Access to Hearing Technology

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Cochlear Implant Access Topics

- Cochlear implant utilization
- Comparison to hearing aid utilization
- Children
- Adults
- Why so low?
- Efforts to improve access and utilization
- Join our movement!
Total hearing loss\textsuperscript{1}
34-36+ million

Potential implant candidates\textsuperscript{2}
1.2-1.3 million severe to profound

\textbf{Data Sources:}

1. 34.52M Market Tracker VIII: 25 Year Trends in the Hearing Health Market, 2009. ~ 36 M American adults report some degree of hearing loss, NIDCD website June 16, 2010

2. iData Research 2010 Report US Market for Hearing Aids and Audiology Devices in 2009 there were approximately 1.2M patients who could benefit from a CI

3. 67k (41.5k adults and 25.5k children) have received CIs in the U.S, NIDCD website June 2010, iData Research 2010 Report: US Market for Hearing Aids and Audiology Devices 67,241 have been treated with a cochlear implant

4. iData Research 2010 Report: US Market for Hearing Aids and Audiology Devices; 5.6% US CI market penetration in 2009
Pediatric CI Access
Newborn Hearing Screening

• Implemented in most developed countries
• US screening history: 7.5% (1996) ➔ 98% (2014)*
• Screening database of children born deaf
• Provides opportunity to identify children who would benefit from hearing aids or CI by offering information to parents
• Implementation of newborn hearing screening changed the CI paradigm for children born deaf or HoH

* Source: CDC
Pediatric CI Utilization in 6 Developed Countries

% CI Utilization in Children

<table>
<thead>
<tr>
<th>Country</th>
<th>Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>50%</td>
</tr>
<tr>
<td>Germany</td>
<td>65%</td>
</tr>
<tr>
<td>U.K.</td>
<td>90%+</td>
</tr>
<tr>
<td>Sweden</td>
<td>90%+</td>
</tr>
<tr>
<td>Denmark</td>
<td>90%+</td>
</tr>
<tr>
<td>Australia</td>
<td>98%</td>
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</tbody>
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Factors that Impact on Pediatric Access to Cochlear Implants

1. Newborn hearing screening by 1 month
2. Follow-up to ensure children enter EI system
3. Comprehensive information on all technology and communication options provided to families in a supportive and timely manner
4. Access to pediatric cochlear implant programs that provide the full range of services for family and child
5. National or private employer plan insurance coverage and extent of coverage
6. 50% of pediatric CI funded through Medicaid
Adult Utilization
Adult CI Utilization in Developed Countries

% CI Utilization by Eligible Individuals

- U.S.: 6%
- Europe: 4%
- Australia 18-29 Yrs: 0.5%
- Australia 65-74 Yrs: 0.3%

Hearing Aid Adoption Rates *

<table>
<thead>
<tr>
<th>Country</th>
<th>Italy</th>
<th>France</th>
<th>Germany</th>
<th>UK</th>
<th>Norway</th>
<th>USA</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption rate %</td>
<td>24.6%</td>
<td>30.4%</td>
<td>34.0%</td>
<td>41.1%</td>
<td>42.5%</td>
<td>30.2%</td>
<td>14.1%</td>
</tr>
</tbody>
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Adoption Rate = % of individuals with self-reported hearing loss using HA’s. European countries all have health insurance coverage for HA’s. Japan offers OTC.

EuroTrak 2012, MT9 2015
Low Adult Utilization Everywhere

• Lack of screening for hearing loss in adults
• Primary care physicians unfamiliar with CI/don’t refer (most also don’t refer for hearing aids)
• Hearing healthcare professionals aren’t referring for CI
• Adults hesitant to move from hearing aids to CI
• Awareness about CI in general population is low
• Is hearing health = healthcare?
Is hearing health = healthcare?

• **Healthcare** is the maintenance or improvement of health via the diagnosis, treatment, and prevention of disease, illness or injury and other physical and mental impairments in human beings

• Healthcare is delivered by **healthcare professionals** (providers or practitioners) in allied health professions
Factors that Affect CI Access in US

1. Awareness in the general population is low
2. Referral networks aren’t referring
3. Accepted “Best Clinical Practices” don’t exist outside of CI community (Even within CI, differences in protocols to determine candidacy)
4. Political complexities of deafness
5. Hearing loss not viewed as a healthcare issue
6. Insurance coverage sometimes an issue but not nearly as significant as #1-5
ACI Alliance Efforts to Expand Access

• Focus on primary care physicians – Consumer Role
• Audiologist referrals – Consumer Role
• Sponsoring research to demonstrate QoL
• Update past studies on cost effectiveness of CI
• Professional/consumer advocacy relative to proposed changes in healthcare funding – Consumer Role
Available on ACI Alliance website under Cochlear Implants/Clinical Guidance

Adult Candidacy for Cochlear Implantation: Clinical Guidance

Hearing aids provide important benefit for the majority of people with hearing loss. Cochlear implants provide meaningful access to sound for those with more severe hearing loss. Only 5% of US adults who could benefit from Cls have them. The average primary care medical practice includes 8 adult patients who would benefit from a cochlear implant.

Background
- Adults who could benefit from Cls typically do not know they are candidates nor what the expected outcomes are
- Age is not a contraindication for CI in otherwise healthy people
- Hearing loss is often progressive
- Hearing acuity declines may be due to noise exposure, genetics, disease, trauma, or ototoxic medications

Impacts of Undertreated Hearing Loss
- Impairs communication at work, in social settings, and with family
- Interferes with medical treatment and in carrying out activities of daily living
- Associated with social isolation, depression, all-cause dementia, and declines in mental flexibility in older adults
Audiologist Referrals

• Go back to your hearing aid audiologist and thank them for everything they did for you
• Encourage them to refer in
• Send them to our website for information on candidacy and recent expansion
• Holly Teagle’s presentation on candidacy will be posted
Join ACI Alliance Advocacy

• Aggressive state-based advocacy program
• Focus this year on retaining healthcare coverage for CI
• Forming State Committees to involve consumers with CIs and parents of CI kids
• Led by existing State Champions typically CI clinicians
• Opportunity to affect decision-making at state and national levels
• Sign-up mechanism explained in flyer (more on website)