is authorized Service Code Grouping, which includes every diagnostic code necessary for evaluation by audiologist, speech pathologist, psychologist. The surgeon is authorized their own grouping.



CI Evaluation Candidacy

- Hearing loss criteria delineated by age:
 - Under 12 months: Confirmed diagnosis of meningitis and bilateral, profound sensorineural hearing loss (SNHL).
 - Under 18 months: Bilateral, profound SNHL.
 - 18 – 36 months: Bilateral, severe-profound SNHL.
 - > 3 years: Bilateral, sloping moderate-profound SNHL with moderate loss only in 250-500 Hz.

CI Evaluation Candidacy

- ❑ Hearing aid trial, prior to or concurrent with evaluation.
- ❑ Auditory deprivation must be offset by the development of language and the abilities of parent and child to communicate.
- ❑ History of compliance with medical evaluation and treatments.





Cochlear Implant Process - Surgery

□ Cochlear implantation

- Must be requested by the CI center after a team evaluation.
- Includes authorization for surgery, post-surgical mapping and therapy, and replacement parts and batteries for each year of program eligibility.
- Reimburse only invoice for device and minimally for surgical costs.



CI Surgical Candidacy

- ❑ Review and approval of IFSP or IEP by implant team member.
- ❑ Access to appropriate post-implant services.
- ❑ Appropriate expectations demonstrated by caregiver motivation and advocacy.
- ❑ Behavioral and developmental characteristics that would not interfere with rehabilitation.

CI Surgical Candidacy



- ❑ Limited benefit from hearing aids determined by best-aided speech perception scores, language scores, and aided audiometric results.
- ❑ Freedom from middle ear infections.
- ❑ Accessible cochlear lumen and normal cochlear nerve.
- ❑ No contraindications to anesthesia/surgery.



CI Bilateral Candidacy

- ❑ Only as recommended by CI Team.
- ❑ Under 18 months: Bilateral profound SNHL.
- ❑ Over 18 months: Bilateral severe-profound SNHL.
- ❑ Simultaneous: case-by-case basis.
- ❑ Sequential: No functional benefit from hearing aids, documented progress in auditory/oral language development, appropriate patient motivation.



CI Follow-up Services

- Service Code Grouping for all cochlear implant evaluation and treatment procedure codes is authorized annually, pending program eligibility.
- Replacement parts and batteries are requested by the CI center but authorized to the CI manufacturer to ship limited quantities per year directly to the beneficiary.

Question -

- Did the implementation of the EHDI program affect the number of implants and the age of implantation for the CCS program?

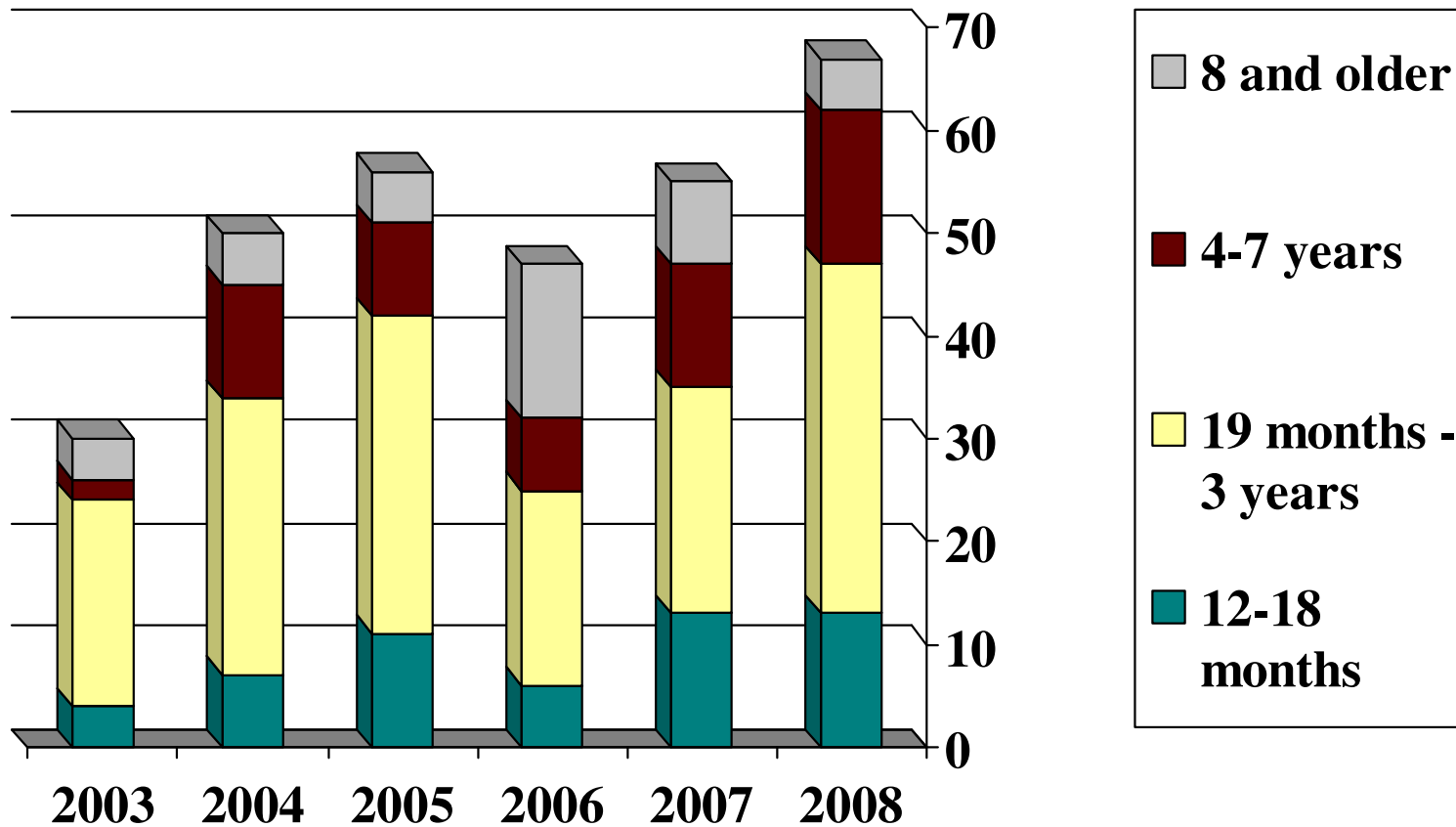


CI Statistical Trends



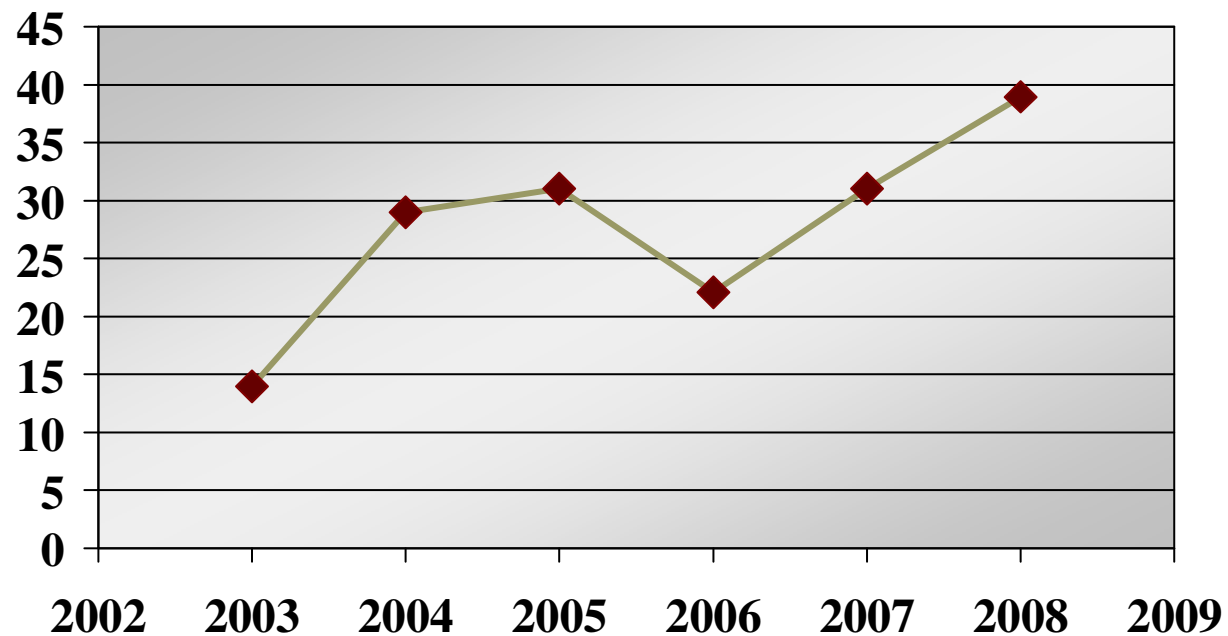
- Data Challenges
 - Data pulled from claims
 - Data pulled from authorizations
 - Data pulled from audiology consultants log
 - Data pulled from EPSDT-SS database*

CI Statistical Trends



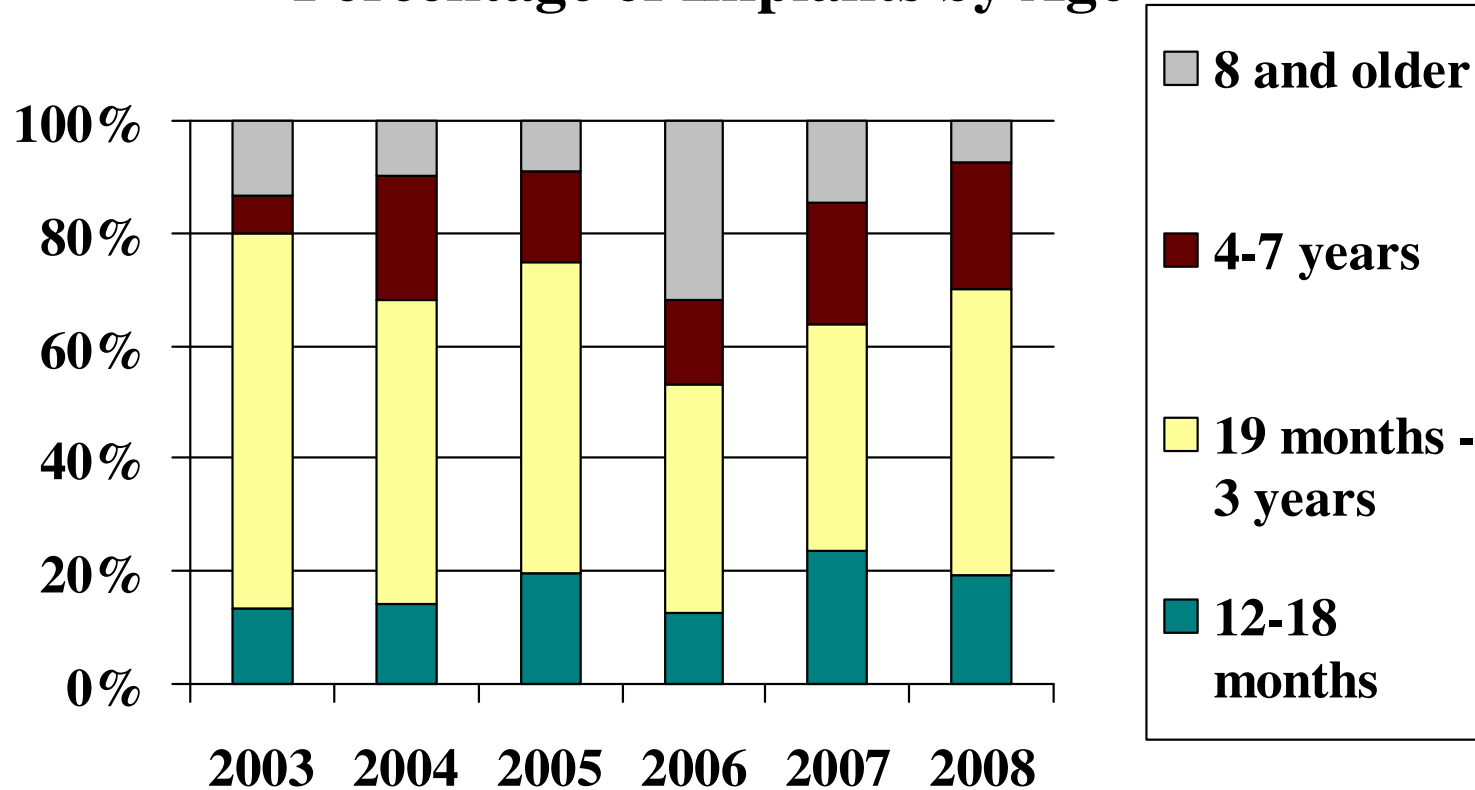
CI Statistical Trends

Cochlear Implants 3 Years and Younger



CI Statistical Trends

Percentage of Implants by Age





CI Statistical Trends

- What does this mean?
 - The number of children implanted by the age of three has more than doubled in 5 years; however, so has the number of total implants in all ages of children.
 - The percentage of children implanted under the age of 4 every year has fluctuated from 53% - 80%.
 - The percentage of children implanted between 12-18 months has fluctuated between 13% - 24%.

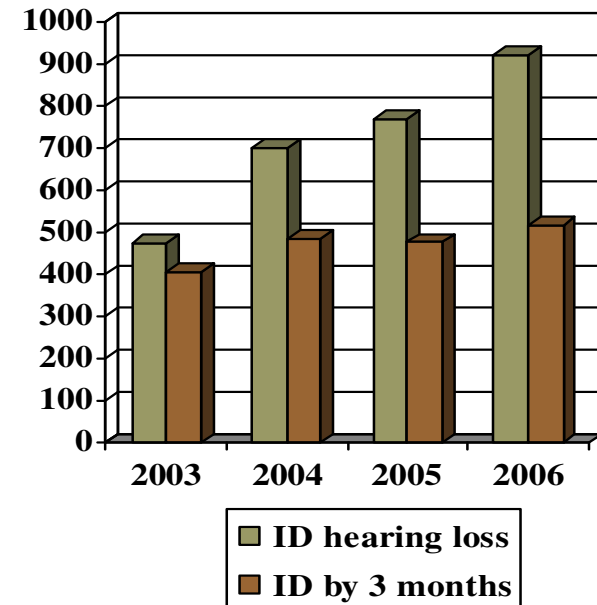


CI Statistical Trends – Why?

- Why have we not seen significant increases in early implantation?
 - Delay in referral from primary audiologist.
 - Difficulty obtaining ENT appointment for hearing aid clearance.
 - Waiting for full hearing aid trial before discussing implant options.
 - Postponement in parental decision.
 - Parents looking to all options of communication and establishing language prior to considering surgery.
 - Parents believe implant “fixes” hearing and can be obtained any time. Research now demonstrates otherwise.

CI Statistical Trends – Why?

- While identification of hearing loss continues to increase, identification by three months has not.
- Lack of pediatric providers, payment issues, insurance barriers, and lack of urgency continue to affect early identification of hearing loss, and therefore, early treatment.



What do we do now?

- ❑ Continue to monitor the trends for age of implantation.
- ❑ Watch the age and frequency of bilateral implantation.
- ❑ Continue to encourage all options to be presented to the child, and educate on the importance of early language development.



Thank you!

