Developing International Consensus on the Use of Unilateral Cochlear Implants for Bilateral Severe, Profound, or Moderate Sloping to Profound Sensorineural Hearing Loss in Adults

Delphi Consensus Group

Poster 101
Disclosures

- Consultant for: Advanced Bionics, Cochlear, IotaMotion, Envoy
- Equity Interest: Advanced Cochlear Diagnostics, LLC

- The consensus process was independently facilitated by Oxford PharmaGenesis, a Health Science communications consultancy providing services to the healthcare industry, professional societies and patient groups through specialist practices

- Support for this project provided by: Advanced Bionics, Cochlear, MedEL, Oticon
Cochlear implant use in adults

- Cochlear implantation has now been available for more than 30 years in many countries.
- Cochlear implants (CIs) are standard of care for newborns with severe to profound sensorineural hearing loss (SNHL) in many developed countries.
  - In children, penetration of CIs is high (>50%).
- In adults, cochlear implantation is often seen as a last resort option.
  - Many adults who could benefit from a CI do not receive them.
  - As in children, CI use in adults has potential to become standard of care.
Achieving standard of care with the consensus process

1. Recruit steering committee, panel and design the process
2. Conduct literature searches and draft report
3. Draft up to 25 consensus statements
4. Three rounds Delphi voting and Steering Committee
5. Create peer-reviewed publication of consensus statements

- The Delphi consensus process provides a summary of clinical evidence and expert opinion on cochlear implantation

- Findings from the Delphi process have the potential to:
  - Establish CIs as the **standard of care** for adults with severe to profound SNHL
  - Improve access to CIs for patients
  - Improves the individual’s hearing function, communication and QoL
The Delphi panel and steering committee bring together clinical experts, ENTs and audiologists from across the globe.

- 1 Chair
- 4 steering committee members
- 25 additional panel members
- 13 countries represented
A systematic literature review was used to obtain evidence relevant to adults with bilateral moderate sloping to profound SNHL or worse receiving and unilateral CIs. Searches were conducted in MEDLINE, Embase, and Cochrane Library, on 18 July 2018.

- English language publications from 2005 onward
- UK, Europe, Australia, USA, Canada, India, Japan and China

- Identified studies were screened for relevance
- Included studies were quality-assessed using a recognized method (Eubank et al. 2016)

PRISMA diagram of included and excluded studies in the systematic literature
Delphi voting process

- Using the findings of the literature review, **21 consensus statements** were drafted.
- These statements, and all supporting evidence from the literature (including quality assessment), were presented to the panel during three anonymous voting rounds.
- At each voting round, the panel marked their level of agreement/disagreement with each statement, using a 6-point Likert scale.

Voting round 1: online questionnaire → Voting round 2: online questionnaire → Voting round 3: face-to-face meeting
Delphi voting process

- The action for each statement for the subsequent round was determined by:
  - the **75% consensus threshold**, and/or
  - provision of text **feedback** from the voter
  - Wording of statements could still be revised even if the statement had reached at least 75% consensus
  - At the end of voting round 3, statements that had reached at least 75% consensus were included in the **final list to be published**

Voting round 1
- Online questionnaire #1
  - ≥ 75% agree with no feedback = include in the publication
  - < 75% agree = revise statement

Voting round 2
- Online questionnaire #2
  - ≥ 75% agree = include in the publication
  - < 75% agree = revise statement

Voting round 3
- Face-to-face meeting
  - ≥ 75% agree with feedback for improvement
  - < 75% agree = exclude statement

Discuss feedback received and revise statements as needed
Vote on original vs revised at Face-to-face meeting
Include in the publication the version that receives most votes
Maximizing the impact of the Delphi process

- An international consensus paper will be submitted to a **high-impact** journal.
- Following publication, **the real work begins for all of us!**

- **Engagement** of professionals and community
- **Dissemination and promotion**
  - Helping the statements to influence awareness and referral behaviour
- **Development** of country-specific clinical practice guidelines through national medical academies
- **Adoption** of clinical practice guidelines
- **Policy advocacy to positively influence decision making** for payers and policy makers

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*Department of Otolaryngology-Head & Neck Surgery*

*Washington University School of Medicine in St. Louis*