



GIG
CYMRU
NHS
WALES

Cyd-bwyllgor
Comisiynu
Joint Commissioning
Committee

Specialist Auditory Hearing Implant Service (all ages)

Service Specification: SS235

November 2024
Version: 1.0

SERVICE SPECIFICATION:
SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

| Document information | |
|---------------------------|--|
| Document purpose | Service Specification |
| Document name | Specialist Auditory Hearing Implant Service (all ages) |
| Author | NHS Wales Joint Commissioning Committee |
| Publication date | November 2024 |
| Commissioning Team | Neuroscience and Trauma Services |
| Target audience | Chief Executives, Medical Directors, Directors of Finance, Specialist Care Centres, Health Boards, NHS Trusts Consultant Ear, Nose and Throat, Audiology, Audio vestibular Physician, Directors of Primary Care, Director of Nursing and Quality |
| Description | NHS Wales will routinely commission this specialised service in accordance with the criteria described in this policy |
| Document No | SS235 |
| Review Date | November 2027 |



Contents

| | |
|---|----|
| Statement..... | 5 |
| Welsh Language | 5 |
| Decarbonisation..... | 5 |
| Disclaimer..... | 5 |
| 1. Introduction..... | 7 |
| 1.1 Background..... | 7 |
| 1.2 Aims and Objectives..... | 9 |
| 1.3 Relationship with other documents..... | 10 |
| 2. Service Delivery | 11 |
| 2.1 Access Criteria..... | 11 |
| 2.2 Service description..... | 15 |
| 2.2.1 Specialist Hearing Implant Service | 16 |
| 2.2.2 Local Outreach Services..... | 17 |
| 2.3 Transition care arrangements | 20 |
| 2.4 Exclusion Criteria | 20 |
| 2.5 Acceptance Criteria | 21 |
| 2.6 Current Service Provider/Designated Centres | 21 |
| 2.7 Exceptions | 22 |
| 3. Quality and Patient Safety | 23 |
| 3.1 Quality Indicators (Standards)..... | 23 |
| 3.2 National Standards..... | 23 |
| 3.3 Improving Quality in Physiological Services (IQIPS) Accreditation Standards..... | 24 |
| 3.4 Other quality requirements | 25 |
| 3.5 Additional Considerations for Patient and Family Experience..... | 25 |
| 3.6 Additional Considerations for Paediatric Services..... | 26 |
| 3.7 Additional Consideration for Adult Services..... | 26 |
| 4. Performance Monitoring and Information Requirement | 27 |
| 4.1 Performance Monitoring | 27 |
| 4.2 Key Performance Indicators | 28 |
| 4.3 Date of Review | 29 |
| 5. Equality Impact and Assessment | 30 |
| 6. Putting Things Right | 31 |

SERVICE SPECIFICATION:
SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

| | | |
|-----------|---|----|
| 6.1 | Raising a Concern | 31 |
| 6.2 | Individual Patient Funding Request (IPFR)..... | 31 |
| Annex i | Patient Pathway | 32 |
| Annex ii | Codes | 36 |
| Annex iii | Abbreviations and Glossary | 37 |
| Annex iv | Quality Standards for Auditory Implant Services in Wales..... | 41 |

Statement

NHS Wales Joint Commissioning Committee (NWJCC) will commission the service of Specialist Auditory Hearing Implant service in accordance with the criteria outlined in this specification.

In creating this document NWJCC has reviewed the requirements and standards of care that are expected to deliver this service.

Welsh Language

NWJCC is committed to treating the English and Welsh languages on the basis of equality, and endeavour to ensure commissioned services meet the requirements of the legislative framework for Welsh Language, including the [Welsh Language Act \(1993\)](#), the [Welsh Language \(Wales\) Measure 2011](#) and the [Welsh Language Standards \(No.7\) Regulations 2018](#).

Where a service is provided in a private facility or in a hospital outside of Wales, the provisions of the Welsh language standards do not directly apply but in recognition of its importance to the patient experience, the referring health board should ensure that wherever possible patients have access to their preferred language.

In order to facilitate this, NWJCC is committed to working closely with providers to ensure that in the absence of a Welsh speaker, written information will be offered and people have access to either a translator or 'Language-line' if requested. Where possible, links to local teams should be maintained during the period of care.

Decarbonisation

NWJCC is committed to taking assertive action to reducing the carbon footprint through mindful commissioning activities. Where possible and taking into account each individual patient's needs, services are provided closer to home, including via digital and virtual access, with a delivery chain for service provision and associated capital that reflects the NWJCC commitment.

Disclaimer

NWJCC assumes that healthcare professionals will use their clinical judgment, knowledge and expertise when deciding whether it is appropriate to apply this document.

This document may not be clinically appropriate for use in all situations and does not override the responsibility of healthcare professionals to make decisions appropriate to

SERVICE SPECIFICATION:
SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian, or Local Authority.

NWJCC disclaims any responsibility for damages arising out of the use or non-use of this policy.

1. Introduction

This document has been developed as the Service Specification for the planning and delivery of Specialist Auditory Hearing Implant service for people resident in Wales. This service will only be commissioned by the NHS Wales Joint Commissioning Committee (NWJCC) and applies to residents of all seven Health Boards in Wales.

1.1 Background

Patients referred to the Specialist Auditory Hearing Implant service require clinical assessment to determine the correct treatment option. The first and preferred way of addressing hearing loss is to use a conventional hearing aid. These devices work by processing and amplifying sound to make it louder.

Hearing loss is grouped into three categories:

- conductive hearing loss
- sensorineural hearing loss
- mixed hearing loss.

For some patients, acoustic hearing aids will not work or they are not suitable. This may be due to the shape and size of the ear or due to other medical problems with the ear for example atresia, chronic infection/ discharge and/or severe to profound hearing loss.

Severe to profound hearing loss is defined as only hearing sounds that are louder than 70 dB 4 frequency average (500 Hz, 1,000 Hz, 2,000 Hz, and 4,000 Hz) bilaterally without acoustic hearing aids¹.

Patients who normally access a Specialist Auditory Hearing Implant Service will have been referred with a more complex hearing loss, as their acoustic hearing aid does not provide adequate benefit. These patients could be considered for a Cochlear Implant Hearing device, Bone Conduction Hearing Implant (BCHI) or a Middle Ear Implant (MEI). Surgical interventions can result in percutaneous or transcutaneous devices being implanted depending on appropriate selection and assessment.

Epidemiology

Hearing loss is the second most common disability in the UK affecting over 12 million people, with a steeply increasing incidence with age². It can lead to significant health and mental health issues.

¹ <https://cks.nice.org.uk/topics/hearing-loss-in-adults/background-information/definition/>

² <https://rnid.org.uk/information-and-support/hearing-loss/>

An ageing population in Wales means that demand for both hearing assessment and associated interventions is set to rise over the coming years. The vast majority of the ageing population with hearing loss can benefit from direct primary care referral to adult hearing services, often based in the community, and do not require referral to an Ear, Nose and Throat (ENT) out-patient appointment prior to audiological assessment. This facilitates timely diagnosis and access to support for adults with hearing loss.

There are approximately 613,000 people aged 16 years and older with severe to profound hearing loss in England and Wales³. In the UK, around 3 percent of people older than 50 and 8 percent of those older than 70 years have severe to profound hearing loss⁴. There are more females than males with hearing loss although this is associated with females living longer rather than gender differences in causes of hearing loss⁵. Some minority ethnic groups may have higher rates of hearing loss due to increased genetic risk associated with consanguinity and increased risk of childhood infections. Approximately 40 percent of children who are deaf and 45 percent of people younger than 60 years who are deaf have additional difficulties, such as other physical or sensory disabilities⁶.

Approximately 370 children in England and 20 children in Wales are born with permanent severe to profound hearing loss each year. Around 90 percent of these children live with hearing parents⁷. About one in every 1000 children is severely or profoundly deaf at 3 years old (Welsh Government School census results as at January 2019 approx. 198 school age <5 to 9 yrs). This rises to 2 in every 1000 children aged 9 to 16 years (Welsh Government School census results approx. 496 >9-15 yrs)⁸. About half the incidence of childhood hearing loss is attributed to genetic causes, although approximately 90 percent of deaf children come from families with no direct experience of hearing loss. Causes of severe to profound hearing loss in children also include conditions such as meningitis and viral infection of the inner ear (for example, rubella or measles), as well as premature birth and congenital infections⁹.

³ [Overview | Cochlear implants for children and adults with severe to profound hearing loss | Guidance | NICE](#)

⁴ <https://www.nice.org.uk/guidance/ta566/chapter/2-Clinical-need-and-practice>

⁵ [England NHS Commissioning /d09-ear-surg-coch service specification](#)

⁶ [Overview | Cochlear implants for children and adults with severe to profound hearing loss | Guidance | NICE](#)

⁷ [nice.org.uk/guidance/ta566/chapter/2-Clinical-need-and-practice](https://www.nice.org.uk/guidance/ta566/chapter/2-Clinical-need-and-practice)

⁸ [nice.org.uk/guidance/ta566/chapter/2-Clinical-need-and-practice](https://www.nice.org.uk/guidance/ta566/chapter/2-Clinical-need-and-practice)

⁹ [2 Clinical need and practice | Cochlear implants for children and adults with severe to profound hearing loss | Guidance | NICE](#)

Impact of hearing loss

Unaddressed hearing loss can have a serious impact on health and wellbeing:

- people with hearing loss are more likely to experience emotional distress and loneliness¹⁰
- hearing loss doubles the risk of developing depression¹¹
- children with hearing loss will have difficulties with their spoken language, taking part in school activities and learning, making friends and interacting with peers¹²
- people with hearing loss are at least twice as likely to develop dementia¹³.

1.2 Aims and Objectives.

The aim of this service specification is to define the requirements and standard of care essential for delivering a Specialist Auditory Hearing Implant Service for people with low frequency or flat hearing loss, or high frequency functional severe to profound permanent hearing loss who do not gain adequate benefit from conventional well fitted hearing aids.

The objectives of this service specification are to:

- detail the specifications required to deliver a Specialist Auditory Hearing Implant Service
- ensure that service delivery is informed by up-to-date high-quality training, guidelines and evidence
- ensure that services deliver safe and effective interventions and outcomes using recognised techniques such as continuous improvement cycles
- ensure that services have clear governance processes
- ensure that services are accessible, responsive and personalised to meet the needs of a diverse population and to equip service users to self-manage their long-term health conditions
- use technology and internet access to provide online support
- develop blended service models combining both in-person and virtual contacts, to enhance flexibility and capacity whilst maintaining quality of care
- ensure equitable access to specialist hearing implantable device centres (please refer to section 2.6) for all eligible children and adults
- ensure equitable access to Specialist Auditory Hearing Implant Services for Welsh patients irrespective of geographical location
- ensure equitable waiting times for all eligible children and adults.

¹⁰ <https://rnid.org.uk/get-involved/research-and-policy/social-research-reports/hearing-matters/>

¹¹ <https://rnid.org.uk/get-involved/research-and-policy/social-research-reports/hearing-matters/>

¹² <https://www.cincinnatichildrens.org/health/h/hearing-communication>

¹³ <https://rnid.org.uk/about-us/research-and-policy/social-research-reports/hearing-matters/>

1.3 Relationship with other documents

This document should be read in conjunction with the following documents:

- **NHS Wales**
 - All Wales Policy: [Making Decisions in Individual Patient Funding requests \(IPFR\)](#).

- **National Institute of Health and Care Excellence (NICE) guidance**
 - Cochlear implants for children and adults with severe to profound hearing loss. NICE Technology Appraisal Guidance (TA566., March 2019). <https://www.nice.org.uk/guidance/TA566>
 - Hearing loss in adults: assessment and management – NICE guideline NG98 <https://www.nice.org.uk/guidance/ng98>

- **Relevant NHS England policies**
 - NHS Standard Contract for Cochlear Implants (2013) [d09-ear-surg-coch-0414.pdf \(england.nhs.uk\)](#)
 - British Cochlear Implant Quality Standards (2023) for children, young people and adults. [BCIG Quality Standard 2023 | British Cochlear Implant Group](#)
 - Auditory Brainstem Implant (ABI) for children with congenital abnormalities of the auditory nerves or cochlear (2018) service-specification-auditory-brainstem-implant.pdf (england.nhs.uk) [www.england.nhs.uk service-specification-auditory-brainstem-implant](#)
 - Clinical Commissioning Policy: Bone Conduction Hearing Implants (BCHIs) for hearing loss (all ages) (2016): [www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2013/05/16041_FINAL.pdf](#) (NHS England: 16041/P)
 - Clinical Commissioning Policy: Bone Anchored Hearing Aids (April 2013) Reference: NHSCB/D09/P/a [www.england.nhs.uk/wp-content/uploads/2013/04/d09-p-a.pdf](#)

- **Other published documents**
 - British Cochlear Implant Group Quality standards (2023). https://www.bcig.org.uk/news/42/bcig_quality_standard_2023
Service Specification: Bone Conduction Hearing Implant and Middle Ear Implant Service (April 2024) https://www.england.nhs.uk/service-spec-bone-conduction-hearing-implant-middle-ear-implant-service-all-ages.April_2024

2. Service Delivery

The NHS Wales Joint Commissioning Committee will commission a Specialist Auditory Hearing Implant service for adults and children in line with the criteria identified in this specification.

2.1 Access Criteria

Access Criteria for Cochlear Implants (CI)

The service will accept referrals from:

- GP
- audiology service (NHS or private)
- Ear, Nose and Throat (ENT) Service (Secondary Care)
- paediatrician (Secondary Care)
- audiological physicians
- speech and language therapists
- qualified teachers of the deaf
- neurology service.

Written or electronic referrals should be made to the Cochlear Implantation service at University Hospital of Wales, Cardiff, Ysbyty Glan Clwyd, Bodelwyddan or the Royal Manchester Children's Hospital, Manchester.

Referrals should provide evidence of:

- unaided hearing level in both ears at frequencies between 0.5 and 8 kHz (for babies and young children this may not be possible to assess fully prior to referral)
- where possible, evidence of a hearing aid trial of at least 6 weeks or a reason as to why this is contraindicated or inappropriate.

Cochlear Implant – eligibility criteria

Children and adult cases are eligible for cochlear implant if the multi-disciplinary team (as referenced in section 2.2) based in the hearing centres are satisfied that all of the following criteria is met:

- the patient meets all of the agreed audiological, physical and psychological criteria outlined in the relevant national Guidelines (e.g. BCIG¹⁴, NICE¹⁵)
- the patient is suitable for surgery under either local or general anaesthesia

¹⁴ [Full article: Cochlear implant services for children, young people and adults. Quality standard \(tandfonline.com\)](#)

¹⁵ [Overview | Cochlear implants for children and adults with severe to profound hearing loss | Guidance | NICE](#)

SERVICE SPECIFICATION: SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

- sensorineural or mixed hearing loss resulting in severe to profound hearing loss defined as 80dBHL at 2 or more frequencies (500 Hz, 1,000 Hz, 2,000 Hz, 3,000 Hz and 4,000 Hz)
- the patient should have a AB phoneme score of <50% at a 70dB(A) in quiet
- parental and/or patient understanding of the implications of the long-term commitment of a cochlear implant.

Simultaneous Bilateral Cochlear Implantation

Simultaneous bilateral cochlear implantation is recommended as an option for the following groups of people with severe to profound deafness who do not receive adequate benefit from acoustic hearing aids:

- adults who in exceptional circumstances (e.g. blindness) may be offered simultaneous bilateral CIs
- for children, simultaneous bilateral cochlear implantation is recommended as an option whenever clinically appropriate. Sequential implantation is not supported unless the patient was unilaterally implanted as a child at the time of the guidance publication, and remains a child at the time of sequential surgery. In exceptional circumstances, sequential bilateral implantation may be required for medical or audiological reasons¹⁶.

Access Criteria for Bone Conduction Hearing Implants (BCHI)

The service will accept referrals from:

- GP
- audiology service (NHS or private)
- Ear, Nose and Throat (ENT) Service (Secondary Care)
- paediatrician (Secondary Care)
- qualified teacher of the deaf
- speech and language therapists.

Written or electronic referrals should be made to the Bone Conduction Hearing Implant service at University Hospital of Wales, Cardiff, Ysbyty Glan Clwyd, Wrexham Maelor Hospital, Wrexham, Royal Gwent Hospital, Newport and Neath Port Talbot, Swansea.

Bone Conduction Hearing Implant (BCHI)– eligibility criteria

A BCHI should be provided when an assessment by the multidisciplinary team leads to a clear recommendation of a BCHI¹⁷.

¹⁶ <https://www.nice.org.uk/guidance/ta566/chapter/1-Recommendations>

¹⁷ [Bone anchored hearing aid: an evidence-based analysis - PubMed \(nih.gov\)](#)

SERVICE SPECIFICATION:
SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

BCHI and will only be available to patients for whom:

1. Conventional Air Conduction Hearing Aids (ACHA) are not suitable, or do not provide adequate benefit (see patient pathway); AND
2. Patients have a level of hearing loss that falls within BCHI manufacturer's guidelines. The specific criteria for BCHI are outlined below.

The specific criteria for BCHI are outlined below.

Implanted BCHI are commissioned for use in adults and children as per manufacturers CE markings who have:

(1a) Unilateral or bilateral conductive or mixed hearing loss within the manufacturers fitting criteria;

AND

Stable bone conduction thresholds (≤ 15 dB deterioration in >2 frequencies in a 2 year period).

OR

(1b) Unilateral sensorineural hearing impairment including Sudden Sensorineural Hearing Loss (SSNHL) where the better ear has bone-conduction hearing thresholds within the manufacturers fitting criteria including sudden sensorineural deafness (SSD);

AND

(2) Trialled an ACHA or wireless CROS / BiCROS hearing aid for a minimum of 4 weeks, or who are anatomically or physiologically unable to undertake a trial of an ACHA;

AND

(3) Trialled a BCHI on a softband or headband for a minimum of 14 days.

Centres implanting BCHI should aim not to implant devices at the upper range of their fitting range, as this is unlikely to offer long-term benefit to the patient.

Where a candidate is suitable for more than one BCHI device, the most cost effective option must be selected by the MDT with full patient involvement. In addition:

- the patient is clinically unsuitable for other medical or surgical treatments
- otological indications supporting the use of BCHI include:
 - congenital malformation of the middle/external or microtia

SERVICE SPECIFICATION: SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

- chronically draining ear that does not allow the use of an air conducting hearing aid
- patients with bilateral conductive hearing loss due to ossicular disease (and not appropriate for surgical correction) or unable to be aided by conventional air conducting devices.

Access Criteria for Middle Ear Implants (MEIs)

The service will accept referrals from:

- GP
- audiology service (NHS or private)
- Ear, Nose and Throat (ENT) Service (Secondary Care)
- paediatrician (Secondary Care)
- qualified teacher of the deaf
- speech and language therapists.

Written or electronic referrals should be made to the Middle Ear Implant service at University Hospital of Wales, Cardiff, Ysbyty Glan Clwyd, Wrexham Maelor Hospital, Wrexham, Royal Gwent Hospital, Newport and Neath Port Talbot, Swansea.

Middle Ear Implant – eligibility criteria

A MEI should be provided when an assessment by the multidisciplinary team leads to a clear recommendation of a MEI.

MEIs will only be available to patients for whom:

1. Conventional Air Conduction Hearing Aids (ACHA) are not suitable, or do not provide adequate benefit (see patient pathway); AND
2. Patients have a level of hearing loss that falls within BCHI manufacturer's guidelines. The specific criteria for BCHI are outlined below.

The specific criteria for MEIs are outlined below.

MEIs are commissioned for use in adults and children > 5 years of age (or as per manufacturers CE markings) who have:

- (1) Unilateral or bilateral conductive, mixed or sensorineural hearing loss within the manufacturers fitting criteria;

AND

- (2) Middle ear anatomy suitable to accommodate a MEI as determined by radiological and audiometrical testing;

AND

- (3) Stable bone conduction thresholds (≤ 15 dB deterioration in >2 frequencies in a 2 year period);

AND

- (4) Trialled an ACHA or wireless CROS / BiCROS hearing aid for a minimum of 4 weeks, or who are anatomically or physiologically unable to undertake a trial of an ACHA.

The use of a device outside of the manufacturers specifications is not routinely commissioned unless part of a recognised and approved trial supported by suitable funding.

Where a candidate is suitable for more than one MEI device, the most cost-effective option must be selected by the MDT with full patient involvement.

2.2 Service description

The South Wales Hearing Implantable Device service will be provided by a single implantable device service (hub) for children and adults, with elements of the service provided at local or regional sites. The service will have a functioning MDT where all referrals are discussed and planned for. The service, through a multi-professional team approach, will be able to offer access to all types of commissioned hearing implants.

The North Wales Hearing Implantable Device service is delivered by BCUHB and is managed as a single multidisciplinary service. The BCHI/MEI arm is based at Wrexham Maelor hospital with outreach support.

Children from North Wales and North Powys have their cochlear implant surgery at the Manchester University NHS Foundation Trust, their follow-on care and maintenance for children over 11 years is provided locally in Glan Clwyd Hospital, Rhyl and at regular outreach clinics (currently Newtown, Deeside, Ruthin). There are a small number of children who require follow-up care at Manchester to best meet their complex needs e.g. those with severe/profound/multiple disabilities - this will be agreed on a case by case basis with Manchester.

The overarching aim of the service is to deliver a safe and sustainable hearing implantable device service for children and adults that meet national standards and

guidance. There should be seamless progression between all delivery sites within the service including hospital to home and from single centre hub to outreach services.

Care will be provided in a timely manner as near as possible to home in order to improve quality of life and participation for the patient, and to reduce the stress and burden on families and carers. For children, care should be provided in a child and family centred setting.

In-patient and follow up services should include appropriate medical, surgical, scientific and rehabilitation expertise, with administrative support.

All patient areas should be appropriate to the needs of a deaf population. The specialist hearing implant device centre will work collaboratively with local services to plan an appropriate blended service according to patient need.

The South Wales Hearing Implantable Device service will develop standard operating procedures, detailing which elements of the assessment processes (including radiology diagnostics) intervention and follow up will be done at the main centre and which will be delivered at the patient's local or regional centre (See Annex i).

2.2.1 Specialist Hearing Implant Service

The Specialist Hearing Implant Service is delivered by a multidisciplinary team of specialist professionals with expertise in:

- otology (surgical and nursing)
- clinical science (audiological scientists and/or clinical physicists)
- clinical physiology (audiologists and/or hearing therapists) and
- rehabilitation (speech and language therapists and qualified teachers of the deaf)
- hearing therapists and/or auditory verbal therapists
- clinical psychologists.

Access should also be available to other appropriate health professionals, such as neuroradiologists, audiovestibular physicians, geneticists, paediatricians and specialists in old people's medicine. The team should have the knowledge and skills to assess and work with 'children and young people' (CYP) and/or adults with a range of complex needs, expectations and priorities.

The Service Lead should be an experienced Specialist Hearing Implant clinician with a leadership and management role. They will have responsibility for the entire patient pathway and will ensure that relevant Quality Standards and national specifications are met.

Service flexibility should ensure person-centred care; in some cases, a blended approach (face to face or remote) may be provided. The Specialist Hearing Implant Device Service should ensure they have the relevant technology and training to offer care remotely. Shared decision making between the MDT team and the patient/family/carer should be used to plan an appropriate blended service and the frequency of patient contact (scheduled or on-demand) according to patient need. Services will support patients to self-manage their hearing implant care, leading to better long-term outcomes.

2.2.2 Local Outreach Services

Cochlear Implant Champions

The British Cochlear Implant Group Charitable Incorporated Organisation (BCIG) aims to advance knowledge, best practice and awareness in the field of hearing implantation, in particular through the dissemination of cochlear implant (CI) research to health professionals and information to the public.

A joint initiative between the British Academy of Audiology (BAA) and the BCIG established the CI Champions scheme (British Academy of Audiology). The scheme aims to ensure all eligible adults, children and young people (CYP), and their families, are well-informed about cochlear implants and are offered a timely referral¹⁸.

The cochlear implantation services will be required to appoint a mentor who will liaise with the referring centre CI service champions. The champions will encourage colleagues in the local outreach service to identify potential CI candidates and ensure that all patients are provided with appropriate information to make an informed decision on referral. Mentors will collaborate with their local champions and share updates and training, establishing and consolidating the seamless care pathway between the local outreach service and the specialist hearing implant device centre.

Facilities and equipment and Software for all Services

The Specialist Auditory Hearing Implant Service should ensure that there is appropriate access to the following facilities, equipment and software:

- acoustic audiology rooms for the diagnosis and treatment of hearing issues which need to provide noise reduction levels of 35dB or more to offer a controlled testing space, compliant with ISO 8253-1:2010 Acoustics – audiometric test methods- Part 1 Pure Tone air and bone conduction audiometry¹⁹
- audiometric assessment and for the fitting and evaluation of hearing implants and the recording and export of service user data including a minimum of:

¹⁸ [Full article: Cochlear implant services for children, young people and adults. Quality standard \(tandfonline.com\)](#)

¹⁹ [ISO 8253-1:2010 - Acoustics — Audiometric test methods — Part 1: Pure-tone air and bone conduction audiometry](#)

SERVICE SPECIFICATION: SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

- otoscope
- ear impression taking equipment
- ear mould modification equipment
- audiometer, objective measurement (for example, REM) and 2cc test box systems that store data electronically in a form that can be readily exported and read into compatible NHS provider systems
- appropriate and updated hearing aid fitting software
- a Patient Management System that stores data, including outcome questionnaire responses (for example, GHABP/COSI/IOI-HA), electronically, in a form that can be readily exported and read into compatible NHS provider systems
- computer hardware and software of a sufficiently robust standard to support the above systems, including secure back up facilities of all patient data.

Other Recommended Equipment:

- access to appropriately calibrated and up-to-date equipment and facilities to enable all appropriate assessments to be undertaken
- audiological testing should be performed in appropriately sound treated rooms such that the ambient noise levels are compliant with the BS EN ISO 8253-1:2010 standard
- if this is not possible because domiciliary visits are required, or where only preliminary hearing assessment is performed before full hearing assessment, the 35 dBA (maximum background noise level) standard should be achieved before undertaking testing. This should be done in situ, with a portable sound level meter and the evidence of this undertaking documented. These standards specify procedures and requirements for pure-tone air conduction and bone conduction threshold audiometry
- all referring and implantable device services will be supported by a 3 tier imaging network
- robust arrangements should be in place for patient transfer if more complex imaging or intervention is required
- Paediatric equipment will be optimised for paediatric use
- a tympanometer to evaluate eardrum mobility and middle ear function as required.

In addition:

All audiometric equipment should be regularly calibrated and checked to current British and ISO standards including Stage A, Stage B or Stage C checks in accordance with national recommendations.

Specialist Teams

SERVICE SPECIFICATION: SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

The service should be provided by a multidisciplinary team that is capable of assessing all patients with severe to profound hearing losses compatible with implantable hearing devices.

The multidisciplinary team should comprise a core team for treating both children and adults, including:

- auditory hearing device co-ordinator/ head of service role
- clinical scientists (audiology/clinical physics)
- clinical physiologists (Audiology), and rehabilitation/hearing therapists
- speech and language therapists
- consultant otologists/ audiovestibular physician /ENT/ radiologist/paediatrician
- educational services including qualified teachers of the deaf
- oral and maxillofacial department teams
- theatre teams including an anaesthetist and operating theatre staff
- radiographers.

Interdependencies with other services or providers

Access to paediatric anaesthesia

If a paediatric patient requires anaesthesia and surgery, their particular needs should be recognised and they should be managed in child friendly facilities, and looked after by staff with appropriate experience and training.

Specialist anaesthesia and sedation services may be required to facilitate radiological procedures and interventions (for example MRI). These should be carried out by an appropriately trained radiologist, radiographers and by an anaesthetist with training and expertise in the management of children.

Co-located services for the Cochlear Implant Service (on the same site)

Co-located services - to be provided on the same site and to be immediately available 24/7.

Any babies and children who are likely to require intensive care following an operation should therefore undergo their surgery in a hospital with a designated Paediatric Intensive Care Unit (PICU).

Interdependent Services (for BCHI, MEI and CI may be required but not necessarily co-located with the Specialist Auditory Hearing Implant Service)

The Specialist Auditory Hearing Implant Service should have the following available support:

- Primary Care

- NHS Audiology Service
- NHS Newborn Hearing Screening Programme
- appropriate rehabilitative services which may include:
- speech & language therapy
- educational services including qualified teachers of the deaf or other specialist teaching services
- Social Services including social worker for the deaf
- occupational therapy
- physiotherapy
- psychology
- tinnitus team
- balance team
- diagnostic radiology
- British Sign Language interpreters
- Specialised Child and Young People Mental Health Services (CAMHS)
- genetics
- specialists in old people's medicine.

2.3 Transition care arrangements

All children and young people with a Specialist hearing implantable device will need to have arrangements in place to ensure seamless transfer between the paediatric and adult MDT service for when they reach 18 years of age.

All transition arrangements should be in line with [Transition from children's to adults' services for young people using health or social care services NICE guidance NG43](#).

The transition process should be a flexible and collaborative process involving the young person and their family as appropriate and the service. This preparation should start from early adolescence, 12-13 year olds. The exact timing of this will ideally be dependent on the wishes of the young person and will involve close liaison between the referring and receiving teams to ensure that the transition process is seen as a positive step and to minimise anxiety that patients and families may feel (e.g. by having joint transition arrangements).

2.4 Exclusion Criteria

Cochlear Implant

Individuals who do not meet the access criteria for cochlear implantation as assessed by the Cochlear Implant Programme team.

BCHI will not be commissioned for:

- patients with a bone disease that is unable to support an implant
- patients who have a sensitivity or allergy to the materials used
- patients with physical, emotional or psychological disorders that, despite suitable treatment and support, would interfere with surgery or the ability to allow suitable rehabilitation such that significant benefit would be unlikely.

MEIs will not be commissioned for:

- • patients with a recent history of uncontrolled middle ear infections.
- • patients who have a sensitivity or allergy to the materials used.
- • patients with physical, emotional or psychological disorders that, despite suitable treatment and support, would interfere with surgery or the ability to allow suitable rehabilitation such that significant benefit would be unlikely.

Additional Considerations

BCHI should be used with particular caution in patients who have had radiotherapy to the area of bone to be implanted and also in those patients who have a bone disease that affects the strength and integration integrity of an implant. In these patient groups the decision pathway and care should be undertaken by an auditory implant centre MDT. For some patients (and particularly BCHI candidates) a remote or desk top review may be appropriate.

The use of a device outside of the manufacturers specifications is not routinely commissioned unless part of a recognised and approved trial supported by suitable funding.

Centres implanting BCHIs should aim not to implant devices at the upper range of their fitting range, as this is unlikely to offer long-term benefit to the patient.

2.5 Acceptance Criteria

The service outlined in this specification is for patients ordinarily resident in Wales, or otherwise the commissioning responsibility of the NHS in Wales. This excludes patients who whilst resident in Wales, are registered with a GP practice in England, but includes patients resident in England who are registered with a GP Practice in Wales.

2.6 Current Service Provider/Designated Centres

Cochlear Implant Centres

- Princess of Wales Hospital, Bridgend *
- University Hospital of Wales, Cardiff *

SERVICE SPECIFICATION:
SS235 SPECIALIST AUDITORY HEARING IMPLANT SERVICE (ALL AGES)

- Ysbyty Glan Clwyd, Bodelwyddan
- Royal Manchester Children's Hospital, Manchester

Bone Conduction Hearing Implant/Middle Ear Implant Centres

- Neath Port Talbot, Swansea *
- University Hospital of Wales, Cardiff *
- Royal Gwent Hospital, Newport *
- Wrexham Maelor Hospital, Wrexham
- Ysbyty Glan Clwyd, Bodelwyddan

*Note – work is underway to determine the most appropriate location for the South/West Wales service.

2.7 Exceptions

If the patient does not meet the criteria for treatment as outlined in this policy, an Individual Patient Funding Request (IPFR) can be submitted for consideration in line with the All Wales Policy: Making Decisions on Individual Patient Funding Requests. The request will then be considered by the All Wales IPFR Panel.

If the patient wishes to be referred to a provider outside of the agreed pathway, an IPFR should be submitted.

Further information on making IPFR requests can be found at: [Individual Patient Funding Requests](#)

3. Quality and Patient Safety

The provider must work to written quality standards and provide monitoring information to the lead commissioner. The quality management systems must be externally audited and accredited.

The centre must enable the patients, carers and advocates informed participation and to be able to demonstrate this. Provision should be made for patients with communication difficulties young adults.

3.1 Quality Indicators (Standards)

All Auditory Implant Services in Wales are expected to comply with the Quality Standards for Auditory Implant Services in Wales (see 3.2).

The provider should work to written quality standards and will be expected to submit data to the registry once established.

The provider will provide an update on their outcomes and achievements over the preceding 12 months, including how they are embedding learning and developing and a Quality Improvement focus.

3.2 National Standards

The Specialist Auditory Hearing Implant Service should follow best practice standards and recommendations as defined below:

- British Cochlear Implant Group Quality Standards 2023²⁰
- Wales Quality Standards for Auditory Implant Services 2024 (annex v)
- Wales Quality Standards for Adult Hearing Rehabilitation Services²¹
- Wales Quality Standards for Children's Hearing Services²²
- NHS Core principles²³
- National Institute for Health and Care Excellence Guidelines and Quality Standards, - Cochlear implants for children and adults with severe to profound hearing loss – Technology appraisal guidance (TA566) 7th March 2019²⁴

²⁰ www.b cig.org.uk/news/42/b cig_quality_standard_2023

²¹ www.gov.wales/sites/default/files/publications/2019-10/quality-standards-for-adult-hearing-rehabilitation-services.pdf

²² www.gov.wales/sites/default/files/publications/2019-10/quality-standards-for-childrens-hearing-services.pdf

²³ <https://www.themedicportal.com/blog/the-6-nhs-core-values-explained/?v=79cba1185463>

²⁴ <https://www.nice.org.uk/guidance/TA566>

- ISO 8253-1:2020 – acoustics – Audiometric test methods – Part 1: Pure tone air and bone conduction audiometry – reviewed in 2021²⁵
- Care Quality Commission Standards²⁶
- Clinical protocols specified by British Society of Audiology and British Academy of Audiology and the British Society of Hearing Aid Audiologists²⁷
- British Academy of Audiology Guidelines for Referral to Audiology of Adults with Hearing Difficulty (2016)²⁸
- BSHAA Practice Manual for the use, supervision, training and approval of Hearing Care Assistants, (British Society of Hearing Aid Audiologists 2013)²⁹
- Standards of Proficiency: Speech and Language Therapists (HCPC 2014)³⁰
- Standards of Proficiency: Clinical Scientists (HCPC 2014)³¹
- Standards of Proficiency: Hearing Aid Dispensers (HCPC 2014)³²
- Guidance on Record Keeping (British Society of Hearing Aid Audiologists 2016)³³
- Health and Care Professions Council professional registration and training standards³⁴.

3.3 Improving Quality in Physiological Services (IQIPS) Accreditation Standards

Providers should ensure that NHS Wales England audiology services participate in, and maintain accreditation to defined quality standards operating under the umbrella of the UKAS IQIPS Accreditation Scheme. In particular:

- the provider will be expected to have completed the IQIPS Self-Assessment Improvement Tool (SAIT) and have registered an application for accreditation with UKAS
- accreditation status should be achieved within the duration of the contract term

²⁵ <https://www.iso.org/standard/43601.html>

²⁶ <https://www.cqc.org.uk/guidance>

²⁷ <https://www.bing.com/search?q=%E2%80%A2+Clinical+protocols+specified+by+British+Society+of+Audiology+and+British+Academy+of+Audiology+and+the+British+Society+of+Hearing+Aid+Audiologist&s&cvid=8c59e73cc8ba45bcb97c31b1ff8de628&aqs=edge..69i57j69i11004.5745j0j4&FORM=ANAB01&PC=U531>

²⁸ https://www.baaudiology.org/app/uploads/2019/07/BAA_Guidance_for_Onward_Referral_of_Adults_with_Hearing_Difficulty_Directly_Referred_to_Audiology_2016_-_minor_amendments.pdf

²⁹ <https://www.bshaa.org/bshaa-practice-manual-for-the-use-supervision-training-and-approval-of-hearing-care-assistants-2013/>

³⁰ <https://www.hcpc-uk.org/resources/standards/standards-of-proficiency-speech-and-language-therapists/>

³¹ [Standards of Proficiency: Clinical Scientists \(HCPC 2014\)](#)

³² <https://www.hcpc-uk.org/resources/standards/standards-of-proficiency-hearing-aid-dispensers/>

³³ <https://www.bshaa.org/bshaa-guidance-on-record-keeping/>

³⁴ <https://www.hcpc-uk.org/resources/standards/standards-of-education-and-training/>

- the provider will have a recognised system to demonstrate service quality and standards
- the service will have detailed clinical protocols setting out nationally (and local where appropriate) recognised good practice for each treatment site
- the quality system and its treatment protocols will be subject to regular clinical and management audit
- the provider is required to undertake regular patient surveys and develop and implement an action plan based on findings
<https://www.ukas.com/accreditation/standards/iqips/>.

3.4 Other quality requirements

- reduce prevalence of avoidable permanent hearing loss
- encourage early identification, diagnosis and management of hearing loss through improved service user and professional education
- improve public health and occupational health focus on hearing loss
- provide person-centred care, and respond to information and psychosocial needs, including for the effect on partners of living with poor hearing
- support communication needs by providing timely signposting to lip reading classes, British Sign Language and assistive technologies and other rehabilitation services
- promote inclusion and participation of people who are deaf or hard of hearing
- improve the service through research and development and the adoption of new evidence-based technologies and practice
- consideration must be given to the needs of a deaf population in all aspects of the design of the service
- there must be clearly defined clinical and managerial accountability within the service
- all work processes are to be protocol-led and clearly defined. Any deviation from these protocols will be clearly documented and investigated with regular reviews led by the commissioners with support from each provider and updated where appropriate.

3.5 Additional Considerations for Patient and Family Experience

Families, carers and associated professionals should have access to information during the assessment, surgery and after implantation. Including national and local charities, support groups (deaf community groups), equipment and services for deaf and deafened people.

Information should be accessible to patients in a language that is appropriate to their preferred method of communication:

- interpreting services for direct patient contact (face to face or remote) including appropriately registered professional British Sign Language, spoken language interpreters and other forms of communication support
- verbal information should be supported by a written summary.

3.6 Additional Considerations for Paediatric Services

- to ensure that those individuals with microtia have access to support and treatment for their hearing and cosmetic aspects provided in a coordinated fashion by a single team or two teams working in a coordinated way to promote the normal development of auditory awareness and comprehension
- to provide a service in these cases – this could be through direct input or an advisory service.

3.7 Additional Consideration for Adult Services

- Specialist Auditory Hearing Implant Services for adults should ensure that there are local arrangements for referral into more specialist medical services in line with British Academy of Audiology (BAA) Guidelines for Direct Referral of Adults with Hearing Difficulty to Audiology Services (2016).³⁵

³⁵

[https://www.baaudiology.org/app/uploads/2019/07/BAA_Guidance_for_Onward_Referral_of_Adults_wit
h_Hearing_Difficulty_Directly_Referred_to_Audiology_2016_-_minor_amendments.pdf](https://www.baaudiology.org/app/uploads/2019/07/BAA_Guidance_for_Onward_Referral_of_Adults_with_Hearing_Difficulty_Directly_Referred_to_Audiology_2016_-_minor_amendments.pdf)

4. Performance Monitoring and Information Requirement

4.1 Performance Monitoring

NWJCC will be responsible for commissioning services in line with this service specification. This will include agreeing appropriate information and procedures to monitor the performance of organisations.

For the services defined in this policy the following approach will be adopted:

- Service providers to evidence quality and performance controls
- Service providers to evidence compliance with standards of care

NWJCC will conduct performance and quality reviews on an annual basis

Cochlear Implants

Providers are expected to meet the quality standards for age-appropriate services as set out in the British Cochlear Implant Group Quality Standard (2023) for Cochlear implant services for children, young people and adults and the Quality Standards for Auditory Implant Services in Wales (2024).

The service will engage in audit and monitoring of service outcomes, including complying with data requirements of the National Hearing Implant Registry (NHIR) and appropriate external organisations, such as the MHRA. The provider should work to written quality standards and will be expected to submit data to the registry once established.

Bone Conduction Hearing Implants

Providers are expected to meet the quality standards for age-appropriate services as set out in the most recent Quality Standards for Auditory Implant Services in Wales (2024) approved in June 2024 and the "Quality standards for bone conduction implants" produced by a multinational consensus in 2015. (Gavilan, Adunka et al. 2015). The contract with the provider will mirror the standard NHS contract (or successor documents) with the provider and the commissioner.

The service will have appropriate policies which cover, as a minimum:

- device failure
- lost devices
- FM policy and assistive devices
- upgrade of devices
- transfer of care pathway from/to another service.

Services will provide reimplantation if required. Costs outside those included in the manufacturer's warranty are the responsibility of the commissioner.

Middle Hearing Implant

Providers are expected to meet the quality standards for age-appropriate services as set out in the most recent Quality Standards for Auditory Implant Services in Wales (2024) approved in June 2024. The contract with the provider will mirror the standard NHS contract (or successor documents) with the provider and the commissioner.

The service will have appropriate policies which cover, as a minimum:

- device failure
- lost devices
- FM policy and assistive devices
- upgrade of devices
- transfer of care pathway from/to another service.

Services will provide reimplantation if required. Costs outside those included in the manufacturer's warranty are the responsibility of the commissioner.

4.2 Key Performance Indicators

CI services should identify Key Performance Indicators (KPIs). These measures may include, but are not limited to:

- safe and successful CI surgery, for example, report on unplanned readmissions within 30 days of surgery and explanation/reimplantation due to medical complications
- CI device use
- specific outcome measures.

Information about deceased CI recipients should be provided to manufacturers to inform device cumulative survival rate data.

Professionals working in CI services should liaise regularly with peers from other CI services throughout the UK (such as through the BCIG and its associated professional groups) to review case management and share examples of good clinical and managerial practice.

CI services benefit from participation in BCIG-led data sharing initiatives in order to inform clinical practice and service development in the UK. As a minimum, the BCIG will

annually collate figures on new CI activity and referral in the UK and figures for the cumulative CI cohort.

Services monitoring geographical access – referral numbers and implants per head of population by county / area. This is important to be able to measure the impact of service redesign and the effectiveness of the outreach model.

Patient satisfaction surveys should be carried out regularly. Services should share feedback with BCIG as appropriate in order to improve patient care nationally, like the BCIG MRI patient questionnaire.

Services are committed to evidence-based care and decision making to achieve the best patient outcomes and experience.

The provider should also monitor the appropriateness of referrals into the service and provide regular feedback to referrers on inappropriate referrals, identifying any trends or potential educational needs.

4.3 Date of Review

This document is scheduled for review before November 2027 where we will check if any new evidence is available.

If an update is carried out the policy will remain extant until the revised policy is published.

5. Equality Impact and Assessment

The Equality Impact Assessment (EQIA) process has been developed to help promote fair and equal treatment in the delivery of health services. It aims to enable NHS Wales Joint Commissioning Committee to identify and eliminate detrimental treatment caused by the adverse impact of health service policies upon groups and individuals for reasons of race, gender re-assignment, disability, sex, sexual orientation, age, religion and belief, marriage and civil partnership, pregnancy and maternity and language (Welsh).

This policy has been subjected to an Equality Impact Assessment.

The Assessment demonstrates the policy is robust and there is no potential for discrimination or adverse impact. All opportunities to promote equality have been taken.

6. Putting Things Right

6.1 Raising a Concern

Whilst every effort has been made to ensure that decisions made under this policy are robust and appropriate for the patient group, it is acknowledged that there may be occasions when the patient or their representative are not happy with decisions made or the treatment provided.

The patient or their representative should be guided by the clinician, or the member of NHS staff with whom the concern is raised, to the appropriate arrangements for management of their concern.

If a patient or their representative is unhappy with the care provided during the treatment or the clinical decision to withdraw treatment provided under this policy, the patient and/or their representative should be guided to the LHB for [NHS Putting Things Right](#). For services provided outside NHS Wales the patient or their representative should be guided to the [NHS Trust Concerns Procedure](#), with a copy of the concern being sent to NWJCC.

6.2 Individual Patient Funding Request (IPFR)

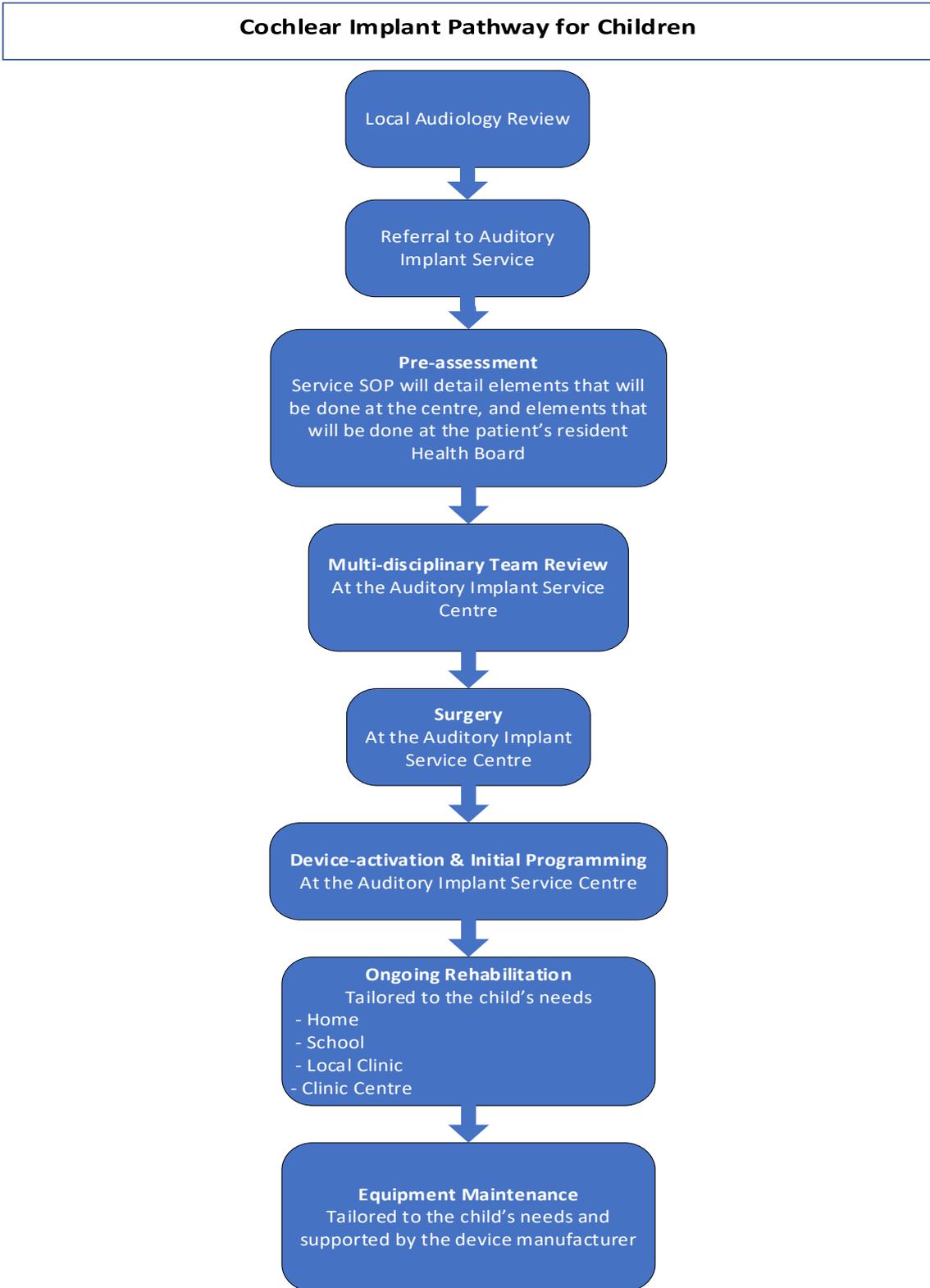
If the patient does not meet the criteria for treatment as outlined in this policy, an Individual Patient Funding Request (IPFR) can be submitted for consideration in line with the All Wales Policy: Making Decisions on Individual Patient Funding Requests. The request will then be considered by the All Wales IPFR Panel.

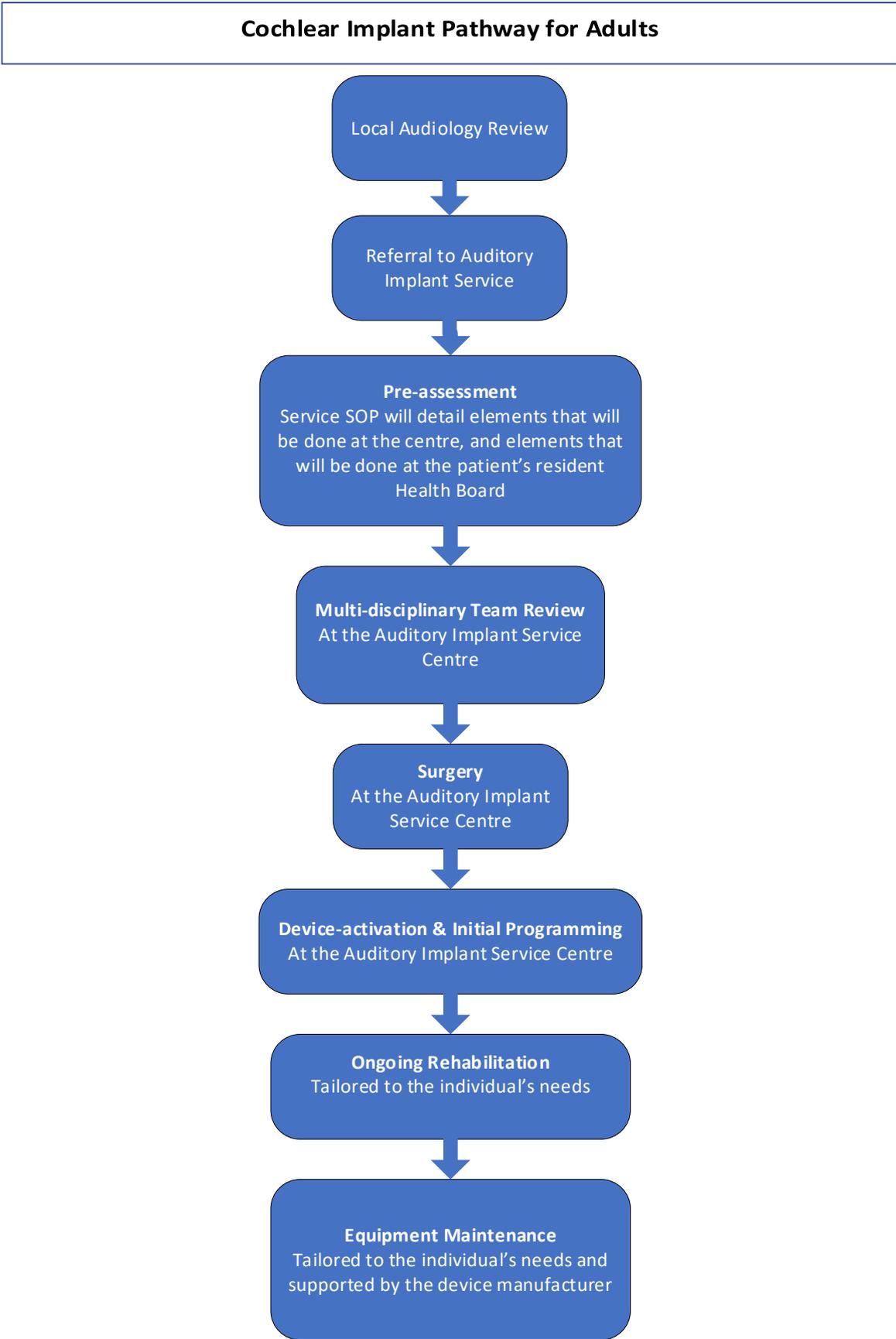
If an IPFR is declined by the Panel, a patient and/or their NHS clinician has the right to request information about how the decision was reached. If the patient and their NHS clinician feel the process has not been followed in accordance with this policy, arrangements can be made for an independent review of the process to be undertaken by the patient's Local Health Board. The ground for the review, which are detailed in the All Wales Policy: Making Decisions on Individual Patient Funding Requests (IPFR), must be clearly stated.

If the patient wishes to be referred to a provider outside of the agreed pathway, and IPFR should be submitted.

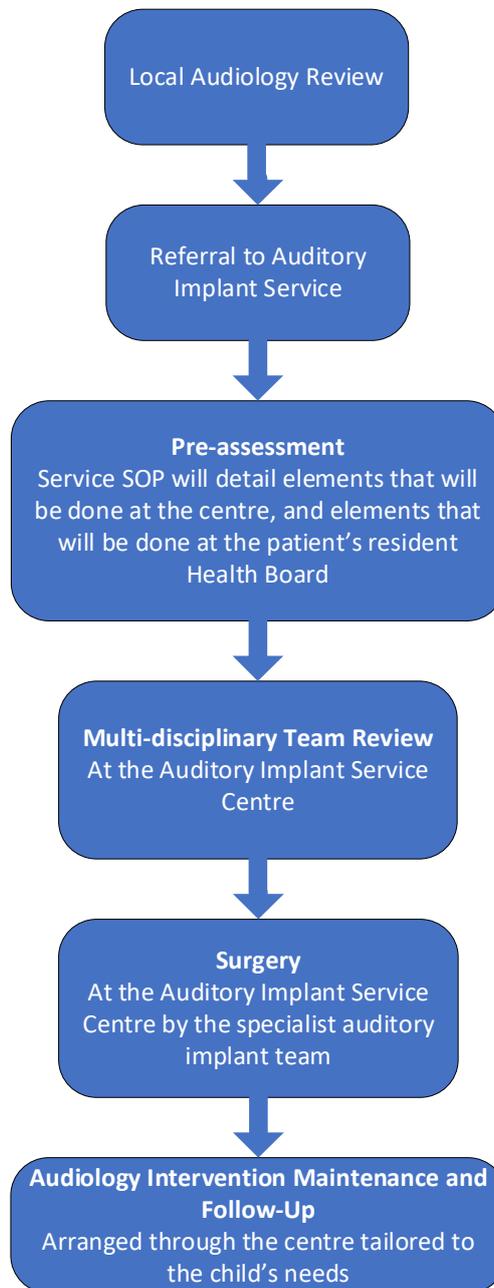
Further information on making IPFR requests can be found at: [Individual Patient Funding Requests](#).

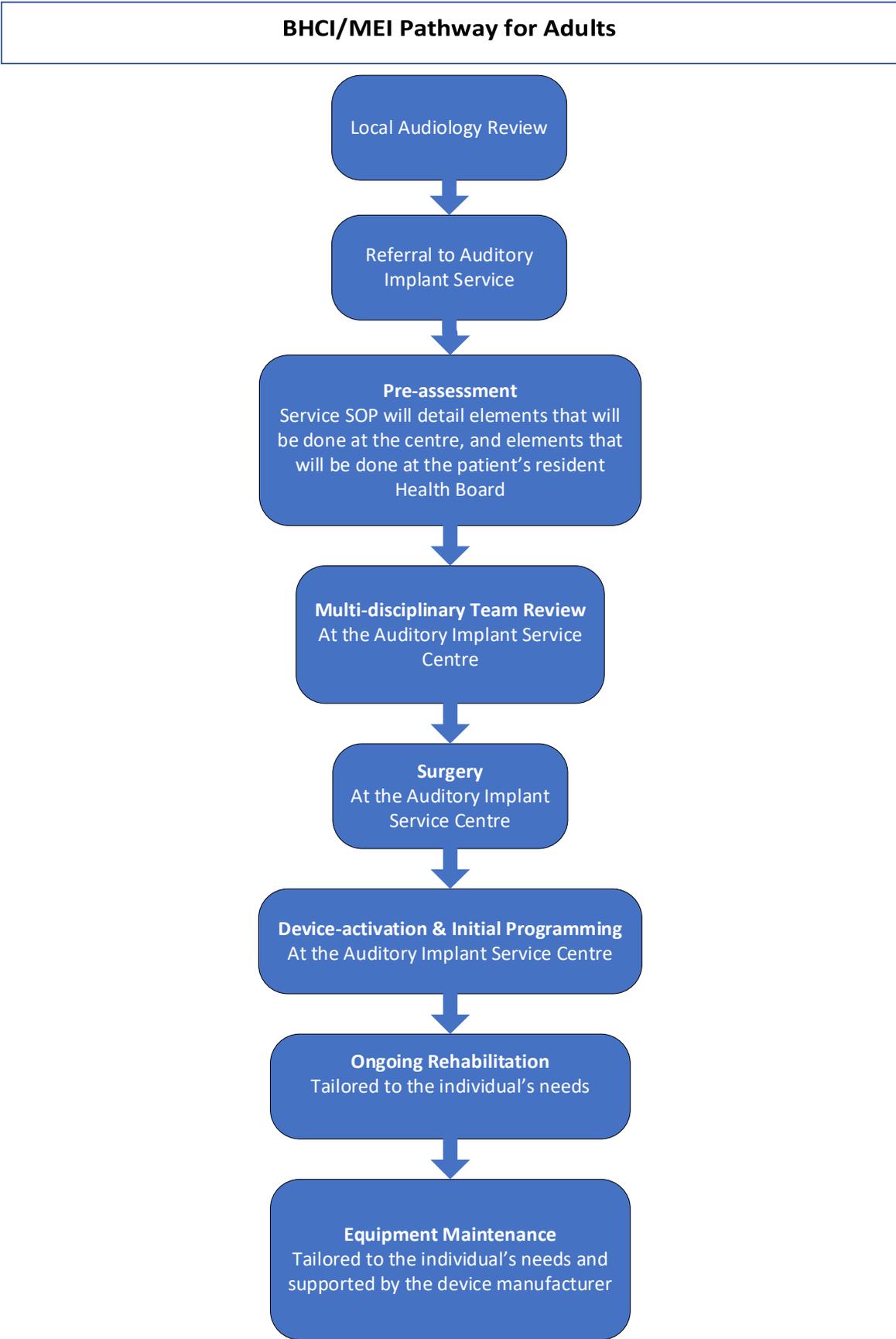
Annex i Patient Pathway





BCHI/MEI Pathway for Children





Annex ii Codes

ICD-10-Codes

| Code Category | Code | Description |
|---------------|-------|--|
| ICD-10 | H90.3 | Sensorineural hearing loss, bilateral |
| ICD-10 | H90.6 | Mixed conductive and sensorineural hearing loss, bilateral |
| ICD-10 | H90.5 | Sensorineural hearing loss, bilateral (which includes congenital hearing loss) |

OPCS-4-Codes

| Code Category | Code | Description |
|---------------|------|--|
| OPCS 4 | D13 | Attachment of Bone Anchored Hearing Prosthesis |
| OPCS 4 | D16 | Reconstruction of Ossicular Chain |
| OPCS 4 | D24 | Operation on Cochlea |
| OPCS 4 | D241 | Implantation of intracochlear prosthesis |
| OPCS 4 | D242 | Implantation of extra cochlear prosthesis |
| OPCS 4 | D243 | Attention to cochlear prosthesis |
| OPCS 4 | D246 | Removal of cochlear prosthesis |

Annex iii Abbreviations and Glossary

Abbreviations

| | |
|--------------|---|
| ACHAs | Air conducting hearing aids |
| AVM | Audio-vestibular medicine |
| BCHI | Bone Conduction Hearing Implant |
| CYP | Children and young people |
| CPD | Continued professional development |
| ENT | Ear, Nose and Throat |
| GP | General Practitioner |
| ICAG | Implant Centre Audiology Group |
| ICTOD | Implant Centre Teachers of the Deaf |
| IPFR | Individual Patient Funding Request |
| MDT | Multi-Disciplinary Team |
| MEI | Middle Ear Implant |
| NDCS | National Deaf Childrens Society |
| NICE | National Institute for Health and Care Excellence |
| NWJCC | NHS Wales Joint Commissioning Committee |
| QTOD | Qualified Teacher of the Deaf |
| SSD | Sudden Sensorineural Deafness |
| SSNHL | Sudden Sensorineural Hearing Loss |

Glossary

Atresia

Absence or closure of a tubular organ/structure.

Audiology

Pertaining to the sense of hearing.

Audiology

The branch of science and medicine concerned with the sense of hearing.

Binaural

Relating to or involving the use of both ears.

Bilateral

Relating to both sides of the body.

Bone Conduction Hearing Implants

A Bone Conductor Hearing Implant (BCHI) is a hearing aid which uses bone conduction to help sound get to the inner ear. Note many people also call a BCHI a BAHA. In normal hearing sound may be transmitted to the inner ear both by air (through the external ear canal) or through the bones of the skull.

Blended Service

A Blended service is either face to face or remote.

Clinical Child Psychologist for Children

Clinical Child psychologists work with children by assessing, diagnosing and treating children and adolescents with psychological or developmental disorders, and they conduct academic and scientific research.

Cochlear Implant Systems

A Cochlear Implant is an implanted electronic hearing device designed to produce useful hearing sensations to a person with severe to profound nerve hearing loss by electrically stimulating nerves inside the inner ear.

Conductive Hearing Loss

Hearing loss may be caused by interference with the transmission of sound from the outer and middle ear to the inner ear, and is called conductive hearing loss. Conductive hearing loss may be transient or permanent and congenital (e.g. malformation of the outer or middle ear) or acquired. Acquired causes include blockage of the external auditory canal by cerumen or foreign objects, otitis externa, otitis media, perforation of the tympanic membrane and otosclerosis.

Conductive Hearing Loss

Due to a defect in the conduction of sound from the external ear to the inner ear. This may be due to perforations of the eardrum, fluid or infection in the middle ear, or disorders of the small bones in the middle ear (ossicles).

Congenital

Existing from birth or before.

Hearing Therapist

A Hearing Therapist offers counselling to help with hearing difficulties.

Individual Patient Funding Request (IPFR)

An IPFR is a request to NHS Wales Joint Commissioning Committee (NWJCC) to fund an intervention, device or treatment for patients that fall outside the range of services and treatments routinely provided across Wales.

Microtia

Congenital abnormally small ears.

Middle Ear Implant (MEI)

MEIs are surgically implanted electronic devices which aim to correct hearing loss through stimulation of the cochlea by delivering sound energy to the ossicles or directly to the entrance of the cochlea (oval or round window placement). MEIs are placed into the middle ear and generally leave the external auditory canal open and unobstructed.

A MEI differs from a cochlear implant in that the latter directly electronically stimulates the auditory nerve.

Mixed Hearing Loss

Mixed hearing loss occurs when an ear has a combination of both conductive and sensorineural hearing loss. An example would be a patient with presbycusis who also has chronic ear disease.

Multi-Disciplinary Team (MDT)

A Multi-disciplinary Team is a mixture of team of named healthcare professionals (e.g. Doctors, audiologists, nurses etc.) who are responsible for discussing and arranging facilitating communication and coordinating care for patients. A remote or desk top review may be appropriate for some patients.

NHS Wales Joint Commissioning Committee (NWJCC)

NWJCC is a joint committee of the seven local health boards in Wales. The purpose of NWJCC is to ensure that the population of Wales has fair and equitable access to the full range of Tertiary Services. NWJCC ensures that services within our portfolio are commissioned from providers that have the appropriate experience and expertise. They ensure that these providers are able to provide a robust, high quality and sustainable services, which are safe for patients and are cost effective for NHS Wales.

National Institute for Health and Care Excellence

National Institute of Clinical Excellence – sets standards and guidance for services.

Ossicular Disease

Disease affecting the "ossicles", small bones which conduct sound through the middle ear.

Outreach Support

The Implantable Device service are enabled to send their own staff to other parts of the regions to offer care closer to home.

Paediatric Anaesthetist

Paediatric Anaesthetists are responsible for the general anaesthesia, sedation, and pain management needs of infants and children.

Qualified Teacher of the Deaf (QTOD)

Qualified Teachers of the Deaf (also known as QToDs) are qualified teachers who provide support to D/deaf children, their parents and family and other professionals who are involved with a child's education.

Sensorineural Hearing Loss

The second category of hearing loss occurs when there is damage to the organ of hearing (cochlea), auditory nerve or auditory centres in the brain, and is called sensorineural hearing loss. Sensorineural hearing loss is usually permanent and may be congenital (e.g. genetic causes or malformation of the inner ear) or acquired.

Specialist Audiologist

[Standards of education and training | \(hcpc-uk.org\)](https://www.hcpc-uk.org/)

Specialist Nurses

Specialist Nurses are dedicated to a particular area of nursing; caring for patients suffering from long-term conditions and diseases.

Specialist Radiologists

Specialise Radiologists are medical doctors that specialise in diagnosing and treating injuries and diseases using medical imaging (radiology) procedures (exams/tests) such as X-rays, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission tomography PET and ultrasound.

Speech and Language Therapist

A Speech and Language Therapist provides life- changing treatment, support and care for children and adults who have difficulties with communication, eating, drinking and swallowing.

Suppurative Otitis Media

Infection of the middle ear which may lead to hearing loss, suppurative means with pus present.

Transducer

A device such as a microphone or electric motor than converts one form of energy into another.

Unilateral

Relating to one side of the body.

Annex iv Quality Standards for Auditory Implant Services in Wales.

Presented as a separate attachment.