# LANDMARK CONSENSUS PROCESS 12 months on...

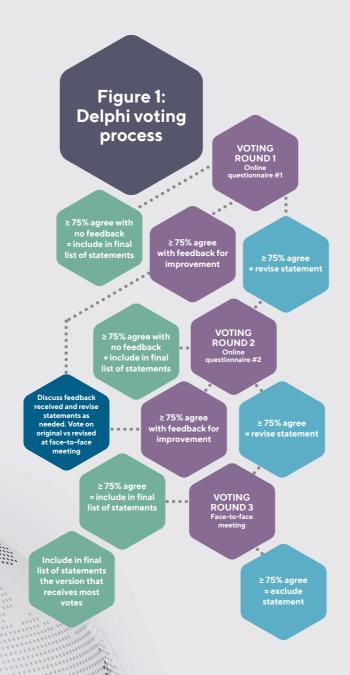
there is an urgent need to address the lack of guidelines and awareness in order to increase patient access to treatment to improve quality of life among adults with hearing loss 99

Professor Craig Buchman, Chair, Delphi Group

# International Consensus Paper (ICP)...12 months on...

Since the first global consensus on the use of Cls for the management of adults living with hearing loss, there has been unprecedented activity to drive awareness around the findings from the ICP.

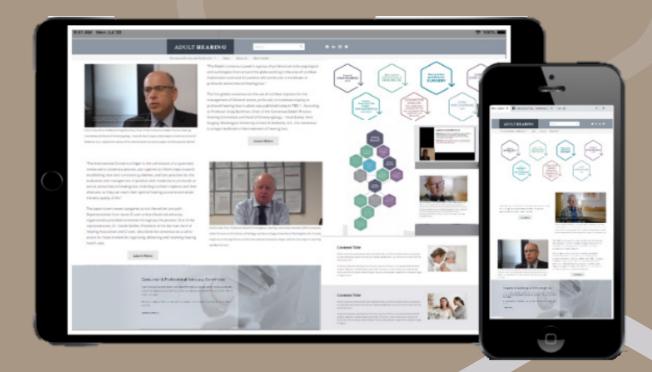
This year in review brings you examples from around the world of the initiatives driving towards the goal for cochlear implants (CIs) being recognised and accepted as the Standard of Care for adults.



# LANDMARK PUBLICATION

sets minimum standards for cochlear implantation in adults relation or had point of view.

Consensus [ kan agreement in a opinion reach whole group;





The first step towards clinical practice guidelines addressing cochlear implantation for adults.<sup>1</sup>

For more information visit www.adulthearing.com

# A systematic literature review of available evidence:

# 20 statements across 7 categories 7 professional & consumer advocacy groups 31 hearing experts





#### JAMA Otolaryngology-Head & Neck Surgery | Review

Unilateral Cochlear Implants for Severe, Profound, or Moderate Sloping to Profound Bilateral Sensorineural Hearing Loss A Systematic Review and Consensus Statements

Craig A. Buchman, MD; René H. Gifford, PhD; David S. Haynes, MD; Thomas Lenarz, MD; Gerard O'Donoghue; Oliver Adunka, MD; Allison Biever, AuD; Robert J. Briggs; Matthew L. Carlson, MD; Pu Dai, MD; Colin L. Driscoll, MD; Howard W. Francis, MD; Bruce J. Gantz, MD; Richard K. Gurgel, MD; Marlan R. Hansen, MD; Meredith Holcomb, AuD; Eva Karltorp, MD; Milind Kirtane, MS ENT; Jannine Larky, AuD; Emmanuel A. M. Mylanus, MD; J. Thomas Roland Jr, MD; Shakeel R. Saeed, MD; Henryk Skarzynski, MD; Piotr H. Skarzynski, MD; Mark Syms, MD; Holly Teagle, AuD; Paul H. Van de Heyning, MD; Christophe Vincent, MD; Hao Wu, MD; Tatsuya Yamasoba, MD; Terry Zwolan, PhD

Viewpoint and Invited

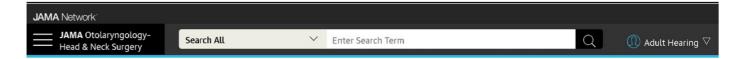
IMPORTANCE Cochlear implants are a treatment option for individuals with severe, profound, or moderate sloping to profound bilateral sensorineural hearing loss (SNHL) who receive little or no benefit from hearing aids; however, cochlear implantation in adults is still not routine.

OBJECTIVE To develop consensus statements regarding the use of unilateral cochlear implants in adults with severe, profound, or moderate sloping to profound bilateral SNHL

DESIGN, SETTING, AND PARTICIPANTS This study was a modified Delphi consensus process that was informed by a systematic review of the literature and clinical expertise. Searches were conducted in the following databases: (1) MEDLINE In-Process & Other Non-Indexed Citations and Ovid MEDLINE, (2) Embase, and (3) the Cochrane Library. Consensus statements on cochlear implantation were developed using the evidence identified. This consensus process was relevant for the use of unilateral cochlear implantation in adults with severe, profound, or moderate sloping to profound bilateral SNHL. The literature searches were conducted on July 18, 2018, and the 3-step Delphi consensus method took place over the subsequent 9-month period up to March 30, 2019.

MAIN OUTCOMES AND MEASURES A Delphi consensus panel of 30 international specialists voted on consensus statements about cochlear implantation, informed by an SR of the literature and clinical expertise. This vote resulted in 20 evidence-based consensus statements that are in line with clinical experience. A modified 3-step Delphi consensus method was used to vote on and refine the consensus statements. This method consisted of 2 rounds of email questionnaires and a face-to-face meeting of panel members at the final round. All consensus statements were reviewed, discussed, and finalized at the face-to-face meeting.

RESULTS In total, 6492 articles were identified in the searches of the electronic databases. After removal of duplicate articles, 74 articles fulfilled all of the inclusion criteria and were used to create the 20 evidence-based consensus statements. These 20 consensus statements on the use of unilateral cochlear implantation in adults with SNHL were relevant to the following 7 key areas of interest: level of awareness of cochlear implantation (1 consensus statement); best practice clinical pathway from diagnosis to surgery (3 consensus statements); best practice guidelines for surgery (2 consensus statements); clinical effectiveness of cochlear implantation (4 consensus statements); factors associated with postimplantation outcomes (4 consensus statements); association between hearing loss and degression, cognition, and dementia (5 consensus statements); and cost implications of



# JAMA Otolaryngology-Head & Neck Surgery



Review

August 27, 2020

Unilateral Cochlear Implants for Severe, Profound, or Moderate Sloping to Profound Bilateral Sensorineural Hearing Loss

A Systematic Review and Consensus Statements

Craig A. Buchman, MD<sup>1</sup>; René H. Gifford, PhD<sup>2</sup>; David S. Haynes, MD<sup>2</sup>; <u>et al</u>

Author Affiliation

JAMA Otolaryngol Head Neck Surg. 2020;146(10):942-953. doi:10.1001/jamaoto.2020.0998

JAMA NETWORK
ARTICLES OF THE YEAR



# How has the ICP made an impact?

- 6,834 consensus paper downloads, influencing 13 citations and 323 media articles
- An evolution in unified global advocacy for first time from the seven advocacy groups involved in the ICP process to the CIICA\* network
  - The evidence from the ICP has provided education to thousands of professionals globally
- The call to action has resulted in subject matter experts signing up to advisory groups around the world to tackle Hearing Health for adults



\*CIICA

CI International Community of Action



Hearing Health Colloborative, a US Standard of Care Initiotive

# International Consensus Paper: 12 months on...

Since the publication of the first Systematic Review on Standards of Care for Cochlear Implantation in Adults we have experienced unprecedented launch activity associated with the Standard of Care Initiative.

This year in review brings you examples from around the world of the initiatives driving awareness of the findings from the International Consensus Paper (ICP) towards the goal for cochlear implants (CIs) being recognised and accepted as the Standard of Care for adults.

# **Background**

Hearing impairment is one of the leading causes of overall disability worldwide. 1 in 5 people globally experience hearing loss. This is expected to rise to 1 in 4 by 2050¹. Hearing impairment has a substantial impact on people's lives, including, but not limited to, communication difficulties, increased risk of dementia and reduced well-being.

Hearing loss is the single largest modifiable risk factor for dementia<sup>2</sup>.

Cochlear implantation has been available for 40 years across the world. In many developed countries, CIs have become established as Standard of Care (SoC) for newborns with severe to profound sensorineural hearing loss (SPSNHL). In adults, however, cochlear implantation is often seen as a last resort option and penetration remains low. During this time, clinical practice and evidence have evolved considerably. The next logical step is for cochlear implantation to become the SoC for adults with SPSNHL.

The global prevalence of hearing impairment is substantial and increasing. For adults, healthy ageing is a key public health issue.

# **About The Consensus Paper**

Numerous medical specialities that have achieved Standard of Care publish an international consensus paper as an initial step to inform treatment and clinical guidelines. In the absence of clear clinical practice guidelines for the diagnosis and treatment of adult hearing loss, the Standard of Care consensus paper aims to be a step towards establishing clear, consistent, global treatment guidelines and best practice aftercare for CI patients to reach their optimal hearing outcome and quality of life. This international paper is focused on unilateral implantation for bilateral SPSNHL in adults.

CLICK IMAGE TO WATCH VIDEO



- 1. World Reoprt on Hearing 2021
- 2. Livingston G et al. Lancet 2017:390(10113):2673–734

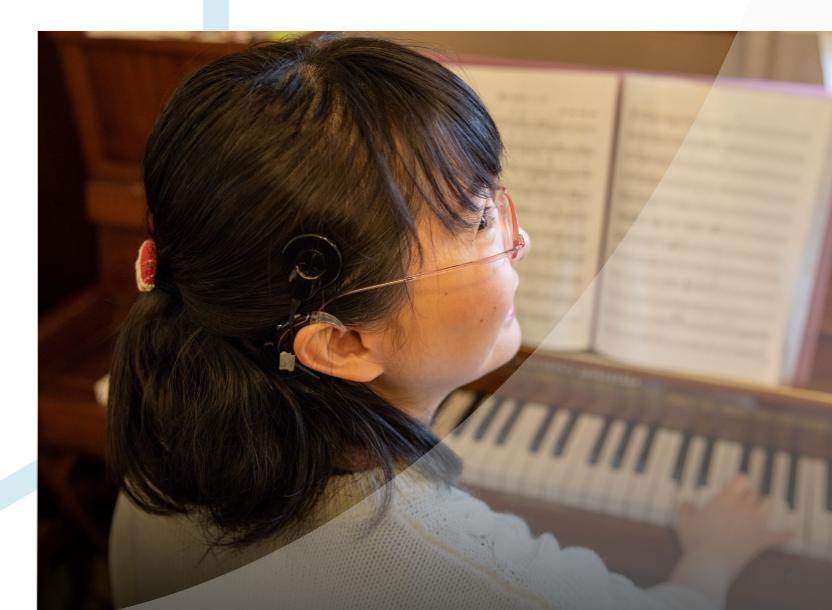
#### **Process**

The international consensus paper contains widely accepted clinical guidance on medical criteria for assessing whether CI surgery is indicated as the most beneficial treatment option for severe and profound sensorineural hearing loss, compared to other treatment options (adults).

The first step in the process was a thorough literature review to inform draft consensus statements. Three rounds of voting on consensus statements (Delphi process\*) followed. The categories from the search were:

- Awareness of Cls
- Best Practice: Diagnosis of SNHL / CI-candidacy Evaluation
- Best Practice: CI Surgery
- Best Practice: Clinical Effectiveness / Influencing Factors of CI
- Best Practice: Follow Up/ Rehabilitation
- Association of SNHL: Depression / Well-being / Loneliness
- Association of SNHL: Cognitive function & Dementia
- Cost of Unilateral CI

Following the Delphi process, an international consensus paper was developed. This contained clinical guidance on the consensus for medical criteria for assessing whether CI surgery is indicated as the most beneficial treatment option for an adult with bilateral SPSNHL, compared to other treatment options.



# The ICP in a tiny nutshell!

Category	Takeaway from the Paper
Awareness	Low awareness among HCPs and unclear pathways limit access to CI. Clearer guidelines and Education is needed!
Diagnosis	Audiometry needs standardisation. Age alone should not limit candidacy.
Surgery	Curved and straight electrodes are effective. Hearing preservation surgery can be beneficial with substantial residual hearing.
Clinical Effectiveness	Older age is not a barrier! CI improves Quality of Life and hearing in quiet and in noise. Implantation should occur as soon as possible!
Outcome Factors	Hearing aid + CI can improve bilateral benefits and optimal speech recognition as well as quality of life outcomes. Long durations of deafness does not rule out benefit.
Cognition	The use of cochlear implants may help improve cognition in older adults.  Cls, could potentially help to reduce the risk of dementia.
Cost	CI is associated with positive impacts on health related Quality of Life and employment. CI is a cost effective and significantly improves hearing ability in the majority of bilaterally deafened adults.

The consensus statements are important in providing an evidence based approach to establishing cochlear implantation as the standard of care for adults with bilateral severe to profound hearing loss and illustrating what good practice should be in several key areas.

The huge underutilization in health systems of the life changing technology of cochlear implantation across the world results in poorer health and wellbeing for individuals and enormous additional costs for health systems.1

#### Who was involved?

To lead the international consensus paper, a dedicated Steering Committee and Panel, was formed, chaired by Dr. Craig Buchman, Washington University (St Louis, US), steering committee members consisting of Professor Thomas Lenarz (Hannover, Germany), Professor Rene Gifford (Vanderbilt, US), Dr. David Haynes (Vanderbilt, US) and Professor Gerard O'Donoghue (Nottingham, UK).

> Awareness of cochlear implants among primary and hearing healthcare providers is inadequate, leading to under-identification of eligible candidates. Clearer referral and candidacy pathways would help increase access to cochlear implants. <sup>2</sup>





































# The panel members consisted of 26 Audiologists and ENT Surgeons across 13 countries:

- Dr. Oliver Adunka, Ohio State University Wexner Medical Center, US
- Allison Biever, AuD., Rocky Mountain Ear Center, Colorado, US
- Associate Professor Robert Briggs, Royal Victoria Eye and Ear Hospital, Royal Melbourne, Australia
- Dr. Matthew Carlson, Vanderbilt University, New York State, US
- Dr. Pu Dai, Chinese PLA General Hospital, Beijing,
- Dr. Colin Driscoll, Mayo Clinic School of Medicine, New York State, US
- Dr. Howard Francis, Duke University School of Medicine, North Carolina, US
- Dr. Bruce Gantz, University of Iowa Health Care,
- Dr. Richard Gurgel, University of Utah Hospitals and Clinics, Utah, US
- Professor Marlan Hansen, Institute for Clinical & Translational Science, The University of Iowa, Iowa,
- Assistant Professor, Meredith Holcomb AuD., Medical University of South Carolina, US
- Dr. Eva Karltorp, Karolinska University Hospital, Sweden
- Dr. Milind Kirtane, P.D. Hinduja Hospital & Medical Research Centre, India
- Jan Larky AuD., Stanford University School of Medicine, San Francisco, US

- Dr. Emmanual Mylanus, Radboud University Medical Centre, Nijmegen, Netherlands
- Professor Tatsuya Yamasoba, University of Tokyo,
- Dr. Thomas Roland, NYU Langone Medical Center, New York State, US
- Professor Shakeel Saeed, University College Hospital; National Hospital for Neurology and Neurosurgery; Royal National Throat, Nose and Ear Hospital, London, UK
- Professor Henryk Skarzynski, Institute of Physiology and Pathology of Hearing of the Ministry of Health, Poland
- Associate Professor Piotr Skarzynski, Institute of Physiology and Pathology of Hearing of the Ministry of Health, Poland
- Dr. Mark Syms, Arizona Hearing Center, Arizona, US
- Associate Professor Holly Teagle, The University of Auckland, New Zealand
- Professor Paul Van De Heyning, The Antwerp University Hospital - UZA, Belgium
- Professor Christophe Vincent, Centre Hospitalier Régional Universitaire de Lille, France
- Dr. Hao Wu, Xinhua Hospital, Shanghai, China
- Professor Terry Zwolan, Michigan Medicine, University of Michigan, Michigan, US

GLOBAL GUIDELINES ON STANDARDS OF CARE FOR ADULT COCHLEAR IMPLANTATION. Sue Archbold. Brian Lamb and Leo De Raeve

Buchman CA, Gifford RH, Haynes DS, et al. Unilateral Cochlear Implants for Severe, Profound, or Moderate Sloping to Profound Bilateral Sensorineural Hearing Loss: A Systematic Review and Consensus Statements. JAMA Otolaryngol Head Neck Surg. Published online Aug 20

# **Consumer and Professional Advocacy Committee**

To ensure the user and CI candidate perspectives were taken into account in the development of the consensus paper, a Consumer and Professional Advocacy Committee (CAPAC) was formed with perspectives of respected international user and professional organisations. The committee made suggestions to the Chair of the Delphi process to ensure:

- Relevance and acceptability of the consensus statements to cochlear implant users and candidates, ensuring a focus on the user experience and that the perspectives of deaf and hard of hearing people have been taken into account in the process.
- The process and outcomes have the confidence of international user and professional advocacy organisations.
- The process and outcomes have the confidence of healthcare providers and their professional organisations. The CAPAC will be invited to provide advice on acceptance and dissemination by professional organisations.

#### The Co-Chairs of the CAPAC were:

- Barbara Kelley (BA) Executive Director of Hearing Loss Association of America
- Dr. Harald Seidler President of the German Hard of Hearing Association and representative of the International Federation of Hard of Hearing People

### The CAPAC Members were:

- Darja Pajk (OT) European Federation of Hard of Hearing People (EFHOH)
- Donna Sorkin (MA) American Cochlear Implant Alliance (ACIA)
- Dr. Leo De Raeve (PhD, in Medical Sciences) European Association of Cochlear Implant Users (EUROCIU)
- Professor George Tvartkiladze International Society of Audiology (ISA)
- Professor Bernard Fraysse International Federation of Otorhino Laryngological Societies (IFOS)



Barbara Kelley, President HLAA presenting at a Delphi meeting of panelists















# Buchman CA, Cifford RH, Haynes DS, et al. Unilateral Cochlear Implants for Severe, Profound, or Moderate Sloping to Profound Bilateral Sensorineural Hearing Loss: A Systematic Review and Consensus Statements. JAMA Ottolaryngol Head Neck Surg. Published online Aug 20

# Why was it important?

Up until now, there has never been any international consensus on the appropriate diagnosis, referral, treatment and aftercare for adults living with SPSNHL. These statements are an important milestone in establishing clinical best practice for adults living with SPSNHL in line with best available clinical evidence. They represent the first step toward the development of international guidelines on best practices for cochlear implantation in adults.

# How were the industry sponsors involved?

This process was the first time in the history of the cochlear implantation that all CI manufactures came together to support the process and align on the need to address adult hearing loss.\*

Advanced Bionics, Cochlear Ltd, MED-EL, and Oticon Medical had no input to the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication. The manufacturers did not participate in selection of the Delphi consensus panel members or in the voting rounds of discussions at any stage in the consensus process. There was no remuneration paid to the Delphi consensus panel members, including the chair and committee members.



# Key insights in the statements from Sue Archbold, Brian Lamb, and Leo De Raeve\*



Level of awareness of cochlear implants



Factors associated with post-implantation outcomes



Best practice clinical pathway for diagnosis



The relationship between hearing loss and depression, cognition and dementia



Best practice guidelines for surgery



Cost implications of cochlear implants



Clinical effectiveness of cochlear implants



## LEVEL OF AWARNESS OF COCHLEAR IMPLANTATION

**Statement 1:** Awareness of cochlear implants among primary and hearing healthcare providers is inadequate, leading to under-identification of eligible candidates. Clearer referral and candidacy pathways would help increase access to cochlear implants.

**Key insights for policy:** Lack of referral pathways to cochlear implantation leads to a substantial unnecessary burden to the individual with hearing loss, with a poorer quality of life. We know that lack of referral and awareness of the benefits of cochlear implantation are the major reasons for under-identification of the many who could benefit.

Estimates suggest that in many countries only 5-10% of potential candidates are implanted. More awareness in primary health care and audiology of the benefits of CIs needs to be promoted to improve access. More knowledge among health professionals about Standards of Care and best practices in CI diagnosis, earlier referral, treatment and aftercare will help many peoplelive healthier and more fulfilled lives.



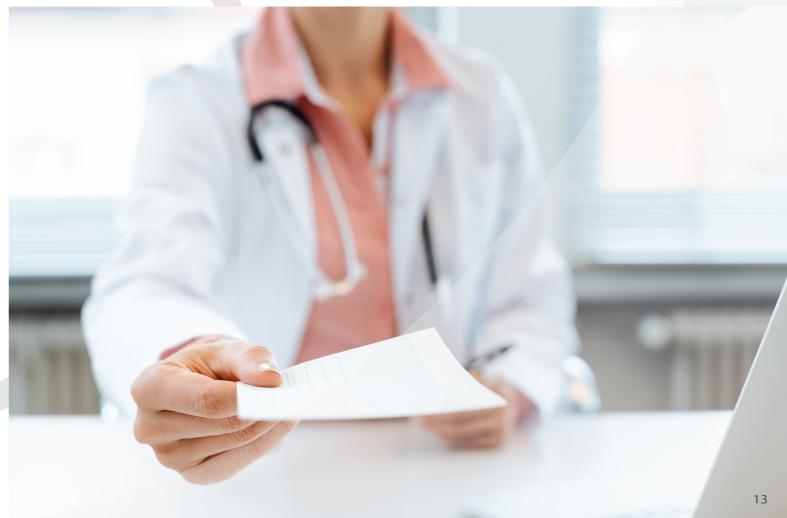
## **BEST PRACTICE CLINICAL PATHWAY FOR DIAGNOSIS**

**Statement 2:** Detection of hearing loss in adults is important; pure tone audiometry screening methods are considered the most effective. The addition of a questionnaire or interview to the screening can improve the detection of sensorineural hearing loss.

**Statement 3:** Preferred aided speech recognition tests for cochlear implant candidacy in adults include monosyllabic word tests and sentence tests, conducted in quiet and noise. Further standardization of speech recognition tests is needed to facilitate comparison of outcomes across studies and countries. Statement 4: Age alone should not be a limiting factor to cochlear implant candidacy, as positive speech recognition and quality of life outcomes are experienced by older adults as well as younger adults.

**Key insights for policy:** Screening for hearing loss in adults is important for the identification of potential candidates for cochlear implantation. Clearer and appropriate criteria for diagnosis of those who may be a candidate for cochlear implants will help create a clear

pathway to implantation and improve understanding of the benefits and appropriateness of CIs by health professionals and the general public. The guidelines and evidence are clear that older age should be no barrier to cochlear implantation.



\*GLOBAL GUIDELINESON STANDARDS OF CARE FOR ADULT COCHLEAR IMPLANTATION, Sue Archbold, Brian Lamb and Leo De Raeve

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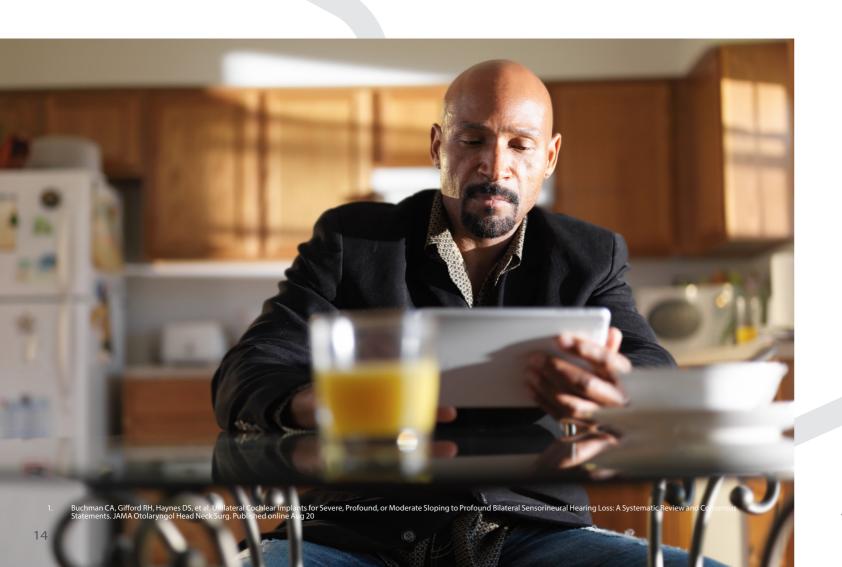
## **CLINICAL EFFECTIVENESS OF COCHLEAR IMPLANTS**

Statement 7: Cochlear implants significantly improve speech recognition in both quiet and moderate noise in adults with severe, profound, or moderate sloping to profound bilateral sensorineural hearing loss; these gains in speech recognition are likely to remain stable over time. Statement 8: Both word and sentence recognition tests should be used to evaluate speech recognition performance following cochlear implantation.

**Statement 9:** Cochlear implants significantly improve overall and hearing-specific quality of life in adults with severe, profound, or moderate sloping to profound bilateral sensorineural hearing loss.

Key insights for policy: Cls are effective in improving quality of life due to improved hearing, and the wider impacts of better communication and connection with the world. Cls are safe with low rates of complications and can also be done while preserving any residual hearing. Cls should be the accepted standard of care for severe and profound deafness in adults.

Cochlear implants significantly improve overall and hearing-specific quality of life in adults with bilateral SPSNHL. 199







# FACTORS ASSOCIATED WITH POST IMPLANTATION OUTCOMES

**Statement 10:** Adults who are eligible for cochlear implants should receive the implant as soon as possible to maximize post-implantation speech recognition.

**Statement 11:** Where appropriate, individuals should use hearing aids with their cochlear implant in order to achieve bilateral benefits and the best possible speech recognition and quality of life outcomes.

**Statement 12:** Many factors impact cochlear implant outcomes; further research is needed to understand the magnitude of the effects.

**Statement 13:** Long durations of unaided hearing loss do not rule out potential benefit of cochlear implants: individuals who receive an implant in an ear that was previously unaided for more than 15 years have been shown to experience improvements in speech recognition.

**Statement 14**: Adults who have undergone cochlear implantation should receive programming sessions as needed to optimize outcomes.

**Key insights for policy**: It is important that for those who are identified as being able to benefit from CIs are provided with an implant as soon as possible to ensure the best possible outcomes. Using hearing aids with CIs also delivers positive outcomes for communication and quality of life. Ongoing support to optimise the functioning and use of the implant is necessary.



# ASSOCIATION BETWEEN HEARING LOSS AND DEPRESSION, COGNITION, AND DEMENTIA

**Statement 15:** Adults with hearing loss can be substantially affected by social isolation, loneliness, and depression; evidence suggests that treatment with cochlear implants can lead to improvement in these aspects of wellbeing and mental health. Longitudinal studies are needed to obtain further knowledge in this area

**Statement 16:** There is an association between agerelated hearing loss and cognitive or memory impairment.

**Statement 17:** Further research is required to confirm the nature of cognitive impairment in individuals with hearing loss, and its potential reversibility with treatment.

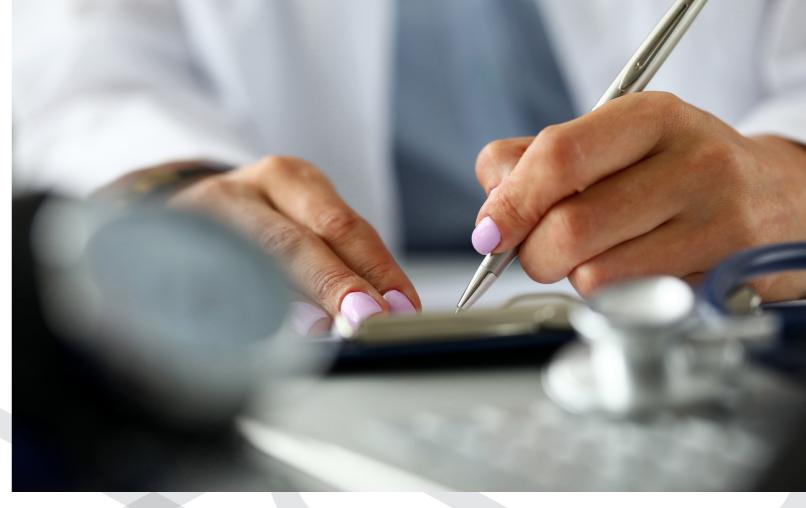
**Statement 18:** The use of cochlear implants may improve cognition in older adults with bilateral severe to profound sensorineural hearing loss.

**Statement 19:** Hearing loss is not a symptom of dementia; however, treatment of hearing loss may reduce the risk of dementia.

Key insights for policy: Addressing hearing loss is associated with improvements in overall wellbeing including mental health by enabling people to communicate more easily with others. This reduces the social isolation and mental health problems associated with hearing loss. Addressing untreated hearing loss improves cognition and may help reduce the risk of dementia. Further research is needed, and being carried out, on the impact of CIs in addressing cognitive impairment and mitigating the risk of dementia.

There is an association between age-related hearing loss and cognitive/memory impairment.







## COST IMPLICATIONS OF COCHLEAR IMPLANTS

**Statement 20:** Unilateral cochlear implantation in adults is cost-effective when compared with no implant or no intervention at all and is associated with increased employment and income.

Key insights for policy: Ensuring that people with hearing loss who could benefit from a CI receive one is not only beneficial for the individual's wellbeing but improves their chances of employment. This reduces the cost of social care and welfare budgets. It is a cost effective intervention for health systems and has the potential to save money on other health related costs.

\*GLOBAL GUIDELINESON STANDARDS OF CARE FOR ADULT COCHLEAR IMPLANTATION, Sue Archbold, Brian Lamb and Leo De Raeve

# ICPINTHE MEDIA

Global media coverage and digital platforms

GLOBAL MEDIA
COVERAGE SPREADS
MESSAGE ACROSS
PROFESSIONAL
AUDIENCE OF MORE
THAN 55 MILLION

Media exposure for the consensus paper saw an unprecedented level of attention from outlets around the world.

The hearing community were informed and motivated to use standard language to describe the narrative from the ICP to drive referrals.

610 media mentions

43 countries

# Coverage highlights...

# **Forbes**

**Consensus Study Says** Cochlear Implants Can Help **People With Severe Hearing Loss Today** 

# HLAA

**Cochlear Implants Standards of** Care: An International Consensus

# Medscape

International Consensus Supports Wider Use of **Cochlear Implants** 

# **News Medical** Life Sciences

Cochlear implants should be offered to adults with moderate to severe or worse hearing loss

# The Hearing Review

'First Global Consensus' on Cochlear Implant Treatment for Adults with **Hearing Loss Published** 



# Washington school of medicine

Cochlear implants should be recommended for adults more often

# **Audiology World News**

Global Consensus can improve adult CI care, but professionals must boost awareness

COCHLEAR IMPLANTS



# Hearing implant recipients' stories front and centre

# **Gold Coast Bulletin**

"It's worth hearing: **Surgeon voices** concern over Coast's loack of public cochlear service"

# **WA Today**

"How a Perth mother can choose to silence her world - or tune in to what's going on around her"

# Click here for more recipient stories.



Diane from Rotherham UK shares her experience with being given back her sounds



80 year old Malcom rediscovers favourite activities after implantation



See how Karl, a cochlear implant recipient from Kaukapakapa New Zealand got a new lease on life

# Podcasts via Hearing Health Today and JAMA explore why SoC is crucial in addressing the growing hearing loss epidemic





Click here for more episodes in the series.



# International professional media highlights the need for improved access to cochlear implantation

# **Physician's Briefing**

Consensus Statements Issued for Adult Cochlear Implantation

# Medscape International Consensus Supports Wider Use of Cochlear Implants

# **Audiology Online**

JAMA Otolaryngology Publishes Consensus Statements on CI in Adults

# AusDoc

Age alone not a barrier for cochlear implant, say otolaryngologists

# **Science Daily**

Cochlear implants should be recommended for adults more often

# **Doof**

Meer aandacht nodig voor mogelijkheden cochleaire implantatie bij volwassenen

Technisches Hintergrundwissen

# CI-Versorgung: Hilfestellung für eine schwierige Entscheidung

Die Versorgung mit einem Cochlea-Implantat (CI) ist für sich genommen schon eine sehr bedeutsame Entscheidung. Ist sie getroffen, steht die Wahl des passenden CI-Systems an. Der nachfolgende Überblick soll Ihnen nützliches Hintergrundwissen vermitteln, damit Sie Ihre Kunden umfassend und kompetent beraten können.

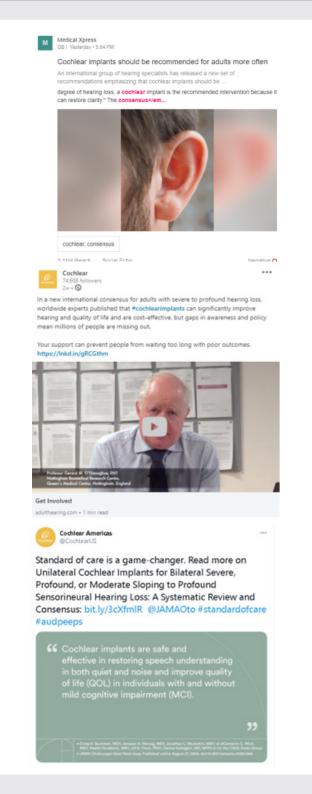
Grundsätzlich gibt es nicht des beste Gochhea-Implantat(CI)-System, sondern die Wahl hängt – neben anatomischen Eigenschaften der Hörschnecke – auch immer von individuellen Prioritäten ab, vor allem im Hinblick auf den Audioprozessor. Daneben maßgeblich sind das Implantat und der Elektrodenträger.

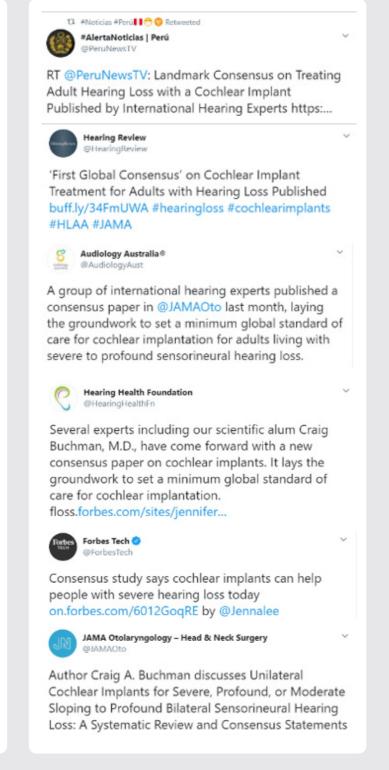
Grundlegend ist die Cochlea schneckenformig aufgebaut. Darin befinden sich die Haarzellen, wobei jeder Ort einer bestimmten Tonhöhe entspricht - am Eingang der Cochlea (basal) befinden sich die hohen Tone, an der Spitze (apikal) die tiefen Tone. Da die Länge der Hörschnecke von Mensch zu Mensch sehr verschie den ist – zwischen etwa 28 und 46 Millimeter –, bieten alle Hersteller unter-



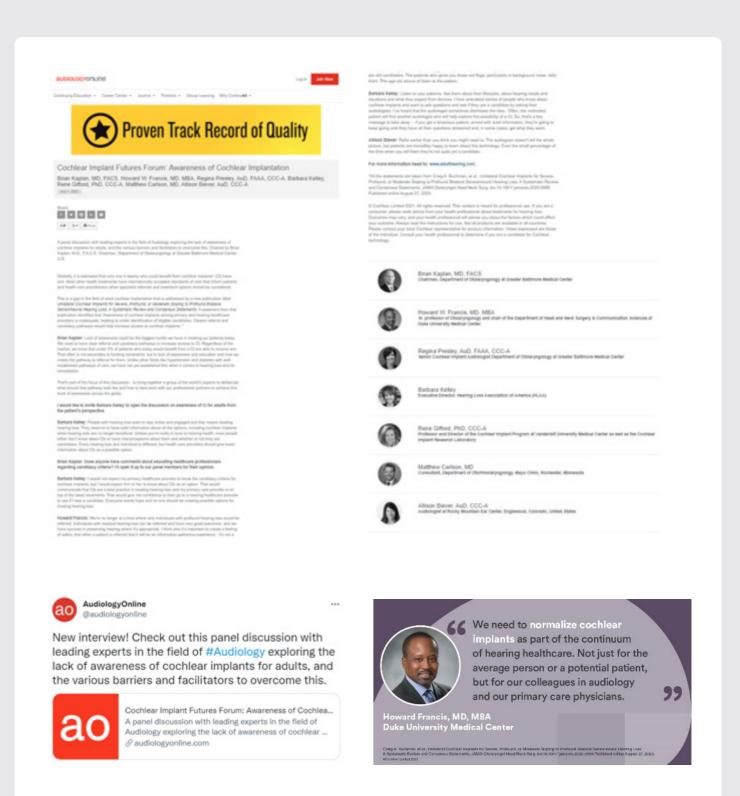
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# ICP messages reaching a broad social media audience





# Awareness whitepaper published via Audiology Online



# ADVOCACY

**UNIFIED ADVOCACY VOICE ACROSS CONTINENTS AS TO** THE IMPORTANCE OF IMPROVING REFERRAL **PATHWAYS AND ADULT CI ACCESS** 







Landmark Consensus on Treating Adult Hearing Loss with a Cochlear Implant Published by International Hearing Experts

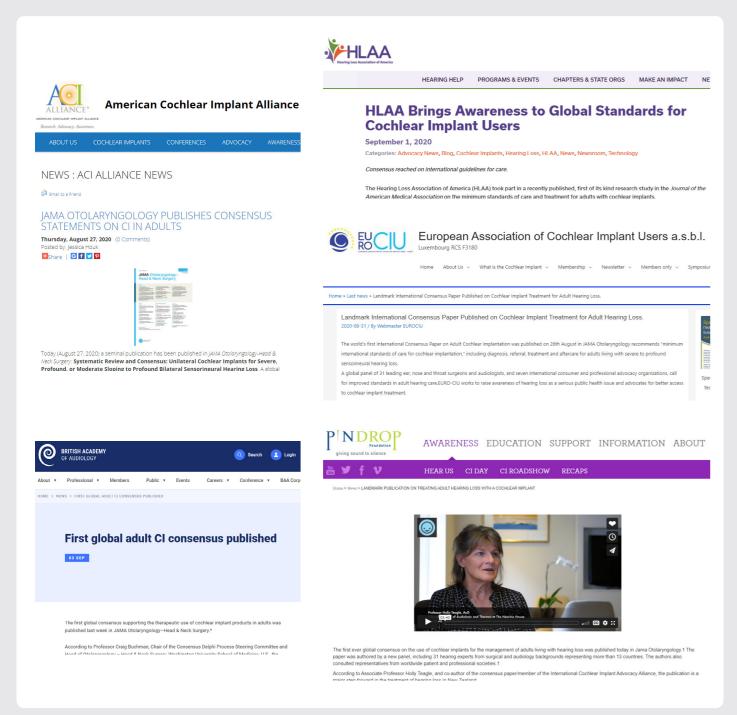
August 27, 2020 11:09 ET | Source: Hearing Loss Association of America





Nordic Advocacy Meeting

# Author and advocacy organisations spread news to key stakeholders via owned channels



# Government & policy activity: evidence into action

Convergence of activity focused on SoC influencing policy locally with the **ICP** and **WHO World Report on Hearing** providing a flow on effect to local Government.

# German Government Parliamentary Meeting

 "The German Hard of Hearing Association calls for better access to cochlear implants for people with severe to profound hearing loss."

# AUS CEO forum submits Hearing Services Program Review to Govt.

 Recommendations for referral and candidacy pathways and increased awareness

# Italian Society of Otorhinolaryngology lobby effort

 "This webinar was a unique chance to realize that we need a joint approach to move toward new national guidelines"

**US FDA ICD** code effort for severity of hearing loss & "**Know your PTA**" campaign in collaboration with **Johns Hopkins**.



Parlimentary evening on World Hearing Day!

# Local consumer and advocacy groups drive transformation of CI-care

International Consensus Paper by the numbers: 31 experts, 7 advocacy groups, 7 categories covered, 74 papers reviewed and 20 statements dedicated to treating adult hearing loss with a cochlear implant. Learn more: short.url/aBcXyZ #audpeeps #cochlearimplant



## CAPAC Meeting

International adulthearing.com ciety of Audiolo

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**COCHLEAR IMPLANT INTERNATIONAL COMMUNITY OF ACTION** 

Learn more at CIICANET.ORG

# THE FOUNDATION FOR CIICA: WHO ARE WE?

The issue addressed by CICA is the massive gap between those who could potentially benefit from CIs and those who have them only 5-10% of those in developed nations with severe to profound deathess and hearing loss have a CI, in spite of the benefits to individual and society being well proven, including the cost effectiveness.

> CICA provides an opportunity for a new way of working for

Cl advocacy groups,

collaboration to strengthen the user

and family voice.

bringing them together with opportunities for sharing and

The proposal for CECA to address this issue globally followed an international consultation with key stakeholders about the role of Cliedvocacy work and its strengths and challenges. This consultation arose from the agreements and interest expressed at a meeting of the Consumer and Professional Advisory Committee (CAPAC). of the Consumer and Professional Advisory Committee (CAPAC) including all industry statisharishar in Colenae in December 2010, where the International Consensus Statements on adult cooklear implantation (CI) were presented. COVID 19 has clearly impacted or funding and practices for Clientees worldwide and the potential for CICA has become even more important and timely.

We describe CICA, to goals and plans and provide the responses of the consultees which drive this initiative.

#### **OUR VISION FOR CITCA**

The vision of CICA is a world in which awareness of the The vision of CL is A wood in which was received the benefits of CL are well known to those with deathest and hearing kes, their families, professionab in the field of hearing care, the general public and public hearth decision makers. A world where a cross to CL and lifetong support is evaluable to all appropriate.

#### **OUR GOALS FOR CITCA**

To increase the number of different and adults globally who have access to cochlear implants and irlationg aftercare by:

- Resing the international global awareness of the health, social and economic benefits of cochlear implants for those who could benefit, from implantation, health care practitioners and wider society.
- Empowering user lad advocacy and awareness raising activity to influence governments and health funders to insert in addressing the under provision of Cb and other implantable technologies, related habilitation, after care and up-grades.
- Supporting Cliedvocates with the took they need to achieve change.

The impact will be improved access globally to cochiese implantation, rehabilitation, life-long technical support including processor upgrades and aftercare driven by C **EURO-CIU BRIEFING** 



# GLOBAL GUIDELINES ON STANDARDS OF CARE FOR ADULT COCHLEAR IMPLANTATION

in every country access to cochlear implantation (CI) for adults with severe or profound bearing loss is lose. Globally, it is estimated that only one in twenty who could benefit from cochlear implants have one. Most other health treatments have internationally accepted standards of care that inform patients and health care practitioners about when specialist referrals and treatment options should be considered.

This is a gap in the field of adult cochlear implantation that is addressed by a new sublication titled "International Consensus Paper on Adult Corblear Implantation."

They have been developed by an international panel of experts based on examining the latest evidence and consisting with user and advocacy organisations and their goal is to improve access and practice in this proven intervention.

The authors condude that international guidelines on adult cochlear implantation candidacy are limited, and that guidelines vary from country to country. This leads to both differing levels of access and lack and systematic underuse across the world. The barriers to access they identity include low awareness and understanding of the benefits of cochlear implantation, poor knowledge of surgical candidacy criteria among health care. professionals, and a lack of dearly defined care pathways.

There needs to be continued efforts to raise awareness about the benefits of codhear implants and in many countries update professional guidelines to enable better access to cochicar implants. European Ci User organisations are working to raise awareness of the benefits of cochlear implants and advocating access to bi-lateral Citreatment, after care and rehabilitation

Statements represen the first step toward the development of international practices for cochlear

mplantation in

adults.

These International

CIICO

# Multi-channel dissemination to drive awareness and engagement for adult hearing opportunity in China

# **Highlights:**

Advocacy partnership with the China Deaf People Association to share awareness of the Consensus Statement and gaining commitment to deliver seminars to promote the ICP to deaf adults in the community and raising as evidence in helping support formulation of policy.

**Professional activation** with support from Prof Wu Hao -Consensus Paper co-author and Delphi panel member and Chairman of Chinese ENT association to introduce the ICP during the National Ear Conference in October.

Consumer reach via Cochlear WeChat with >1100 views.

## To professional & consumer

- · Beijing Hearing Association(北京听力协
- · ENT(听力学耳鼻咽喉 与头颈外科)
- CI.com (人工耳蜗网)

# German advocacy group endorsement!



German Assoc. of hearing (DSB) integrated ICP in policy website.

DSP and leading otologist accepted parliament evening 03.03.21

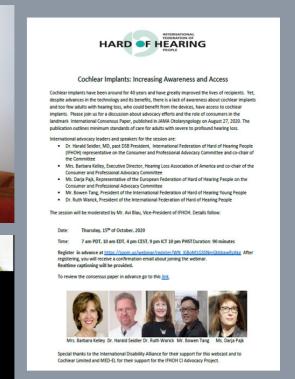


Dr Harald Seidler provides his perspective from a consumer and advocacy perspective as to the significance of the International Consensus Paper and the next steps in reaching standard of care.

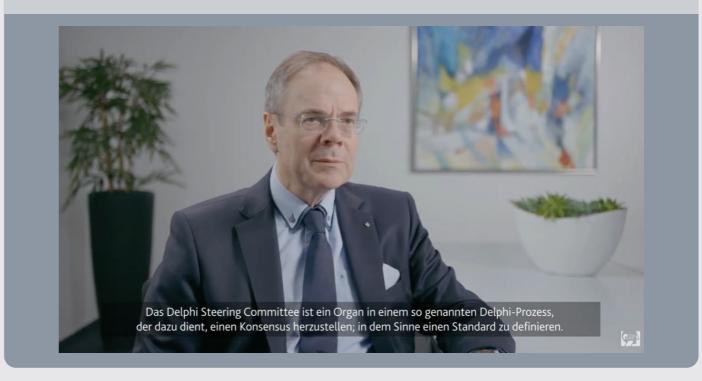
# PODIUM

# Proactive adult ICP support | EURO-CIU, IFHOH, ACIA, HLAA





# Unified voice from our professional partners on the importance of SOC



# Journal clubs and editorials on the ICP make the news!





Cochlear symposium @ online ENT congress: Prof. Timo Stöver on health policy recommendations to drive access to CI

Michal Luntz in Milano: Spreading the SoC word!



# CI Futures Forum series 1 & 2

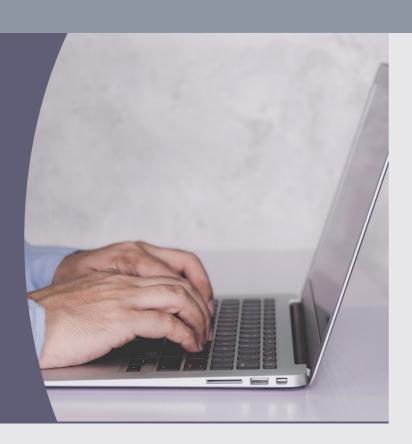


12 webinar events

> 2,500 total registrations



# **EDUCATING OVER** 6,000+ AUDIOLOGISTS **VIA A SERIES OF PROFESSIONAL WEBINARS FOCUSED** ON THE ICP **CATEGORIES**





nsus statements for cochlear implantation ory 6 - The relationship between hearing loss and

chlear implants for bilateral severe, profound, or moderate sloping to profound sensorineural hearing loss<sup>1</sup>

Category 5 - Factors associated with post-implantation

# BAA/BCIG Cochlear **Implant Champions** Webinar

29th September 2020

Tracey Twomey, Tim Mann, Shahad Howe, Laura Turton, Judith Bird, Helen Peebles, Leanne Ponte, Steve Woods, Janet Uttley, Jenny Townsend, May and Victoria (BAA admin and media), BAA Service Quality Committee and National Cochlear Implant Users Association. Thanks to all the Champions for signing up, and to the Mentors for agreeing to support the Champions.



AnnMarie Dickinson (BAA SQC) Linor Llwyd Jones (BAA SQC) Unai Martinez de Estibariz(BCIG) Martin O'Driscoll (BCIG)



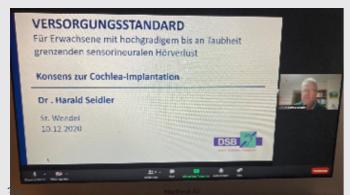
## STANDARD OF CARE

For adults with severe to profound sensorineural hearing loss

#### Consensus for cochlear implantation



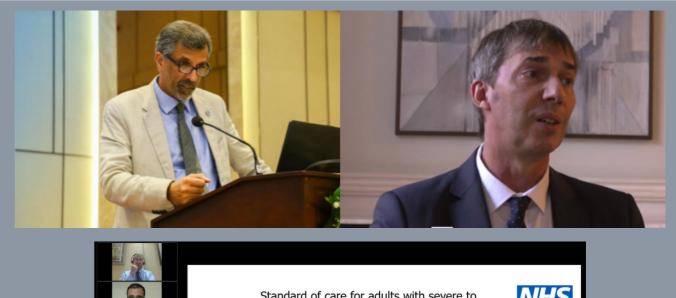






# Professional webinars continue...

# COCHLEAR SCIENCE AND RESEARCH SEMINAR; SOC IN EMEA





## STANDARD OF CARE WEBINARS IN ITALY



# WHAT'S NEXT?

Consensus statements should provide a stepping stone towards establishing clear, consistent, international clinical guidelines and best practice for patients

# Whats next?

Consensus statements should provide a stepping stone towards establishing clear, consistent, international clinical guidelines and best practice for patients

The Delphi consensus process outcomes will provide a summary of clinical evidence and expert opinion on cochlear implantation in adults

Findings from the Delphi process have the potential to:

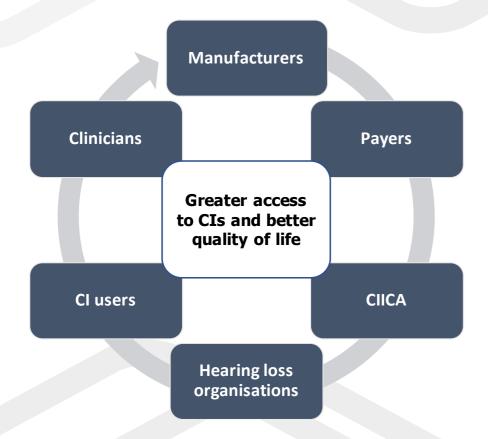
- help establish CIs as the standard of care for adults with severe to profound SNHL
- raise awareness of CI as a treatment option and when it should be considered
- achieve appropriate improved access to CIs for patients who would benefit
- help optimize patient pathways, leading to treatment that improves the individual's hearing function and quality of life







Working together towards the same goal...



# Living Guidelines ... Guidelines for the living

The publication was a world-first in recommending an international minimum standard of care for cochlear implantation and the first step in the long-term journey towards establishing best clinical practice in the use of CIs for adults.

We are due to embark on the next phase of this journey, with the development of a sophisticated resource of living guidelines, one that we hope will ultimately be used to change or develop clinical practice guidelines across a large geography.

More details will be made available on this topic very soon.



Creation of guidance and guidelines to optimise the standard of care for adults eligible for CI via an evidence based, real time repository under the governance of a coalition of the willing.

40 41

# The call to action has resulted in subject matter experts signing up to advisory groups around the world to tackle hearing health for adults

# **Objectives:**

- Raise awareness of the benefits of CI in Adults, in the community, among audiologists and primary health care professionals and politicians.
- Create and ensure a person-centred and consistent referral pathway, which results in consistent diagnosis and more timely referral to CI specialists of candidates who may benefit.
- Sustainable funding and consistent standards of access, including consistent approaches to waiting times, access to a second implant and replacement sound processors.
- Enabling recipient and candidate-centred new models of care including through the development of tele-audiology
- Support Cl user voices and those who would benefit from access to be heard in the community and by policy makers.

# ADULT **HEARING**

Consensus Process and Publication > About Us 🗸 Resources > Consensus statements >



A STANDARD OF CARE INITIATIVE FOR THE UNITED STATES OF AMERICA



Every adult with hearing loss in has timely and accurate diagnostic and treatment information required to make an informed decision to optimize their hearing.

> CLICK HERE TO LEARN MORE ABOUT THE HEARING HEALTH COLLOBORATIVE

### Co-chairs



Matthew Carlson, MD



Sarah A. Sydlowski, Au.D., Ph.D., M.B.A.

# **Participants**



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University

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Heidi Hill, AuD Hearing Health



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Meredith Holcomb AuD, CCC-A University of Miami



Donna Sorkin, MA American Cochlear Implant



Ben Balough, MD, Neurotologist KaiserPermanente



Christopher Spankovich, PhD Uni, Mississippi



Anna Jilla, AuD, PhD Uni. Texas



Alex Sweeney, MD Baylor; Texas Children's Hospital



Barbara Kelley **Hearing Loss** Association of



Doug Sladen, PhD Western Wash. Uni.



Jacob Hunter, MD University of

# The goal:

Meagan Lewis, AuD Wake Forest Baptist Health



Richard Gurgel, MD, MSCI Uni of Utah



Samuel Gubbels, MD, FACS UC Health

Tracy Murphy, AuD North Shore Audio VestibularLab

# Ongoing professional education to overcome awareness





# **Upcoming Webinar CI Futures Forum: Cost Implications of CIs**





# THANKYOU