



**BCIG
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**British Cochlear
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Abstract Book



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Oral Presentations

Beyond the Booth: Co-developing a Digital Testing Platform with Clinicians for Speech Assessments

Oral

Ms. Lisabeth Buelt (University of Cambridge), Prof. Debi Vickers (University of Cambridge), Mrs. Gayle Leeson (Cambridge University Hospitals), Mrs. Justine Maggs (Midlands Hearing Implant Programme (Children's Service)), Dr. Marina Salorio Corbetto (University of Cambridge)

Aims

To identify components for an iPad-based digital testing platform to enable speech and spatial hearing assessments without a specialised booth for individuals with bilateral hearing devices, supporting testing standardisation across clinical sites.

Method

Researchers developed a list of spatial-listening and standard hearing assessments for potential inclusion in a digital testing platform. Using action-research principles, the project concept and assessment list were presented at two clinician and researcher involvement events. At Event 1 (E1), more than twenty attendees reported their speech testing priorities via Slido. Responses were analysed thematically. At Event 2 (E2), twelve participants reviewed the assessment list, discussed strengths and limitations of current tools, and deliberated ideal specifications for a digital testing platform considering recent changes to clinical practice (e.g. remote testing, national registry).

Results

E1 participants prioritised spatial and speech-in-noise testing for clinical practice, emphasising usability and measurement quality. Additionally, participants identified key clinical tests (e.g. AB Words, BKBs, A\$E) for inclusion in the platform. E2 participants proposed four key recommendations for developing a digital testing platform: 1) assessments must be appropriate for a range of age groups and clinical contexts; 2) standard tests should be included; 3) the reporting format should be clear and support clinical decision-making; 4) it could offer a hierarchy of tests with different attributes (spatial listening, speech discrimination). Insights from both events informed a prototype decision-making hierarchy.

Conclusion

Clinicians expressed interest in developing a digital testing platform. A prototype decision-making tool was developed and will be further evaluated by a group of clinicians, researchers, and parents.

Does the Symons and Fanning Classification of Otosclerosis Correlate with Surgical Difficulty during Cochlear Implantation?

Oral

Ms. Holli Coleman (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mr. Paul Sooby (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Natasha Grimmond (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme), Dr. Seamus Culshaw (Radiology department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Dr. Alan Ogg (Radiology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Ms. Lyndsay Fraser (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.)

Aims

To assess the relationship between otosclerosis severity graded on pre-operative computed tomography (CT) imaging using Symons and Fanning classification and peri-operative surgical difficulty in cochlear implantation (CI) including luminal obstruction, electrode choice and completeness of electrode insertion. We hypothesized that grade 2-3 disease correlates with increased surgical difficulty, greater use of rigid electrodes (CI612) and pre-operative magnetic resonance imaging (MRI) use.

Method

This retrospective study included 23 patients with otosclerosis undergoing unilateral CI surgery between 2019-2025. Otosclerosis severity was graded on pre-operative CT by two independent radiologists using Symons and Fanning classification system. Patient records were reviewed to collect data on additional pre-operative MRI, peri-operative surgical difficulty including luminal obstruction, electrode choice and insertion. Data was analysed using SPSS software.

Results

Twenty-three patients with otosclerosis underwent cochlear implantation; 21 (91.3%) had pre-operative CT (grade 1, n=5; grade 2-3, n=16). Radiologist Inter-rater agreement was 76%. Pre-operative MRI was performed in 5 cases of grade 2-3 disease; however, this was not statistically significant ($p=0.278$). There was no association between CT grade and intra-operative difficulty ($p=1.00$) or luminal obstruction ($p=1.00$). The CI622 was the most frequently used electrode across all grades (n =16). The CI612 electrode was used in 4 patients with grade 2-3 disease, however this was not significant ($p=0.152$). Full electrode insertion was achieved in all patients.

Conclusion

In this small cohort, grade 2-3 otosclerosis was not significantly associated with increased surgical difficulty, including luminal obstruction, electrode selection, or insertion. Therefore, grade 2-3 otosclerosis does not necessitate routine pre-operative MRI or rigid electrode selection.

How Low Can You Go?: The Effect of Reduced Stimulation Rates on the Perception of Phonemes, Sentences, Pitch, and Prosody by Cochlear-Implant Users

Oral

Dr. Lidea Shahidi (University of Cambridge), Dr. Robert P Carlyon (University of Cambridge), Prof. Debi Vickers (University of Cambridge), Dr. Tobias Goehring (University of Cambridge)

Aims

Contemporary cochlear implants use high stimulation rates, but a recent speech processing strategy investigation suggests that considerably fewer pulses can be used with no detriment to speech perception (Shahidi et al., 2025). Previous studies of stimulation rate suggest that speech intelligibility can be maintained when using rates below the participants' clinical stimulation rate, with phoneme recognition unaffected by rates as low as 150 pulses per second (pps). Here, we thoroughly investigate speech perception at low stimulation rates across a range of tasks that encompass the utility of speech in everyday perception.

Method

A double-blind within-subject experiment tested twelve recipients of Cochlear™ devices across seven stimulation rates: 80, 110, 160, 240, 350, 500, and 900 pps. Speech perception was measured using complementary measures of phoneme, sentence, pitch, and prosody perception. Measures were taken acutely with no acclimatisation, and threshold and most-comfortable levels were measured for each rate and loudness balanced across rates.

Results

All tasks were significantly affected by rate, with group-level performance gradually declining with decreasing rate. Subjects demonstrated idiosyncratic patterns of performance across rates. Data collection is nearing completion and pairwise comparisons will indicate which rates significantly worsen speech outcomes.

Conclusion

Speech perception is robust to reductions in rate well below those used clinically. Rates as low as 240 pps appear to accurately convey speech information, with sentences, prosody, and pitch being most sensitive to lower rates. Stimulation rate can easily be modified in the clinical software, leading to substantial power savings with no detriment to speech perception.

Reference (if applicable)

Shahidi (2025). EarAndHearing. DOI:10.1097/AUD.0000000000001741

Indicators of progress (IoP) in the first year of cochlear implant use for adult patients

Oral

Mrs. Anne-Marie Marley (Nottingham Auditory Implant Program), Mrs. Angela Maxwell (Nottingham Auditory Implant Program)

Aims

At Nottingham Auditory Implant Programme (NAIP), we have developed a resource to identify ‘red flags’ in adults’ progress during their first year of cochlear implant use. This Adult IoP tool builds on the success of the NAIP paediatric IoP and aims to support expectations counselling during cochlear implant assessment and early identification of any concerns post-operatively.

Method

Expected milestones are presented in an adaptable, visual table, across four domains: processor use, detection of sound, receptive language, and expressive language/speech. Each milestone includes an expected timeframe; for example, an adult having difficulty hearing and monitoring their own voice by three months post cochlear implantation may indicate a concern/further investigation. The tool also highlights factors that may affect progress, including equipment issues (e.g. retention affecting processor use), environmental influences (e.g. limited communication opportunities), and individual factors (e.g. possible cognitive impairment).

Results

The Adult IoP is now used within our multi-disciplinary team alongside patients and their families. Expectations are tailored to each adult, e.g. reasonable expectations for an adult with sudden-onset post-lingual hearing loss would differ to a congenitally deaf adult with limited prior access to sound. Sharing the IoP before surgery supports discussions about realistic outcomes and rehabilitation planning as well as supporting post-operative outcome monitoring. Any perceived impact on quality of life is also recorded in the table.

Conclusion

Early feedback suggests the Adult IoP is a valuable counselling and monitoring tool that also empowers adults in their own rehabilitation. This poster will outline the tool and clinical experience of its use to date.

National Prospective Study of Cognitive assessment in cochlear implant patients

Oral

Dr. Tamer El Natout (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital Ireland), Mr. Khalid Alshaikh (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital Ireland), Dr. Cristina Simoes Franklin (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital Ireland), Mr. Fergal Glynn (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, Royal College of Surgeons, Ireland), Prof. Peter Walshe (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, Royal College of Surgeons, Ireland), Mr. Adrien Gendre (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, Royal College of Surgeons, Ireland)

Aims

Hearing loss is the most significant modifiable risk factor for dementia. Some studies suggest that auditory rehabilitation via cochlear implantation can influence cognitive status. We assessed cognition with the Hearing-Impaired Montreal Cognitive Assessment (Hi-MoCA) in CI candidates pre-operatively and 1 year post-operatively, and explored relationships with speech perception outcomes.

Method

Prospective single-centre study at the National Hearing Implant and Viani Research Centre, Beaumont Hospital. Postlingually deaf CI candidates aged ≥ 65 years completed Hi-MoCA before CI and at 1 year. Hearing outcomes were measured with BKB sentence scores and AB speech audiometry.

Results

To date, 97 patients completed pre-CI Hi-MoCA and 53 completed 1-year follow-up (30 males, 23 females). Mean age was 74 years (range 64–88). Mean BKB improved from 41.6% pre-CI to 82.5% post-CI. Hi-MoCA improved from 24.4 to 26.4/30 ($p=0.001$). Pre-operative Hi-MoCA correlated with BKB improvement (Spearman $r=0.442$, $p<0.002$). Subdomain scores associated with greater BKB scores included visual/executive function ($r=0.308$, $p=0.037$), naming ($r=0.351$, $p=0.017$), abstraction ($r=0.403$, $p=0.005$) and orientation ($r=0.417$, $p=0.004$). A higher pre-operative Hi-MoCA naming score also correlated with a higher AB word score at 1 year ($r=0.319$, $p=0.045$).

Conclusion

Hi-MoCA scores improved significantly 1 year after CI and were associated with post-CI speech perception gains. Baseline cognitive performance, particularly in selected domains, may help predict auditory benefit. Incorporating hearing-appropriate cognitive screening into routine assessment of older CI candidates may improve counselling, expectation setting and personalised rehabilitation planning.

Reference (if applicable)

References in attached PDF

Pain Management in Cochlear Implants – Results of UK Survey

Oral

Mrs. Murette Ambler (Midlands Hearing Implant Programme (Children's Service)), Mrs. Justine Maggs (Midlands Hearing Implant Programme (Children's Service)), Mrs. Christine Melling (The Richard Ramsden Centre for Hearing Implants), Ms. Kerri Millward (The Richard Ramsden Centre for Hearing Implants), Mrs. Christina Maynard (Yorkshire Auditory Implant Service), Ms. Catherine Totten (Yorkshire Auditory Implant Service)

Aims

Pain in recipients with cochlear implants is an uncommon but significant complication. In rare cases pain occurs without an identifiable cause, is difficult to treat, and can negatively impact patient quality of life and implant use. It can also lead to explantation and reimplantation in order to try and resolve the issue.

Method

In 2025 a group of CI clinicians from Birmingham, Bradford and Manchester came together to review current approaches to managing pain in CI recipients and to assess variation in practice across the UK. A survey was created and cochlear implant centres in the UK and Eire were asked to complete for their patients.

Results

10 centres responded to the preliminary survey asking about the number of CI recipients reporting pain and how the pain was managed. Current practice is varied but can be divided into 3 categories: Therapeutic, Medical and Surgical. Outcomes of these pain management options is also variable.

Conclusion

This presentation will share the results of the questionnaire and indicate where further information is required. The authors propose the adoption of a BCIG working group (or sub-group) to further develop national guidelines for more systematic and effective management of such cases.

REVs APP for rapid differential diagnosis of cochlear implant electrode issues

Oral

Dr. Mary Grasmeder (University of Southampton Auditory Implant Service), Dr. Christopher Satchwell (University of Southampton Auditory Implant Service), Dr. Mehtap Ozbey-Arabaci (Faculty of Engineering and Physical Sciences, University of Southampton), Prof. John Robinson (Faculty of Engineering and Physical Sciences, University of Southampton), Ms. Wenrui Qiao (Faculty of Engineering and Physical Sciences, University of Southampton), Ms. Eloisa Kattenhorn (Faculty of Engineering and Physical Sciences, University of Southampton), Prof. Carl Verschuur (Faculty of Engineering and Physical Sciences, University of Southampton), Prof. Tracey Newman (Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom.)

Aims

Access to diagnostic testing for cochlear implant [CI] clinics, including integrity testing, has been limited by the difficulty of analysing relevant data. We introduced in-house Recording of Electrode Voltages [REVs] using surface electrodes six years ago and have collected data from >200 Nucleus devices.

We aim to automate differential diagnosis of common CI issues, including electrode faults, insertion issues and anatomical differences by developing a REVs analysis app.

Method

EV recordings made in common ground mode, and pre- and post-operative radiology were included for 212 CIs, ranging from CI24M to CI600 series.

An app was developed, offering visualisation and quality control of EV recordings and polynomial fitting to assess electrode function.

A machine learning model was developed with nine targets: normal, faulty electrodes, tip rollover, abnormal anatomy, partial insertion, fibrosis/ossification, combined faulty electrodes with abnormal anatomy/ossification, over-insertion, Nucleus double array. Together these form a pipeline for analysis.

Results

Cochlear implant recipients were 2.9-88.8 years old at time of testing. 197/212 devices were normally inserted; anatomy was normal for 159 cochleae. EVs were a good fit to a 5th order polynomial for 103 devices, suggesting good electrode function. EVs for 12 devices were atypical due to abnormal anatomy.

The initial machine learning model shows good separation between different issues.

Conclusion

Automated differential diagnosis of common CI issues is within our grasp. The machine learning model would benefit from more data and for this we would like to extend the study to include more centres within the UK.

Socioeconomic Deprivation and Cochlear Implantation in Scotland: A 35-Year Population-Based Equity Analysis

Oral

Dr. Chinaza Pearl Chukwujekwu (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Ms. Lyndsay Fraser (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Natasha Grimmond (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Ms. Rachael McFarlane (Scottish Cochlear Implant Programme), Dr. Sarah Wattley (Aid with statistics), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme), Mr. Paul Sooby (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.)

Aims

To examine whether cochlear implantation activity in Scotland reflects expected population need across socioeconomic deprivation strata, and identify potential inequities in access to cochlear implantation among paediatric and adult populations.

Method

We analysed cochlear implantations performed in Scotland between 1989-2025, stratified by age group (paediatric/adult) and Scottish Index of Multiple Deprivation (SIMD) decile at implantation. Observed implantation activity was compared descriptively across deciles and interpreted against a needs-based framework incorporating known socioeconomic gradients in hearing-loss risk and audiological service access.

Results

A total of 1,808 implants were included (819 paediatric; 989 adult). Paediatric implantation showed a modest gradient towards more deprived deciles, with 35% of implants occurring in SIMD deciles 1–3. Adult implantation was more evenly distributed across deprivation strata, with 30% of implants occurring in deciles 1–3 and similar in deciles 8–10. When compared with expected distributions based on established socioeconomic gradients in hearing loss prevalence and unmet need, adult implantation appeared disproportionately low in the most deprived deciles. Paediatric activity demonstrated closer alignment with expected need but did not fully reflect the magnitude of deprivation-associated risk.

Conclusion

Over a 35-year period, cochlear implantation activity in Scotland does not appear to be fully aligned with expected socioeconomic patterns of need, particularly for adults. These findings may suggest persistent unmet need, highlighting the importance of targeted referral pathways and outreach. Further research should focus on socio-economic barriers to cochlear implantation, ensuring equitable referrals to the Scottish cochlear implant programme and accurate modelling of socio-economic need for implantation rather than audiological services need.

The Role of Modiolar Proximity for Cochlear Implant Electrodes

Oral

Prof. Andrzej ZAROWSKI (European Institute for ORL-HNS)

Aims

Optimising cochlear implant (CI) electrode positioning remains a key surgical objective to improve speech perception, reduce channel interaction, and preserve residual hearing. Perimodiolar electrode arrays are designed to position contacts closer to the modiulus and spiral ganglion cells, enhancing neural selectivity and lowering stimulation thresholds. However, clinical evidence regarding the impact of modiolar proximity on functional outcomes has not yet been widely accepted. This presentation evaluates the role of modiolar proximity in CI outcomes.

Method

Findings from published literature, institutional data, validation studies, and recent multicentre trials are reviewed. Electrode positioning was analysed using cone-beam CT and advanced imaging techniques, focusing on modiolar distance, scalar location, and their relationship with speech perception outcomes, electrophysiological measures, and hearing preservation.

Results

Multiple studies demonstrate that reduced modiolar distance is associated with narrower excitation spread, lower stimulation thresholds, improved electrode selectivity, and better speech discrimination, particularly in difficult listening conditions. The PREVA multicentre trial identified scalar translocation as a strong independent predictor of poor performance, with significantly lower translocation rates observed for slim perimodiolar electrodes compared to earlier designs. Institutional data further show correlations between modiolar proximity, improved word recognition, and favourable electrophysiological outcomes. Slim modiolar electrodes appear to substantially reduce scalar translocations and improve consistency of outcomes.

Conclusion

Accurate assessment of electrode–neural distance is essential for evaluating the clinical impact of modiolar proximity. When optimally positioned, perimodiolar electrodes provide measurable performance advantages and support hearing preservation. These findings highlight the importance of electrode design, refined surgical technique, and targeted surgical training to maximise CI outcomes.

Using Generative Speech Models to Improve Audiological Testing Capabilities

Oral

Dr. Lidea Shahidi (University of Cambridge), Dr. Tobias Goehring (University of Cambridge)

Aims

Audiological speech assessments can indicate a cochlear implant recipient's communication success in everyday life, but conventional assessments are limited in their predictive utility (Dornhoffer et al., 2020). Given the time and cost required to produce speech recordings, the available assessments contain a small number of stimuli and represent a restricted range of communications experiences. To aid in the development of diverse and representative speech assessments, this work explores the use of contemporary generative speech synthesis for creating clinically applicable speech assessments.

Method

This study evaluated three text-to-speech voice-cloning models on the task of replicating and extending the Bamford-Kowal-Bench (BKB) sentence test, a standardised open-set speech assessment used in UK audiology clinics. Models were evaluated in an online study (N = 73) of intelligibility (psychometric functions of word recognition in a twenty-talker noise), quality (mean opinion score), and speaker replication (two-alternative forced-choice task for replication and within-model consistency).

Results

Results indicate models which accurately replicate speaker characteristics, intelligibility, and naturalness of the BKB sentence test, with differences noted across models. A comparison of list consistency and test-retest performance will reveal whether synthetic speech provides the experimental control necessary to facilitate efficient test calibration.

Conclusion

Models were identified that can produce speech suitable for audiological testing, with implications for the development of synthetic audiological speech materials that represent a range of lived experiences. Further work is needed to identify the factors driving differences in intelligibility, to ensure synthetic speech assessments are suitable for clinical use.

Reference (if applicable)

Dornhoffer (2020). Assessment of hearing aid benefit... *Audiology&Neurotology*. DOI:10.1159/000506666

Poster Presentations

“How did your MRI scan go?” – a BCIG questionnaire

Poster

Mr. Robbie Evans (Scottish Cochlear Implant Programme)

Aims

The “How did your MRI scan go?” questionnaire was developed as part of the BCIG MRI working group in an effort to better understand the risks involved for cochlear implant patients. This poster aims to show some of the data collected from this questionnaire and discuss emerging themes.

Method

From a template questionnaire, individual implant centres distributed the questionnaire to their patients who had undergone an MRI scan. Responses were collected and implant information added before analysis of implant model and overall experience.

Results

Preliminary results are discussed, showing the difference in experiences for patients requiring head wrapping and/or splint kits to be used, to those not. Limitations in terms of data collection are also discussed.

Conclusion

There is variation across CI centres and MRI departments in confidence of scanning cochlear implant patients. This data hopes to help better convey likelihood of pain or adverse events to both patients and clinicians. The future of the questionnaire and associated dataset will also be discussed.

A mobile application for cochlear implant rehabilitation: Development and user feedback

Poster

Dr. Karen Petter (Cleveland Clinic), Mr. Jay Andrade-Hunt (eargym Ltd), Dr. Tim Green (eargym Ltd), Ms. Madison Tuton (eargym Ltd), Dr. Christina Buzzy (Cleveland Clinic), Ms. Carolina Leal (eargym Ltd)

Aims

To develop and evaluate a mobile-based, self-supervised auditory training app for cochlear implant (CI) users that improves rehabilitation outcomes while minimising clinical resource demands.

Method

A Unity-based app compatible with iOS and Android smartphones and tablets was developed. It delivers adaptive, gamified speech training across a wide range of abilities using AI-generated speech from multiple voices to enhance generalisability. Three games were implemented: *Word Wizard* (closed-set word identification), *Grid Game* (fixed-structure matrix sentences), and *Sonic Sentences* (open-set, thematically linked sentences). Task difficulty is adaptively varied through response similarity or sentence complexity, with optional background speech babble. The app recommends games and difficulty based on user performance, while allowing manual selection. A 4-week usability evaluation was conducted with 41 adult CI users, who provided in-app ratings and qualitative feedback.

Results

Usability feedback was positive: 73% agreed the app was easy to use (none disagreed), 87% agreed it was rewarding (none disagreed), and among users with prior training experience, 80% preferred this app over other approaches.

Conclusion

Initial findings suggest the app is usable, engaging, and well accepted by adult CI users. Further studies are planned to assess its effectiveness in improving speech perception outcomes over time.

A Rare Complication: Electrode Shearing During Revision Cochlear Implantation.

Poster

Ms. Catriona Shenton (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Ms. Holli Coleman (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme), Ms. Lyndsay Fraser (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.)

Aims

Cochlear implants have a finite lifespan and revision surgery can pose surgical challenges. Shearing of the electrode on device removal leading to retention within the cochlea is a rare complication of revision surgery. We report a case of an entombed cochlear implant electrode that sheared during cochlear implant revision surgery and discuss techniques for managing this complication.

Method

A 28-year-old man presented with a progressive failure of his Neurilec Digisonic cochlear implant. This was his second cochlear implant and was placed age 5, following previous device failure. During the explantation, the old electrode was seen to be tethered at the cochleostomy and on gentle traction unexpectedly sheared, leaving 12 of 20 electrodes within the scala tympani at the mid/apical turn. After probing the cochleostomy with a depth gauge, a decision was made to advance the replacement cochlear CI612 electrode into the scala tympani up until the point of resistance was offered by the entombed electrode.

Results

Thirteen of the 22 electrode points on the new electrode were inserted. At switch on, the patient reported significant improvement in sound quality compared to his previous device.

Conclusion

This case highlights an important complication of revision cochlear implantation. We anticipate this complication could become more common as our cochlear implant population ages and multiple revision surgeries become more commonplace. We discuss surgical techniques to manage this complication with the aim of achieving a favourable hearing outcome.

AB Remote Support - Patient Experiences

Poster

Mrs. Anel de Klerk (St. Thomas' Hearing Implant Centre), Ms. Hemna Santilale (St. Thomas' Hearing Implant Centre), Mr. Andrew Soulby (Guy's and St Thomas' Hearing Implant Centre)

Aims

To determine patient satisfaction when using AB Remote support

Investigate time/cost savings for patients

Method

Satisfaction questionnaire will be sent to patients following remote programming session.

Results

Results will be analysed and focus on patient satisfaction and time/cost savings comparing remote programming with in-clinic visits.

Conclusion

AB remote programming can offer time savings for clinics as well as patients without compromising care.

Adult Cochlear implant experiences; Awareness and understanding of bimodal hearing aid options in assessment pathways.

Poster

Ms. Charlotte Rogers (Cochlear Ltd)

Aims

The aims were to gain patient views on the relevance of bimodal, and factors that influence patient decision-making. Data suggests that many more patients may benefit from further information on contralateral hearing aid options available post implantation. Improving and growing bimodal awareness in all areas of Audiological practice would support this important aspect of best practice.

Method

600 Adult members of the Cochlear family group were surveyed to understand their perception and understanding of bimodal CI and hearing aid use as explained in UK Audiology and Cochlear implant clinics. In the UK healthcare funding supports unilateral implantation, in this context bimodal listening takes on greater importance, potentially as a means of providing stimulation to the non-implanted ear.

Results

Over a third of respondents stated they did not learn about bimodal options as part of their clinical care as part of the patient pathway. The majority of those using bimodal had used binaural hearing aiding previously and had received hearing aid information from the implanting centre, post implant switch-on. However, the majority of the group reported having no access to a compatible hearing aid, at least initially. Where a compatible hearing aid is not available or is not discussed the reported bimodal use drops considerably to only 11% of the whole group.

Conclusion

Awareness, the role of each audiology professional involved in the referral pathway, and where relevant, emphasis on the possibility and benefits of bimodal options are key conclusions to this work.

Advanced Bionics CHAMPIONS: Learning from Legacy Practice to Future-Proof Inclusive Outcomes for Deaf Children with Complex Needs

Poster

Ms. Rebecca Bentley (Advanced Bionics)

Aims

This paper/poster explores how legacy intervention frameworks inform inclusive practice for deaf children with cochlear implants and complex needs. Responding to expectations beyond speech and auditory outcomes, it examines the relevance of the Advanced Bionics CHAMPIONS resources. Core principles—listening for participation, family-centred routines, multidisciplinary collaboration, and multimodal communication—align with contemporary inclusive practice, alongside consideration of how rehabilitative advances support functional listening, participation, and engagement across developmental pathways.

Method

This paper uses the 2025 redline revision of the Advanced Bionics CHAMPIONS resources, developed with The Ear Foundation in 2009, as a qualitative case study. A structured comparison of original and revised versions examines shifts in language and conceptual framing, including movement toward participation-focused descriptions, reduced reliance on age comparisons, and positioning of CHAMPIONS as a reflective planning tool. It considers how cochlear implant technologies and rehabilitation resources support access, engagement, and participation.

Results

The findings are based on analysis of a redline working draft of the revised CHAMPIONS resources, which are not yet publicly available and are scheduled for launch later in 2026. The author has been directly involved in the revision process, providing insight into the rationale underpinning changes in language, structure, and interpretation.

Conclusion

This paper/poster shows that revisiting CHAMPIONS supports inclusive practice for deaf children with cochlear implants and complex needs by prioritising participation, family-centred routines, and functional real-world outcomes.

Reference (if applicable)

Advanced Bionics CHAMPIONS, developed with The Ear Foundation in 2009, is a reflective framework supporting multidisciplinary assessment of listening, communication, participation, and development for children with cochlear implants and complex needs.

Can research projects increase awareness of Cochlear Implants and identify patients who could meet current NICE criteria?

Poster

Ms. Becki Gladdis (The Richard Ramsden Centre for Hearing Implants)

Aims

Manchester Royal Infirmary Audiology became a research site for the COACH Trial (Comparing Cochlear Implants with hearing aids in adults with severe hearing loss) in 2022.

At 3 years into the trial we have examined our database to examine further the participants who were outside of criteria for the trial, but were within current NICE criteria.

Method

The database allows us to examine how potential participants (from public survey) have been directed to the COACH trial for self referral

So far, 162 expressions of interest forms resulted in 49 “*consent appointments*” (information session; signing of consent forms and audiological assessment). 12 participants were found to be within the NICE criteria* and referred onto either the Manchester Auditory Implant Programme (n=6) or to their local implant centre (n=6). 3/12 were from another CI centre who were just OOC based on their speech assessment and were directed to the COACH trial. We have excluded them from discussion as they had started on a traditional referral route.

Results

- 3 were signposted to COACH from their local audiology service.
- 2 were from COACH trial adverts in the press
- 1 was routed by the SHARC team at MRI,
- 1 responded to advertising in the MRI audiology waiting room
- 1 from the crystal report (designed for COACH using Auditbase) for our patients at MFT

Conclusion

This data shows that by undertaking a research project we have managed to successfully assess 9 novel patients who have not been referred to the Cochlear implant in the traditional referral route.

Case Study: Auditory Neuropathy Spectrum Disorder and Fluctuating Hearing Loss in a Paediatric Patient with CAPOS Syndrome Undergoing Cochlear Implant Assessment

Poster

Mr. Fiontán Ó Muilleoir (Manchester University NHS Foundation Trust), Ms. Morag Lockley (Manchester University NHS Foundation Trust)

Aims

This case study examines the cochlear implant assessment of a young female patient (Child A) with a confirmed diagnosis of CAPOS syndrome (Cerebellar Ataxia, Areflexia, Pes Cavus, Optic Atrophy, and Sensorineural Hearing Loss). As CAPOS is exceptionally rare—with only 34 cases reported in the clinical literature—this assessment required tailored clinical considerations. The aim is to outline the unique challenges, adaptations, and decision-making processes involved, with the goal of informing future cochlear implant evaluations for patients with similarly complex genetic and neurological conditions.

Method

The poster presentation would provide an overview of CAPOS syndrome and its mechanism of hearing loss, Child A's fluctuating audiograms, her vestibular testing results, the challenges in aiding this loss, and the rationale for recommending cochlear implantation.

Results

Initial assessment identified a bilateral moderate-to-severe sensorineural hearing loss (SNHL) with present TEOAEs, consistent with auditory neuropathy spectrum disorder (ANS). Subsequent evaluations demonstrated significant fluctuation in hearing thresholds, speech-perception scores that were disproportionately poor relative to audiometric findings, and marked bilateral vestibular hypofunction accompanied by central vestibular signs.

Conclusion

Although Child A's audiometric thresholds did not consistently meet NICE audiological criteria for cochlear implantation, her limited speech understanding and minimal functional benefit from optimally fitted hearing aids provided strong clinical justification for recommending bilateral cochlear implantation.

Reference (if applicable)

<https://www.nice.org.uk/guidance/ta566/resources/cochlear-implants-for-children-and-adults-with-severe-to-profound-deafness-pdf-82607085698245>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC7313598/>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC7313598/>

<https://www.sciencedirect.com/science/article/abs/pii/S0385814624000452>

Change to clinical care following AB Marvel remote listening study

Poster

Ms. Susan Eitutis (Cambridge University Hospitals), Mrs. Sophie McKenny (Cambridge University Hospitals), Dr. Patrick Boyle (Advanced Bionics), Mr. Dakota Bysouth-Young (University of Cambridge), Dr. Tobias Goehring (University of Cambridge), Ms. Evelien DeGroot (University of Cambridge), Dr. Robert P Carlyon (University of Cambridge), Mr. James Tysome (Cambridge University Hospitals), Mr. Patrick Axon (Cambridge University Hospitals), Mrs. Tsvetemira Koleva (Cambridge University Hospitals)

Aims

In the Marvel remote listening study, 20 experienced Advanced Bionics CI users completed BKB sentence tests at-home using an online platform. We found no significant difference between in-clinic and at-home tests for 3 of the 4 BKB conditions tested. Further investigations are under way to improve consistency between at-home and in-clinic tests and to determine the feasibility of transitioning remote BKB testing from research to clinical practice.

Method

We registered a service evaluation to further validate our remote testing results and to address questions raised from the study. Patients attending in-clinic review appointments will be invited to complete BKB sentence and AB word tests at-home using the online platform AUDITO [1]. To improve consistency in testing, we matched response modality and list replicates between in-clinic and at-home implementation of these tests.

Results

In the first month of trialling AUDITO in clinic, 12 patients completed the sentence and word tests at-home. Only 2 participants reported technical difficulties, both of which could be resolved with minimal support.

Conclusion

Patients were interested in monitoring progress at-home. In future, at-home tests could be completed before routine visits or following a programming appointment. If at-home results using AUDITO are consistent with in-clinic measures we intend to incorporate it into our remote programming clinic. Benefits to the clinic such as minimising waiting times, convenience of testing and satisfaction of patients are being fully evaluated.

Reference (if applicable)

1. Goehring, T., & Carlyon, R. (In press). A web-based listening test system for cochlear implant research and its validation for remote testing. *Trends in Hearing*.

Changing Profiles of Children Receiving Cochlear Implants: A Repeat and Extended Audit of Paediatric Cohorts Implanted at Great Ormond Street Hospital (GOSH) across two decades.

Poster

Mrs. Emily Thomson (Cochlear Implant Programme, GOSH), Ms. Mary Hunt (Cochlear Implant Programme, GOSH)

Aims

To repeat and extend a previous audit by comparing the demographic, educational, and clinical profiles of children implanted at GOSH Cochlear Implant Programme between June 2003–July 2008 and September 2018–August 2025.

Method

A retrospective audit was conducted of children implanted across two cohorts: June 2003–July 2008 (original audit cohort) and September 2018–August 2025 (repeat audit cohort). Data was extracted from clinical records at two defined points in the CI pathway: (1) at team decision meeting (pre-implant), (2) five years post-implant. For both cohorts, data included home languages spoken, presence of additional needs, and age at implantation for congenitally deaf children. For the 2018–2025 cohort, additional variables were audited, including sign language exposure, educational provision, access to local professionals (SLT and TOD) and identification of additional needs at five years post-implant. Descriptive statistics were used to summarise and compare findings.

Results

Compared with the 2003–2008 cohort, children implanted in the more recent cohort demonstrate a broader range of home languages and a higher proportion of identified special educational needs and a significantly lower age of implantation. The children implanted during 2020/21 during the initial COVID lockdowns presented with considerably lower rates of additional needs compared with other years.

Conclusion

Repeating and expanding the original audit demonstrates changing profiles and increasing complexity within the paediatric cochlear implant population over the past two decades. The inclusion of educational and service-access variables in the more recent cohort provides additional insight into long-term support needs and highlights the importance of integrated multidisciplinary follow-up for children with cochlear implants.

CI Champion Audit; Are we having CI conversation in hearing aid clinics?

Poster

Ms. Sandra Abou-Hamdan (The Royal National ENT & Eastman Dental Hospital), Mr. Mark Chung (The Royal National ENT & Eastman Dental Hospital)

Aims

1. Monitoring of discussions with appropriate patients regarding referral to Auditory Implants for a cochlear implant assessment
2. Auditing of documentation regarding this

Method

- Run crystal report on Auditbase for patients that fall under CI criteria (PTA) for July 2024 and September 2025
- Assign a parameter for each patient (C1- Referred for CI Assessment, C2- Not referred: Pt declined CI Assessment, C3 -Not referred: Further assessment needed in Audiology, C4- Not referred: Unsuitable at current time, C5 – No action taken)
- Pull out C5 and see under which department these patients fall under

Results

In July 2024, 36% of patients who met the criteria for cochlear implants (CI) did not have a documented discussion regarding CI referral in their clinical notes. Of these patients, 89% were seen within the adult hearing aid department.

Following this finding, a documentation template was introduced into patient journals, and CI referral criteria were reinforced during a team meeting presentation.

In September 2025, the proportion of eligible patients without a documented CI discussion had reduced. All of these patients (100%) were seen in the adult hearing aid department.

Although some patients who could be considered for cochlear implantation still did not have a documented discussion, there has been a notable reduction compared to the previous year, indicating improved awareness and documentation.

Conclusion

Although there are still patients who are eligible for CI did not have a conversation, the number is still going down compared to last year. We see a very slow improvement

Reference (if applicable)

NICE Guidance TA566 (www.nice.org.uk/guidance/ta566)

Clinical reflections of Superficial Siderosis and Cochlear Implantation.

Poster

Ms. Jane Hatton (Nottingham Auditory Implant Program), Mrs. Lisa Thompson (Nottingham Auditory Implant Program)

Aims

A review of current literature of Superficial Siderosis (SS) and cochlear implantation (CI) with relevant case studies from the Nottingham Auditory Implant Programme (NAIP).

Method

A review of literature regarding SS and cochlear implantation will be discussed, documenting: causes, type, presenting symptoms, disease progression and likely outcomes with CI for patients with SS. NAIP case studies will be presented.

Results

SS is defined as a rare but disabling neurological disorder caused by chronic bleeding into the cerebrospinal fluid (3). SNHL is reported in approximately 95% of cases. (2). Research is limited, with outcomes more variable than in the general adult CI population. Although many patients experience hearing improvement, benefits may be reduced or decline over time due to retrocochlear involvement (1)

We present case studies, detailing both the assessment process, surgical considerations and post-op management.

Conclusion

Cochlear implantation in patients with SS is feasible but requires highly patient-centred counselling, with particular attention to the choice of implant and programming considerations. While implantation may improve sound awareness and communication, long-term speech perception benefits are uncertain and may decline with progressive neurological deterioration (1)

Reference (if applicable)

1. Chaudhry et al (2020). Outcomes of Cochlear Implantation in Patients with Superficial Siderosis: A Systematic Review and Narrative Synthesis. *Journal of International Advanced Otology*, 16(3), 372–379.
2. Fearnley et al (1995) Superficial siderosis of the central nervous system. *Brain*;118:1051–1066. doi: 10.1093/brain/118.4.1051. [DOI] [PubMed] [Google Scholar]
3. Kharytaniuk, et al (2022) Classical infratentorial superficial siderosis of the central nervous system: pathophysiology, clinical features and management. *Practical Neurology*, 22(4), pp. 274–285. doi:10.1136/practneurol-2021-003152.

Cochlear Implant Champions Scheme - Improving access to CI referrals

Poster

Ms. Rhian McTaggart (Manchester University NHS Foundation Trust), Ms. Petrina Checkland (University Hospitals Birmingham NHS Foundation Trust)

Aims

The cochlear implant (CI) champion scheme has been running since 2019. The scheme was designed to try and improve awareness of cochlear implants, increase appropriate referrals and enhance relationships between audiology, ENT and implant centres. The committee sits under the British Academy of Audiology (BAA) and British Cochlear Implant Group (BCIG) as a joint venture to improve overall access to implants for those who need them.

Since it's set up the scheme has delivered various workshops, training sessions, e-learning modules and resources for the CI champions and their mentors within the UK implant teams. Recently we have produced a survey to try and understand the successes of the scheme as well as the challenges that still need to be assessed.

Method

Survey methodology. We produced a survey to understand the champions current role and responsibilities, what support that have from their mentor and what training or support could be useful going forward.

Results

Protected time drives outcomes.

Confidence may have been improved but this does not always equate to more action.

Practical tools for champions and patients are the most valued when it comes to resources.

Mentor support is strong throughout the scheme but more structure is needed for this relationship to be as effective as possible.

Conclusion

The CI champions scheme has come a long way since it's development and we have seen a real change in audiological implant referral counselling and implementation. More can still be done however to improve the pathway and experience for all patients who need it.

Cochlear Implant Outcomes: Does Device Use at One Year Post-Implantation Affect Paediatric Outcomes?

Poster

Dr. Suzanne O’Gara (University of Southampton Auditory Implant Service), Dr. Zoe Foot (University of Southampton Auditory Implant Service), Mrs. Kirsty Carey (University of Southampton Auditory Implant Service)

Aims

To investigate whether achieving age-appropriate full-time cochlear implant (CI) use by one year post-implantation is associated with improved auditory and speech outcomes in paediatric CI users.

Consistent cochlear implant use is a key factor influencing auditory and speech outcomes in children with hearing loss. Device datalogging provides an objective measure of daily processor use and may offer valuable insight into early patterns of wear. Establishing whether early achievement of full-time use affects outcomes could help clinicians optimise counselling and family support.

Method

This is a secondary analysis of clinical data from paediatric CI users implanted from 2020 onwards at Southampton University Auditory Implant Service. Children aged 0–16 years at the time of implantation are included. Device datalogging recorded at the one-year post-switch-on appointment will be categorised based on the criteria for ‘full-time use’ in each age group, defined as approximately 80% of waking hours. Outcome measures include Categories of Auditory Performance (CAP), Speech Intelligibility Rating (SIR), and Auditory Staircase scores collected at one year post-implantation. All data will be anonymised and analysed at group level.

Results

Data collection and analysis are currently in progress. Device use at one year post-implantation will be categorised according to achievement of full-time use, and outcomes will be compared between groups.

Conclusion

This ongoing study aims to explore the relationship between early cochlear implant use and paediatric outcomes. Findings are expected to inform clinical practice and support the use of datalogging as a counselling tool for families during early rehabilitation.

Cochlear Implantation for Single-Sided Deafness in the UK: Case Studies, Qualitative Insights & Practical Learning

Poster

Mr. Joseph Manjaly (University College London Hospitals)

Aims

Cochlear implantation (CI) for single-sided deafness (SSD) has been widely adopted internationally, yet remains an underutilised and often misunderstood option within the UK context. This instructional session presents a unique, practice-based perspective grounded in a small series of UK SSD CI cases performed in the private sector, focusing on qualitative outcomes, real-world challenges, and lessons learned in the absence of formal NHS pathways.

Method

A series of detailed qualitative case studies were undertaken with 6 patients implanted with a cochlear implant for single sided deafness. Questions cover the patient journey prior to being referred, why contralateral routing options (CROS, BAHA) were insufficient, through to post-operative benefits and advice shared for other patients and clinicians.

Results

We will share clinical data (audiological outcomes, datalogging, speech perception) alongside thematic analyses from patient interviews, covering rehabilitation, adaptation to binaural input, music appreciation, tinnitus relief, and psychological transformation.

Particular attention will be given to the lived experience of motivated patients navigating a fragmented system, the critical importance of expectation management, rehabilitation engagement, and clinician empathy.

Conclusion

Cochlear implantation is a treatment for single sided deafness that can bring benefits over and above what is currently offered to patients with this condition in the UK NHS. It is crucial for counselling clinicians to understand the importance of patient selection, how to illustrate the benefits and dilemmas to potential candidates, and how the rehabilitation journey may differ in comparison to tradition bilaterally deaf candidates.

Cochlear Implantation via a Middle Cranial Fossa Approach

Poster

Mr. Amshuman RAO (Queen Elizabeth Hospital (Birmingham)), Mr. William Brassington (Queen Elizabeth Hospital (Birmingham)), Mr. Chris Coulson (Queen Elizabeth Hospital (Birmingham)), Mr. Richard Irving (Queen Elizabeth Hospital (Birmingham))

Aims

Our primary aim was to document and present an interesting and novel case of cochlear implantation (CI) via a middle fossa approach in an adult male patient with hearing loss secondary to meningitis in the context of concomitant severe middle ear disease of unclear cause. This also aims to increase awareness of this uncommon but clinically useful approach. Secondary aims include documenting the electrode programming and mapping parameters utilised post operatively to provide the patient access to sound and performing a comprehensive literature review of CI via a middle fossa approach.

Method

The patient was worked up and followed up post operatively via our institutional CI pathway. The operative intervention was recorded to produce an illustrative video. Mapping parameters and specific electrode parameters were adjusted accordingly to match the electrode location within the cochlear to provide the patient access to sound. A comprehensive literature review of cochlear implantation through a middle fossa approach was performed, with a specific focus on indications, outcomes, device, and array choice.

Results

The patient was successfully and safely implanted. The position of the electrode was confirmed on post operative CT to be within the cochlear and in light of the position, programming of the electrode was performed in reverse. There was improvement in sound awareness and speech perception scores. The patient is a daily cochlear implant user.

Conclusion

In patients where there are anatomical or disease related contraindications to traditional techniques for CI, the middle fossa approach can safely allow for successful implantation and auditory outcomes.

Cochlear Implants as Cybernetic Systems

Poster

Dr. Ishika Singh (Midland Metropolitan University Hospital), Dr. Anirvan Banerjee (James Cook University Hospital)

Aims

- Understand cochlear implants as cybernetic systems
- Link surgery, mapping, and rehabilitation
- Reframe poor performance as system-level failure
- Develop a shared clinic language

Method

We developed a conceptual educational framework by integrating principles from cybernetics, auditory neuroscience and cochlear implant engineering. Core implant components and rehabilitation processes were mapped onto system-based models of control and feedback to produce a clinically applicable explanatory model which has been refined through teaching and interdisciplinary discussions.

Results

Applying a cybernetic model reframes cochlear implants as closed-loop adaptive systems, clarifying the dynamic between device processing, neural plasticity and rehabilitation. It improves a conceptual understanding of cochlear implant function, provides mechanistic explanation for outcome variability, and supports more effective interdisciplinary and patient communication.

Conclusion

Cochlear implants are cybernetic systems, where surgery builds the interface, audiology and rehabilitation tunes the loop and finally the brain learns the code. This provides an intuitive framework for understanding cochlear implants as adaptive human-machine systems. The model enhances education, promotes interdisciplinary communication and improves patient counselling, while offering a foundation for future developments in closed-loop cochlear implant technologies.

Collaborative practice in health and education provision for deaf children: a qualitative study of practitioner perspectives.

Poster

Mrs. Christina Graham (Keele University), Prof. Carolyn Chew-Graham (Keele University), Dr. Tom Kingstone (Keele University)

Aims

Aim

To explore practitioners' views of collaboration in health and education provision for school-age deaf children.

Objectives

1. To explore practitioners' views of their roles in providing for school-age deaf children (including impacts of COVID-19).
2. To explore practitioners' views of working with families and with other practitioners.
3. To explore practitioners' views of collaboration across health and education provision for school-age deaf children.
4. To develop a model/infographic of collaboration in health and education provision for school-age deaf children.

Method

Ethics approvals have been obtained. This is a qualitative study using semi-structured interviews with health and education practitioners. Interviews included a 'Think Aloud' activity, allowing participants to develop their own image of collaboration in health and education provision. A project advisory group consisting of parents of, and practitioners working with, deaf children, is contributing to all aspects of this study. An engagement workshop with parents of deaf children will share findings and generate ideas for dissemination.

Results

Four, interrelated themes have been generated:

'Role positioning' - how people view themselves and others in provision.

'Building & maintaining relationships' - how people build and maintain relationships with each other.

'Communicating & negotiating' - how people communicate, share information and negotiate with each other.

'Influences on collaboration' - constraints and opportunities.

Conclusion

Final conclusions have not yet been drawn, as the study is ongoing. However, insights gained will inform co-design of an infographic to promote a shared understanding of collaboration in provision among parents and practitioners in the study setting, and in regional hearing implant centres.

Developing an Inclusive Functional Listening and Early Communication SLT Assessment Toolkit for Multilingual Cochlear Implant Candidates

Poster

Ms. Laura Haynes (Nottingham Auditory Implant Program)

Aims

Across the UK, an increasing number of children are growing up in linguistically diverse homes, with many school-aged children speaking a language other than English at home. We have identified our current assessment tools may need adapting for these populations as they were largely developed for monolingual English or BSL users. Evidence stresses the importance of supporting home-language development and reducing inequity for multilingual populations.

Method

Toolkit development will be supported by an SLT student, with resources refined through ongoing team reflection, informal feedback, and consultation with colleagues in other CI centres and regional services. This iterative design enables the toolkit to evolve as insights emerge, supporting more inclusive CI assessment practice.

Planned steps include:

- reviewing current assessment processes, tools and resources.
- exploring adaptations of current tools and trialling new resources informed by evidence and practice-based learning.
- development of frameworks to guide clinicians in working with interpreters and in collecting and analysing language samples across children's home languages.

Results

The poster will outline our progress so far with this multi-stage service-improvement project to develop an the assessment toolkit and our experiences of using it. Insights at this stage highlight the value of functional listening measures, high-quality language sampling, and accessible resources for families and interpreters.

Conclusion

This initiative addresses the growing linguistic diversity of paediatric CI referrals and the need for equitable assessment pathways. By developing adaptable, culturally responsive tools, the project aims to improve the efficiency, structure and equity of CI candidacy decisions for multilingual children and their families.

Development and ongoing adaptation of an Adult Regular Interval Follow Up (RIFU) service

Poster

Mr. George Hervey (Guy's and St Thomas' Hearing Implant Centre), Mrs. Karen Archer (Guy's and St Thomas' Hearing Implant Centre), Mrs. Sheena Foster (Guy's and St Thomas' Hearing Implant Centre), Mrs. Hilary Harkin (Guy's and St Thomas' Hearing Implant Centre)

Aims

- Our service has transitioned to a Patient Initiated Follow Up (PIFU) model.
- RIFU supports vulnerable adults unable to reliably initiate contact.
- RIFU Aims to ensure regular proactive care and prevent medical complications, specifically skin issues.
- Provides ongoing device support and incorporates remote care options.

see full abstract

Method

- Patients are identified based on cognitive, sensory, or mobility vulnerabilities.
- Scheduled contacts (3, 6, or 12-monthly) occur via phone, email, or letter.
- Clinical templates are used to monitor health, device management, and skin care.
- Specialist nurses review photos of implant sites for remote monitoring.
- Includes remote programming to support patients unable to attend clinics.
- We are carrying out an ongoing audit to collect quantitative data and qualitative feedback from patients and carers.

see full abstract

Results

- Audit data confirms we have sustained proactive contact with a diverse patient cohort.
- Qualitative feedback highlights reassurance for patients and carers and earlier detection of health deterioration.
- Regular monitoring has enabled early intervention and successfully prevented wound breakdown.
- Remote programming effectively optimised devices in home or care settings.
- Audit data will be used to refine future clinical protocols.

see full abstract

Conclusion

- RIFU mitigates the risks patient initiated follow up poses to vulnerable populations.
- Combines proactive wound management and remote tech as a safety net.
- Ongoing audit data ensures the pathway remains robust and patient-centred.
- Combination of both Patient initiated and Regular interval follow up models has allowed efficiency of clinical resources to be prioritised for vulnerable patients.

see full abstract

Development of a Clinical Pathway for Children with Auditory Nerve Hypoplasia within the Midlands Hearing Implant Programme: Insights from Three Case Studies

Poster

Mrs. Hannah Ager (Midlands Hearing Implant Programme (Children's Service)), Mrs. Justine Maggs (Midlands Hearing Implant Programme (Children's Service))

Aims

Auditory nerve hypoplasia presents significant challenges in paediatric hearing management, particularly when considering cochlear implant (CI) candidacy and potential referral for an auditory brainstem implant (ABI). In 2023, our team attended the 4th International Symposium on Paediatric Auditory Brainstem Implant in London, which highlighted advances in surgical techniques and risks, candidacy criteria, audiological management, and outcome monitoring for ABI.

Following this, we reviewed children under assessment with radiologically confirmed thin auditory nerves and developed a structured clinical pathway. The aim was to optimise post-operative care by ensuring close monitoring of device programming, delivering regular targeted intervention, and measuring early functional outcomes. This approach supports maximising hearing potential and enables timely referral for ABI assessment where appropriate.

Method

The pathway was integrated into routine practice and evaluated through three case studies of children with complex inner ear malformations, including bilateral thin auditory nerves.

Results

The three case studies will demonstrate how the newly developed clinical pathway was applied in practice.

Conclusion

The pathway facilitates multidisciplinary planning and enables timely referral for an ABI assessment. This structured approach optimises post-operative care and maximises hearing potential in children with complex inner ear malformations.

Development of a holistic listening programme for ABI children.

Poster

Mrs. Christine Rocca (Guy's and St Thomas' Hearing Implant Centre), Mrs. Sandra Driver (Guy's and St Thomas' Hearing Implant Centre)

Aims

As our cohort of children with ABIs at St Thomas increases, and the age of implantation reduces we have reviewed their progress and the rehabilitation they receive.

Our experience suggests that these children need significant exposure to structured listening hierarchical activities, specific targeted vocal production and significantly higher levels of repetition than cochlear implant recipients.

This has led to developing and trialling a bank of practical activities that can be used in clinic, at home and in the education setting to support exposure to, carryover and generalisation of early listening and vocal development.

Method

Speech and Language objective outcome measures were recorded for ABI children up to 10 years post operatively.

5 recently implanted children integrated a novel approach, aiming to ascertain if their outcome measures regarding listening and vocal production would be impacted in relation to the current rate of progress monitored across the ABI cohort.

The program developed, integrated hierarchical musical skills stages, focused on the correlational links between music and speech, augmenting the similar acoustic and perceptual features.

Results

The objective outcome measures for the 5 children, indicated an earlier acquisition of specific skills. Recorded constructive feedback from professionals and families suggested the hierarchical rehabilitation approach was positive.

Conclusion

Outcomes demonstrate the efficacy of increasing levels of auditory training, integrating hierarchical musical skills in structured activities as part of rehabilitation for ABI children.

Further development and refinement of this novel bank of practical activities is in progress.

Reference (if applicable)

Besson et al, 2011

Chobert et al, 2012

White et al, 2013

Early activation of cochlear implants: safety, feasibility and early outcomes

Poster

Ms. Lyndsay Fraser (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Ms. Arlene O'Malley (Scottish Cochlear Implant Programme), Mr. Paul Sooby (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Natasha Grimmond (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme)

Aims

Conventional cochlear implant (CI) activation in the UK has historically occurred several weeks post-operatively. However, recent evidence demonstrates that early activation (EA)—within the first week, and even as early as the next day - is safe, feasible, and associated with outcomes comparable to traditional timelines. Activation of CI devices at our unit has traditionally always occurred at 4 weeks post-op.

Method

We report a small consecutive series of CI recipients at our centre who underwent next-day activation following uncomplicated implantation. Standard peri-operative protocols were observed, and assessments included wound integrity, patient comfort, impedance stability, and early auditory responsiveness. These clinical observations were interpreted alongside established findings from the broader literature on early activation.

Results

All patients tolerated next-day activation well, without significant discomfort or adverse events. This aligns with published data showing low complication rates and rapid impedance stabilisation in early activation cohorts. Device function was stable from first fit, and patients reported immediate benefit from early auditory access. Patient-reported experience closely mirrored themes identified in previous studies, including reduced anxiety, decreased travel burden, and strong preference for early activation where feasible.

Conclusion

Next-day cochlear implant activation in this small UK series was safe, well-tolerated, and associated with favourable early functional and experiential outcomes. These findings support the expanding evidence base suggesting early switch-on as a viable option in appropriately selected patients when combined with careful postoperative assessment.

Empowering Young People With Cochlear Implants in Scotland: Outcomes From the 2025 Scottish Cochlear Implant Programme Transition Event

Poster

Mrs. Brogan Thomson (Scottish Cochlear Implant Programme), Mrs. Laura Hogg (Scottish Cochlear Implant Programme), Mr. Martin Ramsay (Scottish Cochlear Implant Programme), Ms. Kathryn Sullivan (Scottish Cochlear Implant Programme), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme)

Aims

In June 2025, the Scottish Cochlear Implant Programme (SCIP) delivered its first national Transition Event to support young people aged 15–19 with cochlear implants and hearing loss as they move into further education, employment, and adult life. Young people from across Scotland came together to connect with peers, explore their Deaf identity, learn more about cochlear implant technology, and engage directly with training providers, colleges, universities, and third sector organisations.

Method

The programme featured three inspirational speakers who shared their lived experiences of Deafness and cochlear implantation. Two were Scottish CI users recognised nationally—one as Young BAFTA Presenter of the Year and the other as a member of the Scottish Deaf Football Team. Keynote speaker Tasha Ghouri offered an open and empowering account of her journey as a Deaf CI user through school and into adulthood, emphasising confidence, representation, and embracing new opportunities.

Results

Interactive workshops in drumming and content creation encouraged self-expression, creativity, and leadership in a supportive environment. Early outcomes show meaningful impact: one participant has since been selected to represent Team GB Women's Football at the Deaflympics in Tokyo, and a new Young Scottish Cochlear Implant Users Group has been formed. This youth-led group now provides a national platform to influence policy, raise awareness, and strengthen support pathways for young people with cochlear implants across Scotland.

Conclusion

This abstract demonstrates how a collaborative, person-centred national event can build confidence, inspire ambition, and empower young people with cochlear implants to become advocates for themselves and their wider community.

Enhancing Post Implant Care with Coproduced Pathways: A National Service Perspective

Poster

Mr. Ben Ashton (Scottish Cochlear Implant Programme), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme), Ms. Arlene O'Malley (Scottish Cochlear Implant Programme)

Aims

Increasing patient cohorts mean existing care pathways are not sufficient to meet demand. Current evidence base and technology developments can mitigate this risk. The aims of this project were to:

- Review literature on CI technology and adult patient pathways.
- Develop a qualitative methodology using coproduction to gather data.
- Inform a new post-implant adult care pathway.
- Produce supporting documentation.
- Implement the pathway.

Method

Two coproduction workshops were held with patients and clinical staff. Workshop 1 used structured discussions, questionnaires, and group activities to explore barriers and enablers to care, strengths and limitations of the existing pathway, and priorities for a revised model. The themes generated informed the structure of Workshop 2.

Workshop 2 focused on constructing the revised pathway. Through moderated discussion, participants agreed on priorities and mapped proposed models.

Results

Agreement was reached on all service-patient touchpoints for four pathways reflecting clinical need and the documentation required for implementation. Staff felt their perspectives were heard, contributing to a positive attitude toward the proposed changes.

Four pathways were developed: two standard care models for patients requiring intensive input, and two pathways based on patient initiated follow up with expanded use of digital resources.

Conclusion

This co-production project developed four revised post-implant pathways for the SCIP, reflecting staff perspectives and the service challenges specific to Scotland. Pending endorsement by the patient involvement group, work is ongoing to finalise documentation, operationalise pathways, and design tools to support clinical decision-making for pathway assignment.

Evaluating the Experience of Early Cochlear Implant Switch-On in Adults and Children

Poster

Mr. Madhusagar Gurusiddappa (James Cook University Hospital), Ms. Lisa Kennedy (James Cook University Hospital), Mr. Anirvan Banerjee (James Cook University Hospital)

Aims

To evaluate the perceived benefits of early cochlear implant (CI) switch-on from the patient perspective, using patient-reported outcome measures (PROMs). The aim was to quantify the impact of early activation on comfort, anxiety, emotional wellbeing, and overall experience of cochlear implant use.

Method

Cochlear implant recipients, including adults and children able to self-report, who underwent early switch-on within the first week post-surgery were invited to complete a short PROMs questionnaire. For younger children, a separate parent/carer questionnaire was used to report on the child's experience, including comfort, anxiety, emotional wellbeing, and overall impressions of early switch-on. Likert-scale responses (Strongly agree to Strongly disagree) were used to explore comfort, anxiety, emotional wellbeing, and satisfaction with the timing of switch-on. Responses were collected as part of routine service evaluation and analysed descriptively.

Results

Feedback from cochlear implant recipients and parent/ carer (s) regarding early switch-on has been positive. Participants have expressed satisfaction with the timing of switch-on, and overall impressions suggest that early activation has been well received within the early post-operative period.

Conclusion

Early cochlear implant switch-on appears to be a feasible and acceptable approach within routine clinical practice. Initial participant feedback suggests that early activation is well received in the early post-operative period and supports a positive experience of cochlear implant care. Ongoing evaluation including patient-reported outcome measures will support further assessment of the impact of early switch-on and help inform future service development and best practice.

Evaluation of a Decision Support Tool to review Remote Check

Poster

Dr. Saji Maruthurkkara (Cochlear Ltd), Prof. Helen Cullington (University of Southampton Auditory Implant Service), Ms. Sophie Bryson (University of Southampton Auditory Implant Service), Ms. Kim Veekmans (Nottingham Auditory Implant Program), Mr. Jerome Evans (Cochlear Hearing Center San Antonio), Ms. Maryann Flores (Cochlear Hearing Center San Antonio), Mr. Abdulmalik Binmarzuq (Cochlear Implant Centre, King Saud Medical City), Ms. Reem Badghaish (King Abdullah Ear Specialist Center), Ms. Susan Johnson (Nottingham Auditory Implant Program), Ms. Ellen Jeffs (Nottingham Auditory Implant Program), Ms. Mada Aljabr (Cochlear Ltd), Mrs. Dalal Alrushaydan (Cochlear Ltd), Mr. Abdulaziz Ahmed Almalki (Cochlear Implant Centre, King Saud Medical City), Mrs. Sahar Mohammed Bin Dehaish (Cochlear Implant Centre, King Saud Medical City)

Aims

Demand for audiological services continues to rise. Remote Check (RC) is an asynchronous telehealth method that helps clinicians triage which patients require intervention and what type, reducing unnecessary appointments and clinical workload. The RC questionnaire enables efficient triage because most items use closed-set response options, while assessments such as Digit Triplet Test, Aided Threshold Test and Time on Air rely on clinical judgement supported by defined critical difference values and recently established targets. These rules informed development of a clinical Decision Support Tool. This study examines the feasibility, clinical suitability and time-saving potential of using this tool alongside RC.

Method

A spreadsheet-based RC Decision Support tool combined patient responses with expected outcomes and guidance. Clinicians from five clinics in the UK, USA and Saudi Arabia reviewed 184 RC submissions. Audiologists used the tool to guide review and, recorded whether the tool's guidance was considered and their rationale for decisions. RC review duration, review outcomes and the total time each RC remained "pending review" were also captured.

Results

At the time of submission, analyses were underway and findings will be presented. The presentation will describe where recommendations aligned with clinical judgement, where they differed and why suggestions were not followed. It will also outline additional information sources and summarise clinician feedback on usefulness, efficiency and areas for refinement.

Conclusion

A clinical decision support tool may streamline Remote Check reviews. This study will provide evidence on feasibility and practical value and indicate priorities for further refinement.

Evaluation of potential electrode migration in a paediatric patient population

Poster

Mrs. Emily Coleman (Guy's and St Thomas' Hearing Implant Centre), Mrs. Sali Salah (Guy's and St Thomas' Hearing Implant Centre), Mrs. Katherine Wilson (Guy's and St Thomas' Hearing Implant Centre), Mr. Andrew Soulby (Guy's and St Thomas' Hearing Implant Centre)

Aims

- To evaluate whether paediatric patients with implant 'A' had more electrodes switched off in mapping, leading to investigations for electrode migration, compared to another implant type 'B'.

Method

- Data collected included 262 implants, implanted between dates of January 2022 and August 2024, for children aged between 2 and 17 years old.
- Data was collected through crystal reports for patients implanted with implant 'A' or 'B'.
- Patients were implanted by a variety of surgeons. All patients were implanted at St Thomas' Hospital.
- All patients had normal radiological findings re-implant

Results

When focusing on the basal end only, Implant 'A' had 12% of implants with switched off electrodes, compared to 6.5% for 'B'.

- 'B' most commonly had 1 electrode off, where as 'A' spread across mainly across 2-5.
- 'A' most common reason for switch off at the basal end was absent NRI and poor aided, 'B' most common reason was discomfort.

Whole array findings:

- There were a higher number of implants with switched off electrodes for implant 'A' comparing to 'B' (19.5% and 16%).
- Highest percentage of electrode array switched off in 'A' re-implants (22%), than new 'A's (12.5%).

Conclusion

Implant 'A' had more electrodes switched off at the basal end due to poor aided/absent NRI, and led to investigations with CT scans for electrode migration, and consequently some revision surgeries needed for re-insertion.

Evaluation of remote check in children with cochlear implants

Poster

Ms. Reem Badghaish (King Abdullah Ear Specialist Center (KAESC), King Saud University, 11411, Riyadh, Saudi Arabia.), Ms. Dalal Alrushaydan (Cochlear Arabia Regional Head Quarter, Riyadh, Saudi Arabia.), Ms. Mada Aljabr (Cochlear Ltd), Dr. Mariam Al-Amro (Neuro-otology and lateral skull base, King Abdullah Ear Specialist Center (KAESC), college of medicine, king Saud University Medical City, King Saud University, Riyadh, Saudi Arabia.), Mr. Hassan Yalcouy (Cochlear, Cochlear Arabia Regional Headquarters, Riyadh, Saudi Arabia.)

Aims

Objective: This study evaluates the feasibility of reducing in-person appointments by utilizing Remote Check (RC) in pediatric cochlear implant (CI) recipients and investigates the most suitable age range for implementing RC.

Method

Methods: Fifty-eight pediatric CI recipients, aged 1-17 years, were evaluated using a web-based RC application by audiologists. Most (84.5 %) used verbal communication. Inclusion criteria required stable map status, caregiver tech proficiency, and a compatible phone.

Results

Results: Remote assessments were beneficial, with 89.7 % of participants successfully completing RC. Aided threshold tests (ATT) were completed in 73.2 % of participants, while speech-in-noise tests (Digit Triplet Test, DTT) were completed in 47.3 %. Children as young as 4 successfully completed ATT, while a minimum age of 7 was required for DTT. A significant relationship between age and test success was demonstrated. Verbally communicative children had higher completion success rates. Parental education was significantly correlated with DTT success, with higher success rates in children whose parents had undergraduate degrees. With RC use, 69 % of children did not need clinic visits, emphasizing the need for personalized and remote support for optimal cochlear implant performance. In-person appointments were primarily required due to concerns about the duration of device usage.

Conclusion

Conclusion: The study confirms the effectiveness and feasibility of using RC in pediatric CI users, even as young as one year old with stable aided hearing. The findings advocate for the integration of RC into routine follow-up protocols, offering a more accessible option for enhanced patient care.

Experiences in Radiology Staff Training to Undertake Head Wraps for MRI Scanning in Cochlear Implant and Cochlear™ OSIA Implants.

Poster

Dr. Harriet Crook (Sheffield Teaching Hospitals NHS Foundation Trust), Mrs. Alison Sandhu (Sheffield Teaching Hospitals NHS Foundation Trust), Mr. Christopher Holroyd (Sheffield Teaching Hospitals NHS Foundation Trust), Mr. Ashley Martin (Sheffield Teaching Hospitals NHS Foundation Trust)

Aims

To share experiences of training to undertake Cochlear implant and OSIA head wraps for MRI scanning. We report experiences of training in a large teaching hospital. We identify additional practical tips in addition to BCIG, and manufacturer guidance. We discuss patient reported experience and scan tolerance in relation to the device types, described techniques, and equipment used in a small cohort of patients

Method

We describe the training processes undertaken: shadowing, trial headwrap and description of technique used to assure splint placement with manufacturer and putty splints. BCIG MRI questionnaires from a small sample of patients are reported.

Results

2 Radiographers have become competent in head wraps for cochlear and OSIA devices. We have collated practical recommendations to support training and carrying out headwraps and we report patient experience using our methodology which meets manufacturer and BCIG/IPEM guidance.

Conclusion

The training undertaken was successful and has enabled Radiology staff to provide head wraps, giving timely access to MRI. Experience with a larger cohort over time will allow us to compare incidence of scan tolerance in OSIA devices versus cochlear implants. Participation in national working groups on MRI safety provides the opportunity for further shared learning in this area to optimise patient experience.

Reference (if applicable)

BCIG Safety Guidance for MRI

Leinung et al 2021) Comparison of bandaging techniques to prevent cochlear implant magnet displacement following MRI. *Eur Arch Otorhinolaryngol* 278(11):4209-4216

Fussell et al 2021. Cochlear implants and magnetic resonance imaging: experience with over 100 studies performed with magnets in place. *Otology & Neurotology*, 42(1): 51-58

From Backlog to Breakthrough: Recovering and Optimising Cochlear Implant Waiting Times Through Connected Care, Remote Pathways, and Assessment-to-1st-Year Pathway Redesign at Oxford University Hospitals

Poster

Ms. Alice Roberts (Oxford Auditory Implant Programme)

Aims

Since 2021, the OUH Cochlear Implant Programme has aimed to eliminate its CI review backlog and create a sustainable lifelong follow-up model amid rising demand. Priorities included reducing review and assessment waits, embedding Connected Care tools, Cochlear Care, Remote Check, Remote Programming, intraoperative monitoring, K2R and U2R, to shift routine care remotely, and redesigning the first-year pathway for the stable 80%. Success was measured by full backlog recovery, shorter assessment waits, and stable long-term remote follow-up.

Method

Between 2021–2025, OUH implemented a staged redesign integrating Connected Care. Spares and repairs were outsourced, and a two-branch review model introduced: annual Remote Checks with 2.5-yearly reviews for remote users, and annual or extended intervals for stable non-remote patients. SmartNav, Remote Assist, K2R and U2R supported self-management. Audiology-only triage weeks enabled focused candidacy screening, and the first-year pathway was streamlined for routine cases. Evaluation used waiting-list trends, clinic activity, Remote Check data and feedback.

Results

A drop from ~400 overdue reviews (late 2021) to full backlog recovery was achieved. Successive pathway changes freed 0.64–0.8 WTE capacity and enabled stable remote monitoring. Triage weeks showed ~50% were not NICE-eligible, preventing unnecessary MDT assessments. The streamlined first-year pathway cut routine visits for the stable 80%, preserving capacity for complex cases and supporting rollout of the Advanced Management Pathway.

Conclusion

Using connected technology, redesigned pathways and targeted triage, the OUH CI Programme cleared its review backlog without extra staff, sustaining care quality, supporting wellbeing, and strengthening foundations for future CI and BAHA/MEI improvements.

Hearing implant Focus Groups: sharing, learning and innovating together

Poster

Ms. Charlotte Rogers (Cochlear Ltd)

Aims

Understanding the patient journey on referral to an implant centre is essential to support informed and shared decision-making and patient empowerment. It is also important that clinicians working in different and sometimes geographically distant locations maintain smooth, open channels of communication. This link provides peer support networks and guidance that aids clinical decision making in complex cases.

Method

Two focus groups were conducted in consecutive years with CI champions, CI mentors. Discussions were analysed to identify key themes and areas for further development and initiative sharing.

Results

Insights emerged in the following areas and domains:

- Audiologists and CI clinicians feel auditing their current services is crucial and would like more support in accessing reporting software and running reports.
- Audiologists, CI champions benefit from opportunities to explore and ask questions about complex cases in CI clinics.
- Practising conversations with patients regards onwards referral for implantation is beneficial and supports training needs.
- Clinicians report lack of capacity for clinical audit regards onward referral for implantation.

Conclusion

These findings highlight the need for collaborative working. For specialist implanting centres and referring audiologists to have regular and open channels of communication and peer support. Also, for further consideration into the provision of service level support for those undertaking the champion role as part of individual and service development requirements for clinical quality. Tools and resources for patient dialogue and conversations regards onward referral for implantation should also be considered as part of wider service, clinician and preceptorship needs.

How does hearing loss alter the predisposition to anxiety?

Poster

Dr. Bethan Impey (University of Southampton, Faculty of Medicine), Dr. Kate Hough (Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom.), Dr. Aimee Kosniowski (University of Southampton, Faculty of Medicine), Dr. Mariam Riadh (University of Southampton, Faculty of Medicine), Dr. Mustafa Alkasser (University of Southampton, Faculty of Medicine), Dr. Mohammed Elsankary (University of Southampton, Faculty of Medicine), Prof. David Baldwin (University of Southampton, Faculty of Medicine), Prof. Matthew Garner (University of Southampton, School of Psychology), Prof. Tracey Newman (Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom.)

Aims

The susceptibility to anxiety is increased in people with hearing loss. We need to understand why. Our brain is continually processing stimuli such as sound and heart rate from our external and internal environments. Internal stimuli are integrated in a process known as interoception. The brain regions that integrate external sensing and interoception overlap with the anxiety regions. We hypothesize that hearing loss reduces activity in these regions, altering interoception and the predisposition to anxiety.

Anxiety, hearing and the response to internal stimuli can be measured. We use these measures to investigate the biological link between hearing and anxiety in people with and without hearing loss.

Method

Potential participants [Ethics ERGO II 102389] will be screened against inclusion criteria. Recruited participants will have blood pressure measurements and psychological questionnaires at baseline and end of procedure. Respiration and heart rate will be recorded in air for 10 minutes and in air enriched with 7.5% carbon dioxide, delivered via a face mask for 20 minutes, a technique known to induce mild psychological and physiological anxiety symptoms (1).

Results

Data collection is underway. Preliminary findings will be presented.

Conclusion

Understanding the biology of anxiety in people with hearing loss could inform tailored anxiety treatments. Importantly anxiety is a barrier to adoption of cochlear implants in adults (2), although management of hearing may improve anxiety symptoms. Greater understanding of the biological links may support improved counselling for adults who are eligible but hesitant about having an implant.

Reference (if applicable)

1. Baldwin et al. doi.org/10.1007/s40263-017-0423-2.
2. Giby et al. doi.org/10.64898/2026.01.08.26343668.

How does paediatric cochlear implant usage change from childhood to adolescence? A service evaluation of device usage in 5–15-year-olds.

Poster

*Ms. Emilia McMonigall (Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom.),
Dr. Kate Hough (Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom.), Prof.
Tracey Newman (Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom.)*

Aims

Regular cochlear implant use is associated with improved auditory outcomes. Our understanding of patterns of use across from childhood to adolescence is not well studied. This study evaluated cochlear implant usage in paediatric patients aged 5 to 15 years-old at a single UK centre, the University of Southampton Auditory Implant Service.

Method

Ethical approval was obtained [ERGO:104483]. 179 patients met inclusion criteria (105 Cochlear, 74 Advanced Bionics). Datalogging was extracted from patient records for Cochlear and Advanced Bionics devices and analysed using descriptive statistics.

Results

Average daily device (n = 179) usage was 9.1 hours (SD = 1.4; range = 6.9–12.0). and increased between ages 5 and 13 years (9.9–12.0 hours). Coil-off frequency remained stable across ages. Most time was spent in “speech in quiet” across all ages in Advanced Bionics users, while younger users of Cochlear devices users spent more time in “speech” and “speech in noise” environments, with older children spending more time in “quiet”. A limitation of the study is that only the most recent datalog is available for Cochlear devices.

Conclusion

Time, and total usage, spent in different auditory environments varies with age. Greater access to and analyses of this data could inform and improve clinical management and patient counselling. Importantly it may support earlier identification of issues with implants through changes in usage patterns. More complete access to datalogging history would increase data richness and enable longitudinal analysis of device usage through childhood development.

How does receptive vocabulary development correlate with overall language development in deaf children with cochlear implants?

Poster

Ms. Aine O'Brien (National Hearing Implant and Research Centre Beaumont Hospital), Ms. Jennifer Robertson (National Hearing Implant and Research Centre Beaumont Hospital), Ms. Olivia Ferguson (National Hearing Implant and Research Centre Beaumont Hospital), Ms. Maura O'Brien (National Hearing Implant and Research Centre Beaumont Hospital), Dr. Cristina Simoes Franklin (National Hearing Implant and Research Centre Beaumont Hospital), Mr. Adrien Gendre (National Hearing Implant and Research Centre Beaumont Hospital), Mr. Fergal Glynn (National Hearing Implant and Research Centre Beaumont Hospital), Prof. Peter Walshe (National Hearing Implant and Research Centre Beaumont Hospital)

Aims

Cochlear implantation is well recognised as a successful procedure for congenitally deaf children, giving them access to sound to support the development of spoken language. Many studies focus on how spoken language development compares to that of typically hearing peers. In addition this audit aims to identify specific areas of language development at risk for children with CIs.

Method

All children in primary education receive a speech and language assessment at 10 years post CI at our centre. The Clinical Evaluation of Language Fundamentals 5 UK and the British Picture Vocabulary Scales 3 were used to assess language and vocabulary development. Results of these standardised assessments for children who were 10 years post CI in 2023 and 2024 were analysed to look for any pattern of language difficulties. Results were compared to norms for typically hearing peers, and were also examined to identify areas of language difficulty.

Results

Vocabulary was found to be the most challenging aspect of language development for this cohort of children. 97% of children achieved a core language score within the average or above average range on the CELF-5 UK, but only 54% of children achieved an average or above average standard score for vocabulary development using the BPVS-3. No child scored more than 2 standard deviations below the mean on the CELF-5 UK but 6% did on the BPVS-3.

Conclusion

This audit confirmed that achieving vocabulary development on par with hearing peers remains challenging for deaf children with CIs, even when other language skills are age appropriate.

Implementation of the Cochlear Remote Check

Poster

Ms. Brianna Ensor (Oxford Auditory Implant Programme)

Aims

To reduce patient waitlists and decrease the number of face-to-face appointments required by implementing the Cochlear Remote Check into our standard appointment protocols for adult patients.

Method

A new protocol was created which replaced annual tunings with a routine Remote Check. All adult Cochlear recipients were added to a waitlist and exclusion criteria were applied. When due their next annual tuning, an e-mail was sent advising of the new protocol, introducing the cochlear Remote Check, explaining what is required to complete the Remote Check and asking patients to contact us if they do not believe themselves eligible. The Remote Check was scheduled shortly thereafter, with further emails being sent as necessary. Once submitted, a 30-minute 'remote appointment' was scheduled for a qualified audiologist to review the results, decide on an appropriate outcome and close the submission with feedback for the patient. If not submitted, then a 15-minute remote appointment was created, marked as 'did not attend' (DNA) and a DNA letter posted to the patient.

Results

Over a 31-week period, 409 Remote Checks were sent to adult patients. Of these, 63% were submitted and 37% expired. Of those submitted, less than a third required a face-to-face clinic appointment to be scheduled.

Conclusion

The implementation of the Remote Check has ultimately proven to save clinic hours, better manage expanding patient loads and provide a convenient and quick method for checking the basic functionality of the implant and processor.

Improving Cochlear Implantation: Reducing Intraoperative X-Rays with Electrical Field Imaging

Poster

Ms. Saatvika Eluri (Newcastle Univeristy), Dr. Daniel Lin (James Cook University Hospital), Mr. Madhusagar Gurusiddappa (James Cook University Hospital), Ms. Lisa Kennedy (James Cook University Hospital), Mr. Anirvan Banerjee (James Cook University Hospital)

Aims

To assess whether intraoperative Electrical Field Imaging (EFI) reduces the need for on-table radiographs during cochlear implantation.

Method

Two cohorts of cochlear implant (CI) recipients were analysed. The pre-EFI group comprised 160 patients (June 2020–December 2022) who required CI and relied on intraoperative and post-operative radiographs to confirm electrode positioning. The EFI group included 165 patients (March 2023–October 2024) who underwent intraoperative EFI, either alone or in combination with intraoperative or post-operative radiographs. Both adult and paediatric patients were included.

Results

The EFI group demonstrated a lower rate of intraoperative radiograph use compared with the pre-EFI group. Chi-square analysis showed a statistically significant difference between the two groups. The use of EFI was associated with a significant difference use of intraoperative X-Rays between groups.

Conclusion

Intraoperative EFI provides reliable, real-time feedback on cochlear implant electrode positioning, reducing reliance on on-table radiography and facilitating immediate correction of positioning issues. Its use may improve surgical efficiency and reduce unnecessary radiation exposure to patients during cochlear implantation.

Increasing Access to CI through Collaborative Advocacy

Poster

Dr. Sue Archbold (CIICA), Dr. Leo De Raeve (CIICA), Mr. Brian Lamb (CIICA), Ms. Darja Pajk (CIICA)

Aims

To develop an innovative collaborative approach raising CI awareness to create CI demand.

Method

A global consultation of CI users, families, professionals, industry exploring views on:

- Barriers to CI access
- Overcoming barriers
- Examples of successful advocacy

Interviews with 32 individuals from 22 countries, and survey of 63 individuals from 28 countries. Emergent themes were analysed, using a grounded theory approach, and recommendations for increasing access to CI developed.

Results

Major barriers to access: lack of awareness of hearing loss and CI, lack of referral pathways, of funding.

Strengths of advocacy work: increased grass roots action in time of societal change, powerful messages, decision makers listen to the user voice, inclusion of diversity of views, flexible and responsive.

Challenges of advocacy work : managing diversity of views, mixed messages, shortage of time and resources for volunteers, lack of advocacy training .

Support for developing collaborative advocacy work: advocacy/user/family groups working together for increased CI access and long-term management with 52 examples of advocacy success shared by user/family groups.

Impact

CI International Community of Action, established.

Now 700 individuals and 130 organisations in 76 countries: users, families, professionals, politicians and industry.

An innovative approach: interactive website providing advocacy training, advocacy resources, accessible evidence , online events sharing advocacy challenges and successes, global research initiatives.

Conclusion

This innovative approach has contributed to changes in policy, in funding decisions, in access and practice achieved by network members.

Effective advocacy transforms awareness into action, and action into change. Sara Rubinelli, 2026

Reference (if applicable)

Lamb et al, 2024, IJA, 63.7 473-481.

Introduction of an Enhanced Cochlear Implant Aftercare Pathway

Poster

Mrs. Kathryn Edge (Betsi Cadwaladr University Health Board)

Aims

Some cochlear implant (CI) users require additional support with management of their CI. Users were identified as requiring enhanced aftercare due to reduced ability to self-manage their device and/or risk factors for magnet site skin compromise. The aim was for this pathway to provide closer monitoring and additional support.

Method

CI users are identified as requiring enhanced care by the clinical team as and when they are seen for review, or if the team are informed of a change in circumstance. Patients are discussed in our team meeting where it is agreed and documented the need for enhanced care. CI users are contacted or seen at specified intervals, in addition to 'routine' aftercare. Support may involve contact with the user, family or care staff or in clinic or home visit. The type, location and frequency of additional support is individualised depending on the needs of the CI user.

Results

The enhanced care pathway has now been in place since November 2025. Currently we have 35 CI users on the enhanced care pathway compared to 480 on routine review. Our enhanced care pathway has involved home visits and wellbeing calls to monitor CI use.

Conclusion

The introduction of this new enhanced pathway ensures that the CI users who require enhanced level of care to ensure appropriate and safe use of their CI are monitored effectively. This ensures the CI service allocate their time and resources appropriately. The pathway will continue to be monitored and audited as part of service evaluation.

Investigating the role of middle ear inflammation in children with cochlear implants; the potential to improve hearing outcomes

Poster

Dr. Kate Hough (1. Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom), Dr. Ian Reddin (2. BioR, Cancer Sciences, Faculty of Medicine, University of Southampton, United Kingdom), Mrs. Jaya Nichani (3. Royal Manchester Children's Hospital, Manchester University Hospitals NHS Foundation Trust, Manchester Academic Health Science Centre, Manchester, United Kingdom), Mr. Callum Findlay (1. Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom, 4. Department of Otolaryngology, University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom), Prof. Iain Bruce (3. Royal Manchester Children's Hospital, Manchester University Hospitals NHS Foundation Trust, Manchester Academic Health Science Centre, Manchester, United Kingdom), Prof. Tracey Newman (1. Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom)

Aims

Many children who receive cochlear implants may have a history of middle ear infections. Surgical outcomes of cochlear implantation in children with active middle ear inflammation are good. However, not all these children get good quality hearing with their implant.

Prior studies have shown inflammation in the middle ear causes inflammation in the cochlea and hearing loss. Despite this, we do not understand how inflammatory signalling from the middle ear might alter hearing with a cochlear implant.

We aim to determine whether the inflammatory state of the middle ear, at implantation, is a biological factor contributing to variable performance in children with cochlear implants.

Method

CHIEF is a cross-sectional study of children undergoing cochlear implantation [IRAS:330110, ERGO:89744]. Middle ear mucosa, cochlear fluid samples and clinical and hearing data spanning five years post-implantation are being collected.

Results

The spatial gene expression profile of the major cell types in middle ear mucosal samples from the first four participants has been determined. Bioinformatic analyses shows differences between samples in gene expression across immune, epithelial, endothelial and stromal cells. Further analysis will characterise the inflammatory state of each middle ear.

Conclusion

This is the first spatial gene analysis of cells in the middle ear of children undergoing cochlear implantation. To interrogate the association between inflammatory signature of the ear and long-term hearing outcomes, the relationship between the biological and clinical data will be analysed. If a predictable relationship is determined, anti-inflammatories agents could be used to modulate inflammation at the cochlea-electrode interface and improve hearing following implantation.

Learning from the Front Line: Clinician Involvement in a Multicentre Randomised Controlled Trial

Poster

Ms. Liz Arram (University College London), Prof. Helen Cullington (University of Southampton Auditory Implant Service), Ms. Arlene O'Malley (Scottish Cochlear Implant Programme), Prof. Debi Vickers (Cambridge University), Prof. Dan Jiang (Guy's and St Thomas' NHS Foundation Trust)

Aims

Taking part in clinical research is generally a positive experience for patients and improves the performance of healthcare organisations; professional registration bodies expect engagement with evidence-based practice. BEARS is a large paediatric cochlear implant (CI) rehabilitation project; it is a Randomised Controlled Trial (RCT) - which is considered the gold standard of clinical research design. BEARS is a collaboration across six institutions and 16 out of 17 UK paediatric CI departments – providing a unique opportunity to explore clinical involvement in a RCT.

Method

Each participating site has a local Principal Investigator (PI) and additional clinicians running the BEARS trial. Many of these clinicians has never been involved in a RCT before. The BEARS central team provided ongoing training and support to empower clinicians to develop their own skills, knowledge and confidence in clinical research.

Results

Clinicians reported a positive experience - highlighting the value of collaborative research, strengthening their site's contribution to evidence generation, and enhancing understanding of trial processes. Challenges included the additional workload alongside routine clinical duties and the need to comply with rigorous study protocols.

Conclusion

Clinical research is essential for service and staff development – leading to improved patient outcomes. The UK CI field is now involved in more clinical trials than ever before. Beyond generating evidence for the BEARS intervention, the study has enhanced clinicians' confidence, skills, and enthusiasm to participate in future research.

Ling sound rehabilitation videos

Poster

Mrs. Lisa Tatum (NHS Lothian)

Aims

In Lothian many SLTs will work with a child or children with a degree of deafness. It became apparent some years ago that many had never heard of the Ling sounds. Modelling/coaching parents and others when working on Ling seemed to take a long time for people to grasp.

With both of these things in mind I started to create a resource that could be accessed by a range of different people who work with deaf children in their own time. The Deafness and hearing loss paediatric SLT team in Lothian worked together to produce what we have done today.

Method

The SLT team worked closely with medical photography at each stage to produce a script that was then used for each video.

We have now added all of these videos to Lothian Sharepoint and plan on a Ling Launch in March for all Lothian SLTs to help them understand more about the resources and how to access them.

Results

It is early days for us to be able to say much about the results of using these videos. It is hoped that parents and others will feel more empowered and pro-active in their use of Ling sounds with the children in their work lives and homes.

Conclusion

This has been a lengthy process to carry out from formulation to development. We have all learned a lot along the way, not least the challenges of juggling a heavy clinical caseload alongside trying to develop resources that we hope will be of value.

Listening Effort resource/toolkit to support paediatric cochlear implant users

Poster

Mrs. Anne-Marie Marley (Nottingham Auditory Implant Program), Mrs. Angela Maxwell (Nottingham Auditory Implant Program), Ms. Laura Haynes (Nottingham Auditory Implant Program), Mrs. Gabriella Bizeul (Nottingham Auditory Implant Program), Mrs. Amanda Odell (Nottingham Auditory Implant Program)

Aims

Children with cochlear implants frequently experience listening fatigue, which can affect their academic, social, and emotional wellbeing. However at NAIP (Nottingham Auditory Implant Programme) we have observed considerable variation in how listening fatigue is recognised and supported. We therefore raised the topic at our NAIP rehabilitation conference, attended by Teachers of the Deaf (ToDs) and Speech and Language Therapists (SLTs), with the aim of using focus-group discussions to inform a resource/toolkit that local professionals and settings can use to support children experiencing listening fatigue.

Method

Focus groups discussed:

1. Awareness of listening effort/fatigue among children/young people, families, schools, and other professionals
2. Helpful language or definitions to describe this
3. Measures used to quantify listening effort/fatigue
4. Strategies, resources, and barriers related to supporting individuals

Responses were collated and shared with our NAIP professional development group for ToDs and SLTs working with young children. A follow-up survey was also sent to all conference delegates to gather further contributions for the developing resource/toolkit.

Results

As a group, we explored potential formats for the toolkit e.g. online resource bank, physical document, video, or a combination of these. We discussed language and analogies that could raise awareness of listening effort and support understanding among children, families, and professionals. A bank of adaptable strategies was compiled, alongside ideas for addressing challenges in implementing support.

Conclusion

The resulting resource/toolkit aims to support paediatric cochlear implant users experiencing listening fatigue and strengthen collaboration between NAIP and local professionals. A further aim is empowering children to develop greater self-awareness and understanding of their needs.

Mapping the future: moving towards alignment with the 10-year health plan for England

Poster

Mrs. Deepal Sharma (Nottingham Auditory Implant Program)

Aims

In July 2025 the government launched its *Fit for the future: 10 year health plan for England*¹. This poster sets out the Nottingham Auditory Implant Programme's (NAIP) plans to align with this strategy.

Method

NAIP has experience in several of the areas set out in the 10 year plan: Hospital to Community, Analogue to Digital, and Sickness to Prevention. Here we summarise current service provision and describe planned service developments.

Results

Hospital to community: NAIP has successfully shifted elements of care to home settings, through expanded virtual and remote delivery. This shift has increased patient choice and decreased patient travel time and costs. Analogue to digital: Nottingham University Hospitals NHS Trust has recently migrated to a new electronic patient record system, allowing single-location real-time access to patient records. The Trust has introduced AI to facilitate administrative tasks. In addition to this, NAIP are increasing the use of latest technologies.

Sickness to prevention: NAIP is using the introduction of genomics, and research in this area to improve the targeting of treatment. NAIP is also committed to minimising the impact of hearing loss on individuals through patient empowerment, continuous service improvement and involvement in research.

Conclusion

The evolution from hospital-based care towards community-focused, digitally enabled services marks a significant advancement in patient-centred care. NAIP is committed to embracing new ways of working to deliver, evidence-based solutions in alignment with the 10 year plan. This will improve access to treatment and optimise outcomes.

Reference (if applicable)

See attached document

Measuring Real-World Benefit: A New Method for Evaluating Remote Microphone Systems

Poster

Mr. Stuart Whyte (University of Southampton Auditory Implant Service)

Aims

To evaluate the effectiveness of a novel speech-in-noise test rig in quantifying the functional listening benefits of Remote Microphone (RM) systems under conditions reflecting everyday communication demands.

Remote Microphone systems improve access to speech, yet standard clinical assessments often fail to capture their real-world benefit. Traditional test environments typically show around a 7 dB improvement with RMs (Whyte, 2020), suggesting conventional measures underestimate functional gains. Building on earlier work (Gaastra, Whyte et al., 2024), this study developed an enhanced speech-in-noise assessment designed to better represent typical listening environments and measure RM performance more accurately.

Method

A pilot study assessed speech-in-noise performance using a test rig incorporating the Bamford-Kowal-Bench (BKB) test at 60 dB(A), with background noise at 60 or 65 dB(A). Performance was measured with and without Remote Microphones (RMs). To minimise ceiling effects, an adaptive BKB procedure was implemented using the Nottingham Institute of Hearing Research algorithm. Speech stimuli and multi-talker babble were delivered via loudspeakers, with the signal-to-noise ratio varied adaptively to estimate the speech-reception threshold. All conditions were completed twice - first without, then with RMs. Noise characteristics ensured the RM Adaptive Audio Gain remained active.

Results

Fourteen patients with Auditory Processing Disorder showed substantial improvement: at 60 dB(A), scores increased from 25% to 99% with RMs; at 65 dB(A), from 1% to 97%. Seven cochlear implant users required speech to be 2 dB louder than noise with processors alone, compared with 23 dB quieter when using RMs.

Conclusion

The test rig offers a robust method for assessing RM benefit.

Missing Voices: Socioeconomic Bias in Cochlear Implant Research

Poster

Prof. Helen Cullington (University of Southampton Auditory Implant Service), Dr. Fleur Corbett (University College London), Mrs. Sandra Driver (Guy's and St Thomas' Hearing Implant Centre), Prof. Debi Vickers (Cambridge University)

Aims

People taking part in clinical research should reflect the population of those with the health condition. However, clinical trials often face barriers recruiting people from ethnic minority backgrounds or deprived areas. In the BEARS Virtual Reality clinical trial we wanted to find out:

1. What is the sociodemographic profile of children aged 8 to 16 years with cochlear implants in the UK?
2. What are the sociodemographic characteristics of the families recruited to BEARS

Method

We conducted a scoping review to assess the scope and volume of literature available. All UK paediatric cochlear implant centres were asked to share deidentified sociodemographic data. We examined data from the first 6 months of BEARS trial recruitment.

Results

Data were provided on 2274 children with bilateral cochlear implants aged 8 to 16 years - from 13 of the 17 UK paediatric centres. Overall children with implants were from significantly more deprived backgrounds than the UK population - varying greatly between centres as expected. Ethnicity of children with implants in the UK was also different from the general population – with significantly less children identifying as white. Thirty-five languages other than English were listed as home language. Children recruited to the BEARS trial however were from significantly less deprived backgrounds than the UK population.

Conclusion

We hope that our emphasis on research recruitment inclusivity will help the BEARS clinical trial and future cochlear implant studies. Collection of sociodemographic data in The National Registry of Hearing Implants will support better monitoring and more representative research in the future.

Modernising Post-Implant Care Pathways: Findings from a remote check patient satisfaction audit

Poster

Dr. Jo McDonagh (Scottish Cochlear Implant Programme), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme)

Aims

In 2024/25, 147 patients who completed a Remote Check (RC) using the Cochlear™ Nucleus® Smart App were invited to complete a survey evaluating their experience with remote monitoring. The survey explored satisfaction, benefits, challenges and preferences for future models of care. Findings will guide service development and support patient-centred care within the Scottish Cochlear Implant Programme

Method

The patients were invited to complete an online survey consisting of 10 questions designed to assess:

- Accessibility and ease of completing RC
- Willingness to recommend RC to other cochlear implant (CI) users
- Any technical difficulties encountered
- Preference for future care models (in-person clinic reviews versus remote care)

Responses were collected and analysed to identify trends in patient experience and preferences for hybrid care pathways.

Results

The 147 patients invited to participate aged between 7 and 96 years (M=47.75yrs, SD=20.12yrs). Thus, yielding a response rate of 38% (n56).

Ease of access, 89% (n50) agreed that RC was a convenient way to access their CI healthcare, while only 3 patients disagreed. 84% (n47) stated they would recommend RC to other CI recipients; no respondents indicated they would not recommend it. Technical difficulties were experienced by 9 patients, 2 felt this had a negative impact. 77% (n40) expressed a preference for alternating between remote checks and face to face clinic reviews.

Conclusion

Remote Check is well-received by CI recipients, offering a convenient and effective alternative to traditional clinic visits. A hybrid care approach appears to align with patient preferences and may represent the optimal model for future service delivery.

Modified blind sac closure for cochlear implantation; How we do it and a ten-year review of the Scottish National Implant centre experience

Poster

Mr. Dimitrios Angelou (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Ms. Lyndsay Fraser (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mr. Peter Wardrop (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mr. Paul Sooby (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.), Mrs. Natasha Grimmond (Otolaryngology Department, University Hospital Crosshouse. NHS Ayrshire and Arran.)

Aims

Within the context of cochlear implantation, it is particularly important to secure a safe and infection-free environment for the cochlear implant (CI) device. Blind sac closure (BSC) is a useful tool as it can help with the management of infections, provide coverage of the device in a pre-existing mastoid cavity and can improve access in cases of unfavourable anatomy. This paper showcases our modifications of the usual technique to better suit CI patients, in addition to outlining our results from the last decade.

Method

We describe our modifications of the traditional technique to better suit CI surgery and demonstrate our results from the last decade via a retrospective review of surgical outcomes. Our approach includes less extensive mastoid drilling rather than a subtotal petrosectomy, we do not block the eustachian tube and we do not obliterate the mastoid cavity with grafts.

Results

We have found that many of the steps of the classically described BSC approach are not necessary in CI practice. The benefits of our technique entail having a shorter and simpler procedure, no donor site morbidity and also reduced risk of damage to adjacent structures arising from the more limited mastoid drilling.

Conclusion

Our results indicate comparable outcomes to the current literature which utilise the traditional BSC technique. This demonstrates that our modified BSC technique is safe and effective in the management of challenging CI cases.

My Experience from completing the BAA HTS module in Cochlear Implants.

Poster

Ms. Alysia Dyke (North Wales Auditory Implant Service)

Aims

To share my experience of completing the BAA HTS module in Cochlear Implants (CI).

Method

I obtained a job offer to work in CI in 2023. I started completing the HTS module in CI a couple of years ago, and it has involved several steps including:

- Having supervised clinical sessions in my department
- Having direct observations of my clinical skills
- Attending tutorials led by colleagues in my department on topics such as rehabilitation, hybrid and bi-modal hearing, management of complex cases, device choice and candidacy
- Participating in at least 5 multidisciplinary meetings
- Completing competencies (periodic appraisals of whole patient management and a reflective diary)
- Completing four case studies
- Attending manufacturer programming training sessions
- Attending the University College Cork in April/May 2024 to complete a Master's module in CI
- Completing a week-long secondment at Bradford CI centre in May 2025
- Completing my CI exam in Winter 2026

Results

Completing the HTS module in CI has been an invaluable experience, providing me with a thorough tailored structure of training, that has provided a mixture of theoretical learning, on-the-job training, and learning from the way other CI centres operate so that I could bring this learning back to my home department (e.g. regarding the uses of ASSE to help verify C levels).

Conclusion

I feel this HTS module in CI equipped me well to start my career in cochlear implants, and I would recommend any individual wanting to start their career or grow their knowledge of CI to complete it too.

Reference (if applicable)

<https://baaudiology.org/wp-content/uploads/2022/03/HTS-Cochlear-implants-module-summary-290322.pdf>

Optimising the routine post-operative care pathway

Poster

Dr. Linor Jones (BCUHB)

Aims

The North Wales Cochlear implant service identified a need to optimise our post-operative care pathway for reasons including:

- To reduce unnecessary 'mapping' appointments
- To meet capacity demands
- To maximise efficiency of access to limited clinical rooms
- To utilise remote care options

Method

Reflecting on information shared by other teams, our team discussed options on how best to optimise our post-operative care pathway for routine patients. Once we had formulated what we felt was an optimised pathway we presented our proposed changes to our service users through discussions in our three user groups and by engaging with our PPI group. Feedback received on the changes was generally positive which reassured us on the proposed changes.

Results

The optimised post-operative care pathway was implemented from 1st November 2025. The main changes in the pathway are:

- removal of post-operative check appointment
- introduction of switch-on one week after surgery
- reducing the number of mapping appointments between switch-on and three month review from four to two
- promoting use of remote care options

One challenge identified was the need to switch from an off-the-ear to a behind-the-ear processor temporarily due to retention issues at switch-on, presumably due to the presence of swelling at implant site.

Conclusion

Feedback from staff and service users on the introduction of the optimised post-operative care pathway for CI users has been positive. The changes mean that patients have their device switched on sooner. The optimised pathway remains flexible to allow clinicians the ability to arrange additional appointments for those users that require additional support.

OTOPLAN: Did it change our plan?

Poster

*Ms. Nicola Hatton (Emmeline Centre, Cambridge University Hospitals), Mr. Andrew Neale (MED-EL UK),
Mrs. gemma crundwell (MED-EL UK)*

Aims

Previously, our default electrode selection for MED-EL implants was the FLEX28 array, however, this does not account for variation in cochlear size and may limit cochlear coverage depending on individual anatomy. With this in mind and following the introduction of OTOPLAN into our clinical process, we are evaluating if our electrode selection changes from default when using OTOPLAN and how this impacts clinical outcomes.

Method

This study analysed all patients whose electrode selection was guided by OTOPLAN. We calculated the percentage of cases where OTOPLAN resulted in an alternative electrode choice at multidisciplinary team (MTD) compared to the default selection. Post operative data will be analysed to identify the rate of extracochlear electrodes for those whose electrode selection was chosen using OTOPLAN compared to those implanted prior to OTOPLAN.

Results

We have used OTOPLAN to guide electrode selection on 42 ears. A change from the default was recommended for 64% of implants. Post-operative data are being collected and x-rays reviewed to identify extracochlear electrodes.

Conclusion

We have changed our practice from using the default electrode to OTOPLAN guided electrode selection. We are currently providing an OTOPLAN electrode suggestion at MDT as standard for all proposed MED-EL implant recipients. We are working towards collecting long-term outcomes for extracochlear electrodes/electrode migration data as well as impact on function measures. We will re-evaluate the practical implementation of OTOPLAN once we have these longer-term outcomes available.

Our experience of Otoplan at North Wales Auditory Implant Programme

Poster

Mrs. Rebecca Anderson (North Wales Auditory Implant Service)

Aims

Will Otoplan alter the choice of implant?

Method

Otoplan is a patient-specific otological planning software developed by MED-EL. Within 2025, all patients consenting for a MED-EL implant had their CT scans reviewed by Otoplan.

Reports received by MED-EL including diameter, width, height, cochlear duct length (cdl) (full), cdl (oc), scala volume, no of turns, degrees, cochlear length. Recommendations of implant type specific for the patient were provided by MED-EL based on predicted 80-85% cochlear coverage and insertion angle above 630 degrees.

All Otoplan reports were reviewed by cochlear implant surgeons and the otoplan report was used alongside other factors to choose implant type.

Results

- 11 patients received MedEL implants in 2025 at North Wales Auditory implant programme
- Flex 28 recommended on 5 occasions (45%)
- Flex Soft – 4-5 occasions (36-45%)
- Flex 34 – 1-2 occasions (9-18%)
- Medium or FORM (24mm) – 1 occasion (9%)

in 100% of cases, surgical device choice matched one of the devices recommended by MED-EL.

Conclusion

The most frequently recommended implant type was the Flex 28 and Flex Soft. The Flex 34 was recommended on one/two occasions.

The Otoplan helped to identify a case of cochlear ossification requiring a Medium 24mm implant.

Otoplan mapping provided confidence for our surgeons to implant a Flex 34 implant and we became the first centre in the UK to implant a Flex 34.

Reference (if applicable)

Deven P. Curtis, Anthony N. Baumann, Anita Jeyakumar. Variation in cochlear size: A systematic review. International Journal of Pediatric Otorhinolaryngology. Volume 171, 2023.

Outcomes of cochlear implantation in individuals with infratentorial superficial siderosis: our experience

Poster

Dr. Natalia Kharytaniuk (Department of Neuro-otology, Royal National ENT and Eastman Dental Hospitals, University College London Hospitals NHS Foundation Trust, London, UK), Ms. Amy Scrivener (Department of Auditory Implants, Royal National ENT and Eastman Dental Hospitals, University College London Hospitals NHS Foundation Trust, London, UK), Ms. Wanda Aleksy (Department of Auditory Implants, Royal National ENT and Eastman Dental Hospitals, University College London Hospitals NHS Foundation Trust, London, UK), Mr. Ben Silver (Department of Auditory Implants, Royal National ENT and Eastman Dental Hospitals, University College London Hospitals NHS Foundation Trust, London, UK), Dr. Peter Cowley (Lysholm Department of Neuroradiology, National Hospital for Neurology and Neurosurgery, Queen Square, London, UK), Mr. Parag Sayal (Victor Horsley Department of Neurosurgery, National Hospital for Neurology and Neurosurgery, Queen Square, London, UK), Dr. Simon F Farmer (Comprehensive Stroke Service, National Hospital for Neurology and Neurosurgery, Queen Square, London, UK), Prof. David J Werring (Stroke Research Centre, Department of Brain Repair and Rehabilitation, UCL Queen Square Institute of Neurology, London, UK), Prof. Doris-Eva Bamiou (Centre for Auditory Research, UCL Ear Institute, London, UK), Ms. Hala Kanona (Department of Auditory Implants, Royal National ENT and Eastman Dental Hospitals, University College London Hospitals NHS Foundation Trust, London, UK)

Aims

Classical infratentorial superficial siderosis (iSS) is a complex, rare neuro-otological condition. Its most common feature is sensorineural hearing loss, downslowing, often asymmetrical and of variable severity. Cochlear implantation (CI) success rates vary in individuals with iSS (47-59%). The decision for CI suitability is challenging for the clinical team and the patients. Some iSS patients have good speech-discrimination scores and may be deemed unsuitable. This study aimed to review our team's experience and CI outcomes in iSS patients.

Method

This was an observational study, performed as part of a clinical audit. We reviewed clinical, radiological and audiological parameters of adult (≥ 18 years-old) patients with confirmed iSS, under the care of our iSS multi-disciplinary team, who underwent CI (1995-2025).

Results

Eleven patients (9 males, 82%) had 14 implants: two re-implanted, one had bilateral CIs. The mean (SD) age at surgery was 42 (12 years). The iSS aetiology was: post-operative dural defect or following CNS trauma (five and three patients, respectively); unknown (two). Radiological haemosiderin burden varied. Eight patients had iSS treatment (dural repair, chelation or both). Speech-scores (Bamford-Kowal-Bench, BKB) recorded in 10 patients (pre-op BKB 0% in seven); post-CI BKB scores ranged between 0% and 88% (n=7, mean (SD) 30 (31)) at mean (SD) follow-up 36 (76) months (range 2-251 months).

Conclusion

In our experience, most iSS patients showed improvement in speech-scores following CI. CI technology should be offered to iSS individuals; however, multidisciplinary team involvement is paramount when assessing for suitability. Longitudinal studies are needed to monitor performance over time.

Practices and Perspectives on Objective Measures of Auditory Discrimination in UK Cochlear Implant Centres: A National Survey

Poster

Mr. Wayne Ellis (UCLH NHS Foundation Trust), Prof. Nishchay Mehta (UCLH NHS Foundation Trust), Dr. Garreth Prendergast (University of Manchester), Dr. Samuel Couth (University of Manchester), Prof. Debi Vickers (Cambridge University)

Aims

To evaluate current knowledge, use, perceived benefits, and challenges to implementing objective measures of auditory discrimination in cochlear implant services across the United Kingdom.

Method

A cross-sectional survey was distributed electronically to professionals working with cochlear implant recipients across implant centres in the United Kingdom. Questions addressed demographics, familiarity with objective tests, current implementation, perceived utility across patient populations, barriers to implementation, and recommendations for clinical integration.

Results

58 professionals responded to the survey. Familiarity with objective measures of auditory discrimination was generally moderate to low. Tests were primarily used for threshold estimation in difficult-to-test patients. The highest perceived utility was for young children (0-3 years) and patients with limited behavioural assessment capabilities. Perceived challenges to implementation included time constraints, cost, training requirements, and the interpretation of results.

Conclusion

While UK cochlear implant professionals recognise the potential benefits of objective measures of auditory discrimination, particularly for challenging populations, significant barriers limit widespread implementation. Results highlight the need for standardised protocols, improved training, and clearer evidence-based guidance for clinical application.

Predicting speech-processing preferences from initial outcomes in cochlear implantation

Poster

Dr. Andrew I McLaren (Scottish Cochlear Implant Programme), Dr. William M Whitmer (Hearing Sciences - Scottish Section, University of Nottingham), Dr. Jack A Holman (Hearing Sciences - Scottish Section, University of Nottingham), Prof. Graham Naylor (Hearing Sciences - Scottish Section, University of Nottingham), Mrs. Jane Gallacher (Scottish Cochlear Implant Programme)

Aims

The Scottish Cochlear Implant Programme (SCIP) offers new recipients a choice in processing between two systems (with different stimulation rates), ACE (900 Hz) and SPEAK (250 Hz). The current study investigated whether initial outcomes from a recipient sample had any predictive power for individual processing preference.

Method

We analysed data from 107 adults with severe-profound hearing loss that were implanted between 2019-2025. Patients are initially given two different MAPs with different programming strategies to use. Approximately one week after initial activation, each patient completes a series of standardised tests of speech intelligibility. After a further three weeks in which they try both programmes, they choose which of the programming strategies they would like to use on their device thereafter.

Results

After the trial period, choice was evenly split between processing strategies: 57 patients (53%) chose ACE; 50 chose SPEAK. Predictions of this choice, regardless of method/model, were generally poor. Significant predictors were age and sentence-recall scores (both CUNY audiovisual and BKB audio-only sentences). Differences in scores between choices, however, were generally small.

Conclusion

The lack of a strong predictor of choice is likely due to multiple factors being differently weighed by each recipient (e.g., quality, comfort). Further research is needed to understand how the choice is individually determined, and what benefits may come from offering a choice.

Should D/deaf adults in the UK be offered one or two cochlear implants? PART 1: Cochlear implant outcomes with one versus two implants: Real-world hearing and user experience

Poster

Prof. Nicci Campbell (University of Southampton Auditory Implant Service), Ms. Isabel McGauley (University of Southampton Auditory Implant Service), Prof. Emily Arbuthnot (University of Southampton Auditory Implant Service), Dr. Ben Lineton (University of Southampton Auditory Implant Service), Prof. Roberta Buhagiar (University of Southampton Auditory Implant Service), Prof. Carl Verschuur (University of Southampton, Faculty of Engineering and Physical Sciences)

Aims

Acknowledgements: Project funded by Cochlear Ltd (IIR-2564). External advisor: Chris Sampson (OHE)

In the U.K., children are eligible for bilateral cochlear implants (CI), whereas adults usually receive only one. Current NICE guidance (2019) is based on evidence predating 2009, as the 2019 update focused on candidacy thresholds rather than bilateral implantation in adults. This project, involving >100 participants, contributes to the evidence base required to inform future guidance review.

Primary aims were to evaluate spatial hearing outcomes and user experience in adults, assess the feasibility of bilateral hearing assessment and CI optimisation, and inform both internal clinical practice at USAIS and future NICE decision making. Secondary aims included comparisons of simultaneous versus sequential implantation outcomes and adult versus adolescent outcomes.

Method

The 16-month project was co-developed with the All_Ears@UoS Patient and Public Involvement group. 105 CI users: 75 adults and 30 adolescents (14–18 years), all with ≥ 12 months bilateral CI experience. Each CI user attended a 90min session undergoing a ‘real-life’ spatial hearing test battery and user experience questionnaires. A further appointment was offered for optimisation of settings, if necessary.

Results

Results show limited benefit in the standard front-facing speech-in-noise (1.6 dB SNR) but significant gains in roving and fixed spatial conditions (up to 6.9 dB SNR) and a 35% improvement in localisation, with corresponding quality-of-life benefits.

Conclusion

This project contributes to the growing body of evidence supporting bilateral CI in adults. The results support the feasibility of a randomised control trial (RCT) as the next step, with current results seen as complementary.

Should D/deaf adults in the UK be offered one or two cochlear implants? PART 2: The results of two national online surveys: one for adult CI users and the other CI professionals

Poster

Ms. Isabel McGauley (University of Southampton Auditory Implant Service), Prof. Nicci Campbell (University of Southampton Auditory Implant Service), Prof. Emily Arbuthnot (University of Southampton Auditory Implant Service), Dr. Ben Lineton (University of Southampton Auditory Implant Service), Prof. Roberta Buhagiar (University of Southampton Auditory Implant Service), Prof. Carl Verschuur (Faculty of Engineering and Physical Sciences, University of Southampton)

Aims

Acknowledgement: Project funded by Cochlear Ltd (IIR-2564)

In the United Kingdom (U.K), children are eligible for bilateral cochlear implants (CI), while adults are typically offered only a unilateral CI. However, increasing evidence highlights advantages of bilateral implantation for adults, particularly on spatial hearing and real-world listening outcomes. Alongside clinical evidence, understanding stakeholder perspectives is critical.

Method

As part of the IIR-2564 project investigating unilateral versus bilateral CI outcomes and real-world user experience, we conducted two national online surveys with adult CI users and CI professionals. Surveys were co-developed with the Patient and Public Involvement & Engagement group (All_Ears@UoS) and other stakeholders (Ergo: 102255, 103001). Adult CI users and professionals across the U.K. and Channel Islands were recruited through professional societies, charities, and user groups. Surveys were open from 01/04/2025 to 15/08/2025.

Results

Responses were received from 140 CI users and 73 CI professionals. The majority (95% of CI users; 90% of professionals) believed adults meeting candidacy criteria should be offered bilateral CI. Reasons included equity irrespective of age and real-world listening demands equal to children, while recognising funding constraints. Among unilateral CI users, 83% reported they would consider a second CI via the NHS and 28% privately. Views differed on simultaneous versus sequential implantation, with 63% of professionals and 39% of users favouring simultaneous implantation. Both groups agreed current assessments inadequately capture real-world listening in noise and sound localisation.

Conclusion

Overall, the findings demonstrate strong stakeholder support for bilateral CI in adults and highlight the need for more ecologically valid outcome measures.

Sound Futures Begin Early: Enhancing Access and Outcomes with Let's Listen and Talk

Poster

Ms. Julie Hughes (The Elizabeth Foundation), Mrs. Kate Dixon (The Elizabeth Foundation)

Aims

Strengthen Collaborative Practices Between Parents and Professionals

Apply Evidence-Based Strategies from the Let's Listen and Talk Programme

Identify Strategies to Improve Accessibility and Engagement

Method

Early intervention is essential for supporting communication development and ensuring optimal outcomes. Let's Listen and Talk, developed by The Elizabeth Foundation, offers comprehensive home learning and support designed to empower both parents and professionals.

This presentation introduces Let's Listen and Talk as an innovative, flexible, and evidence-based intervention that connects family-centred early intervention with home-based learning. It integrates early communication development with interactive activities, tailored resources, and professional guidance to foster strong skills from infancy through preschool. The programme includes:

- Parent Education
- Professional Support
- Individualised Learning

Results

Launched in 2017, the programme has tracked user demographics, behavioural trends, and anecdotal feedback. This session will share insights from these data, methods trialed for feedback collection, and how input has shaped the programme's evolution into an agile, responsive resource. Preliminary findings show improved parent-child interactions, increased parental confidence, and stronger professional alignment. These outcomes suggest Let's Listen and Talk significantly contributes to better auditory and language development in deaf children and empowers parents to become confident advocates on behalf of their child.

Current developments include increasing accessibility and exploring AI to enhance content delivery and address the way people access and consume information.

Conclusion

By showcasing this holistic and adaptable approach, the presentation will demonstrate how empowering families and professionals through structured support can transform paediatric rehabilitation and promote long-term success for deaf children.

SOUND-CI: Towards Linguistic Equity in Cochlear Implant Assessment: Evaluating the Language Independent Test Against AB Words

Poster

Mrs. Jane Gallacher (University of Cambridge), Prof. Debi Vickers (Cambridge University)

Aims

Current UK cochlear implant (CI) candidacy assessment relies on speech tests such as Arthur Boothroyd (AB) words, which are linguistically biased toward native English speakers. This creates inequitable pathways for potential CI candidates who use English as an additional language or who do not speak English. The SOUND-CI project aims to evaluate the Language Independent Test of Auditory Discrimination (LIT-AD; Ching et al.) at pre-implant assessment stage, validating its clinical utility against AB words. The goal is to establish a more equitable and robust method of determining CI candidacy for adults who do not speak English.

Method

Adults referred for CI assessment will complete both LIT-AD and AB word test under standardised clinical conditions. Demographic data, language background, and pure tone audiograms will be collected. Correlational analyses and regression modelling will evaluate relationships between LIT-AD performance, AB word scores (scored by phoneme and word), and degree of hearing loss.

Results

Analyses will focus on the extent to which LIT-AD outcomes align with AB based candidacy decisions and whether LIT-AD reduces language related test bias.

Conclusion

If validated, LIT-AD could offer a linguistically fairer assessment method, improving accuracy of CI candidacy decisions for non-native English speakers - supporting equitable access to CI referral and reducing current linguistic barriers within UK assessment pathways.

Reference (if applicable)

Ching TYC, Dillon H, Hou S, Seeto M, Sodan A, Chong-White N. Development and Evaluation of a Language-Independent Test of Auditory Discrimination for Referrals for Cochlear Implant Candidacy Assessment. *Ear Hear.* 2022 Jul-Aug 01;43(4):1151-1163. doi: 10.1097/AUD.0000000000001166. Epub 2021 Nov 19.

Subtotal Petrosectomy with blind sac closure in Cochlear Implantation: A 23 case national Centre Experience

Poster

Dr. Tamer El Natout (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital Ireland), Mr. Khalid Alshaikh (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital Ireland), Mr. Omar Abuzant (Royal College of Surgeons in Ireland), Dr. Cristina Simoes Franklin (National Hearing Implant and Research Centre Beaumont Hospital), Mr. Fergal Glynn (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, Royal College of Surgeons, Ireland), Prof. Peter Walshe (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, Royal College of Surgeons, Ireland), Mr. Adrien Gendre (National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, Royal College of Surgeons, Ireland)

Aims

Subtotal petrosectomy with blind sac closure (BSC) is used to enable safe cochlear implantation (CI) in chronically diseased ears and selected complex cases. We report our national centre experience, indications and postoperative complications.

Method

Retrospective review of all CI cases requiring subtotal petrosectomy/BSC at the National Hearing Implant and Viani Research Centre (NHIVRC), Beaumont Hospital, between 1995 and 2025. Demographics, primary versus revision setting, indications, postoperative imaging and complications were extracted from the CI database.

Results

Twenty-three patients were included (13 male, 10 female). BSC was performed at primary CI in 11 cases and during revision CI in 12. The most frequent indication was cholesteatoma (13/23). Other indications included abnormal/complex anatomy requiring transcanal approach (3/23), tympanic membrane perforation (5/23), electrode extrusion (1/23), and encephalocele (1/23). Ten patients underwent postoperative CT imaging during follow-up; three developed wound dehiscence requiring explantation and subsequent reimplantation. No meningitis or intracranial complications were recorded.

Conclusion

Subtotal petrosectomy/BSC facilitated CI in challenging ears, most commonly for cholesteatoma. Wound dehiscence, although uncommon, may necessitate implant explantation and reimplantation. Our findings support BSC as a valuable option for disease control and implant preservation.

Reference (if applicable)

References included in PDF

Supporting Babies Early Communication Skills with Sensory Integration

Poster

Mrs. Helen Peebles (Yorkshire Auditory Implant Service)

Aims

To support early communication skills.

To enable retention of the coil by developing motor skills.

To develop families understanding of the development of early communication skills and to provide them with strategies to support their babies.

Method

This was a pilot study with 4 children who were not on the YAIS Well Baby Pathway.

8 rehabilitation sessions were initially offered over 8 weeks with the family being advised of the need to complete activities during the week. Home toys were used.

Sessions were arranged with the local TOD and the Centre's SLT to work together with the family to develop the foundation skills of communication by developing the vestibular, tactile and proprioceptive systems using sensory integration techniques. The focus of the sessions was to develop head control, sitting, shared attention etc in order for the children to develop the skills for eye contact and vocalisations leading to the development of the foundation skills for communication and language development.

Results

Three children improved head control, sitting unsupported, shared attention and following a point. These children have gone forward for cochlear implants. A cochlear implant was considered not appropriate for one of the children.

Conclusion

This approach has engaged families and provided psychoeducation which has developed rapport. Assessment of the babies has been more timely. The babies and the families are in a better position to retain the cochlear implant coils. The children have developed the foundation skills for communication and language which is an excellent start for their cochlear implant journey.

The 'Referral Support Tool' for audiologists and their patients - A UK pilot study

Poster

Ms. Charlotte Rogers (Cochlear Ltd)

Aims

Exploring the feasibility of a newly developed Referral Support Tool (RST), to assist and enhance audiologist-patient conversations regarding cochlear implantation (CI).

This study assessed clinician perceptions of the value of the RST, its influence on CI-related counselling, and its potential to help shape clinical conversations.

Method

Participants consisted of 17 audiologists in the pre-pilot phase and 10 during implementation, the drop in number being due to clinical commitment and time pressures. Clinicians held varied levels of experience and seniority, providing wide scope of opinion and feedback. Semi-structured interviews, online survey and a tool trial phases were combined to provide reliable and robust information and meet the aims of our investigation.

Results

Nine out of ten audiologists considered the RST helpful, particularly for less experienced clinicians and patients exploring CI. The tool was perceived to improve the effectiveness of CI discussions and increase patient confidence, chiefly by offering a structured framework for introducing CI and presenting possible outcome expectations. Reservations about the RST centred on possible data assumptions and need to review the tool within a UK-centric evidence base, potential sample bias, and the clarity of graphical outputs.

Conclusion

Recommendations for implementation suggest framing the tool as a counselling aid, as opposed to a diagnostic outcome prediction aid. Participants felt targeted training in interpretation and communication were key to refinement of the RST. Overall, it was felt that the tool demonstrates considerable potential to support informed decision-making, normalise CI discussions, and strengthen the quality of referral discussions across the patient pathway.

The UK National Registry of Hearing implants (NRHI) in 2026: Progress and Next Steps

Poster

Dr. Jenny Townsend (BCUHB), Mrs. Katherine Wilson (St Thomas's hearing implant programme), Prof. Debi Vickers (Cambridge University), Mrs. Kate Hanvey (Midlands Hearing Implant Programme (Children's Service))

Aims

Hearing implants make a huge difference to the quality of life of individuals who struggle to benefit from conventional hearing aids. The range of hearing implants available on the NHS includes cochlear implants (CI), auditory brainstem implants (ABI), middle ear implants, transcutaneous bone conduction implants and percutaneous bone conduction implants.

Whilst hearing implants are generally very safe and effective, failures and complications can occur, and clinical outcomes will vary. As our implant caseload grows, there is an urgent need to capture national data on the use and outcomes of these devices to ensure safety and effectiveness. The NHS England Outcome Registry Programme (ORP) is supporting development of NRHI to meet this goal.

Method

Following a successful pilot, the NRHI CI arm was rolled out to all CI centres in England, with all centres entering live data from June 2025.

Results

We will present an update on the first nine months of the NRHI cochlear implant arm. This will include early feedback and platform changes, estimates of compliance with data entry ('case ascertainment'), a summary of the data captured to date, and progress towards data reporting for clinics. We will introduce datasets for the auditory brainstem implant, bone conduction hearing implant and middle ear implant arms of the NHRI, and describe the next steps to integrate these devices into the registry

Conclusion

The NRHI had a successful launch in 2025. Next steps in Registry development and reporting will be discussed.

Understanding lived experiences of adults with severe hearing loss and preparedness for cochlear implantation: a qualitative study

Poster

Dr. Sarah Somerset (School of medicine, University of Nottingham), Dr. Paul Leighton (School of medicine, University of Nottingham)

Aims

To explore lived experiences of severe hearing loss and factors influencing preparedness for cochlear implantation.

Method

Adults eligible for the COACH (COmpAring Cochlear implants with Hearing aids in adults with severe hearing loss) trial were invited to take part in semi-structured interviews. Participants were aged over 18 years and close to, but not meeting, NHS CI candidacy criteria. Interviews were conducted in person, by telephone, or via video call with captioning where required. Data were transcribed verbatim and analysed using thematic analysis.

Results

Clear differences emerged between participants who declined and those who accepted trial participation. Those declining commonly reported low urgency due to age or perceived slow progression of hearing loss, viewing CI as a future option. Concerns about losing residual hearing and the impact of care responsibilities on recovery and adjustment were prominent barriers. Participants who enrolled described a sense of having “nothing to lose,” perceiving participation as a worthwhile risk. Across both groups, progressive changes in social behaviour were described, with social withdrawal and isolation evident.

Conclusion

Adults approaching CI candidacy experience complex social and emotional factors that influence preparedness for cochlear implantation. Addressing concerns around residual hearing, caregiving responsibilities, and social isolation may support more informed and timely decision-making within CI pathways.

Validation of the UK verification protocol for Digital Modulation (DM) receivers with Cochlear Implant (CI) sound processors

Poster

Mr. Stuart Whyte (University of Southampton Auditory Implant Service)

Aims

Remote Microphone Systems (RMS) improve speech perception in noise. Electroacoustic Verification Protocols (EVPs) ensure transparency between CI processors and RMS. Previous work showed DM receivers provide a speech-in-noise advantage, typically 7 dB SNR.

Objective: To validate EVPs for DM receivers with CI processors and review changes in practices.

Method

Forty-seven CI processors were tested: Advanced Bionics (n=10), Cochlear Nucleus (n=33), and MED-EL (n=4), including the latest models from each manufacturer. Electroacoustic responses were measured using UK Assistive Listening Technology Working Group (ALTWG) and US AAA protocols to determine transparency, defined as equivalent outputs for equivalent inputs. Two averaging methods were compared: the US three-frequency approach (750, 1000, 2000 Hz) and the UK six-frequency approach (750–4000 Hz). Initial analysis indicated no significant difference between methods; however, further evaluation of absolute differences against Hearing Instrument Test Box transparency and tolerance ranges showed greater compliance with the UK method developed by the University of Southampton Auditory Implant Service (USAIS) and adopted by ALTWG.

Results

Transparency at EasyGain 0 was achieved in 91% of DM receivers, 6% at EasyGain -2, and 2% at EasyGain -4. Of 44 processor–receiver combinations, 70% met specification using the UK extended frequency range versus 30% using the US method.

Conclusion

The USAIS protocol is effective for verifying DM receivers with CI processors. Recent work demonstrates that a new speech-in-noise test simulates speech at distance with transmitters in standard user mode, showing thresholds exceeding 20dB SNR for CI plus DM compared to CI alone. Further research is recommended to confirm optimal outcomes.



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