BAA Audiology Services: A Guide for Health Commissioners and Health Boards
This document has been produced by the British Academy of Audiology, and is endorsed by the following partner organisations:

Action on Hearing Loss
Hearing Link
Cambridgeshire Hearing Help CIC
Contents

Introduction............................................................................................................................4
Paediatric Audiology Services ...............................................................................................5
Adult Audiology Services ......................................................................................................7
Tinnitus, Balance, Diagnostic and Implant Services..............................................................9
Reference Group...................................................................................................................11
Introduction

Across the UK, there are a variety of documents underpinning the commissioning and delivery of services for hearing, tinnitus and balance. This guide aims to bring reference to all of these into one document, to assist commissioners, health boards and business managers in understanding the diverse nature of Audiology Services. It should be read in conjunction with the document “BAA – Audiology Scope of Practice”. This document, published November 2014, details the human resource requirements, in terms of the healthcare science workforce, to deliver each part of the service.

What is the scope of Audiology?

Audiology is the specialism encompassing hearing, tinnitus and balance. It is a healthcare science, predominantly provided by NHS healthcare science staff in conjunction with many partners. In the UK, Audiology has developed with combined functions as a diagnostic and treatment discipline. This model – where treatment is often provided by the same, non-medical staff as the diagnostics – is now beginning to be followed by other healthcare science disciplines such as neurophysiology due to its cost effective use of knowledge and skills. To understand the breadth of services provided, it is best to consider this within the context of the life course.
Paediatric Audiology Services

Newborn Hearing Screening
Approximately 2/1000 are born with a significant hearing loss which will significantly impact on their ability to develop normal speech and language, or a milder loss that will likely have some effect on their education and long-term development. Universal Newborn Hearing Screening has been in place for a decade across the UK. There are detailed service specifications and mature quality assurance programmes currently in practice for this. The commissioning frameworks and details of the programmes vary across the UK, but should always be followed.

Paediatric Diagnostic Services
Specialised diagnostic services for hearing and balance are required across the age spectrum. Newborns who do not pass their hearing screen, children whose speech and language are not developing, those with recurrent ear infections or middle ear pathologies and children with special needs, all need age appropriate assessments from specialist paediatric audiologists. These vary from objective electrophysiological tests of the auditory system to more commonly performed subjective behavioural tests of hearing detection and/or functional assessment of speech perception. In Scotland and Wales there are Quality Standards for Paediatric audiology: (http://www.scotland.gov.uk/Resource/Doc/270506/0080556.pdf and http://wales.gov.uk/topics/health/publications/health/guidance/qualitystandards/?lang=en) which cover this element. In England, the quality assurance is through IQIPS (Improving Quality in Physiological Services) accreditation (https://www.iqips.org.uk).
There are currently no standards for paediatric audiology adopted in Northern Ireland, although the Scottish ones may be adopted there in the future and the BAA continues to work with the National Deaf Children’s Society and Heads of Service NI to promote the introduction of best practice standards.

Glue ear
80% of children will have an episode of glue ear that lasts more than 3 months by the time they leave primary school. For the majority, this will resolve spontaneously and not have a long-term effect on their development. However, for a significant minority further management is required – normally grommets, hearing aids or conservative monitoring. Paediatric audiology services offer the diagnostic testing, watchful waiting, and the assessment of impact on behaviour, speech development and education – all of which are required to identify if and when intervention is warranted. These services are then able to facilitate the appropriate habilitation when required. The Royal College of Surgeons and ENT UK have produced more detailed guidance for commissioners on glue ear, which can be accessed here: http://www.rcseng.ac.uk/healthcare-bodies/docs/published-guides/ome

Requirement for integration with hospital/community services/audiology

Requirement for integration with ENT/AVP/Paediatrics

Requirement for integration with ENT/education
Permanent Childhood Hearing Impairment/Paediatric Hearing Aid Provision

1.2/1000 infants are born with a moderate or greater permanent hearing loss and around 45,000 children in the UK will live with a congenital or acquired hearing loss. They require expert and highly complex hearing assessment and hearing aid support early in life alongside multiprofessional working to facilitate the best long-term outcome for these children. Cochlear implants provide great benefit to those children where hearing aids are not providing enough access for appropriate speech and language. These are best provided by an infant's first birthday, so the service has to be both extremely accurate and extremely rapid to correctly identify those who need implantation. In England this is a prescribed service commissioned by NHS England. There is also a requirement in the Children and Families Act for this to be commissioned jointly with Local Authority provision. In the other UK countries it is commissioned as part of the overall paediatric hearing service. The same quality assurance programmes apply as for paediatric diagnostic services.

Auditory Processing Disorders

Approximately 5% of children have some form of auditory processing disorder (APD). This is characterised by poor speech discrimination in noise with apparently normal peripheral hearing. The effects of this will be impaired educational achievement, often with associated behavioural difficulties, as children with APD will struggle in the classroom environment. There is no simple diagnostic test for this, but a comprehensive test battery can indicate APD. Depending on the severity, children with APD will need additional support varying from classroom placement through to specialist equipment. There are also home training packages that appear to provide some benefit, although there is more research needed in this area. Paediatric audiology will provide the diagnostic support, but the majority of the intervention is provided by education services.
Adult Audiology Services

**Transition**
Across a wide range of long-term conditions, transition is accepted as being a key time in which high quality, targeted services are needed if young people are not to be significantly impaired. Hearing loss is no different. High quality transition services, with cooperation between paediatric and specialist adult services are required to ensure a smooth ride in this life stage and to facilitate young people in taking ownership of their hearing difficulty. There are separate quality standards for this in Scotland, which are also adopted by Wales, (http://www.ndcs.org.uk/about_us/campaign_with_us/scotland/campaign_news/newquality_standards.html) and transition is also included in the quality standards for IQIPS in England (at the link above). It is especially important that the adult services are responsive to the needs and special requirements of these young adults.

**Requirement for integration with paediatric service/social care**

**Co-morbidities in younger adults – diabetes, syndromes**
A key vulnerable group are young adults whose hearing loss is associated with other disorders, either as part of a syndrome or as co-incidental co-morbidities. They require their hearing loss to be well managed in order to be able to take part in their transition in other services. Often, they may be very isolated as each individual syndrome will be low incidence. They will also require multiple appointments for their various conditions. Failure to support these young people can result in very poor outcomes.

**Requirement for integration with other specialties**

**Age related hearing loss**

Early intervention improves outcomes, and therefore reduces some of the consequences of hearing loss, including social isolation and physical inactivity. Intervention should be a package of personalised care, which will often include hearing aid provision, but also requires appropriate counseling, and often other equipment to facilitate independent living. Advice and provision of these latter elements is normally either via social care or the voluntary sector, according to local circumstances. In Scotland, Wales and Northern Ireland adult hearing services are covered by the quality standards: http://www.scotland.gov.uk/Publications/2009/04/27115807/0
In England, quality assurance is provided via IQIPS accreditation: https://www.iqips.org.uk. There is some variation in whether these different standards and quality assurance programmes differentiate between the needs of the specialist services noted overleaf. These can be grouped together as ‘complex cases’, but there are significant sub-groups which are worth separate consideration.

**Requirement for integration with social care/voluntary sector**
People requiring combined ENT & Audiology services – surgical ears
There are a number of conditions which require careful and combined management by ENT specialists and audiologists. As examples, these include people who have undergone mastoid surgery, those with long-standing perforations, chronic outer or middle ear disease and those with otosclerosis. They may need ongoing aural toilet, careful consideration of treatment options to optimise hearing whilst limiting risk of further damage to ear health and other personalised considerations. These people are always likely to benefit from multi-disciplinary working.

Requirement for integration with ENT

Age related hearing loss & comorbidities – dementia, vision – non-audiological complexities
In the older age group, hearing loss will often co-exist with other conditions, such as vision loss or dementia or other degenerative long-term conditions. Good audiological care will improve the outcomes of the other conditions, promoting self-management and independence. Special consideration of the whole person, and their long-term care, is needed, with joined up working as required for the individual. Appropriate care of these individuals can be highly specialised and complex not due to their audiological difficulties (although this maybe an added element) but due to their co-morbidities.

Requirement for integration with other services

Audiological complexities – sudden losses, severe/profound losses, severe speech perception difficulties
Adults with sudden or rapidly progressive losses, and those with severe or profound loss, or suffering significant speech perception difficulties need specialist care. The audiological considerations – in terms of initial diagnostics, amplification and other devices – are different from less severe or gradual losses or lesser problems in perceiving speech. There is often an increased need for psychological and psychosocial care, and for working with implant/therapy services. The BAA is producing separate guidance on identifying non-routine cases which will be available via the BAA website: http://www.baaudiology.org
More information about the needs of adults with sudden hearing loss can be found here: http://www.hearinglink.org/sudden-deafness-and-hearing-loss

Requirement for integration with ENT/AVP/rehab services/social care/voluntary sector

Adults with learning difficulties
It is estimated that 40-50% of adults with learning difficulties also have hearing loss. Often, this is unrecognised by their carers. They often need specialist testing, both behavioural and objective, and specialist rehabilitation. The facilities needed, diagnostic equipment and skill set are substantially different from the rest of the population. There is a multi-disciplinary group nationally dedicated to this area, and much more information showing good and best practice, and sharing of knowledge, can be found on their website: http://www.hald.org.uk
Tinnitus, Balance, Diagnostic and Implant Services

These services cut across the age ranges, and are therefore considered here separately. But there is of course a significant cross-over between hearing loss, tinnitus and balance, so in practice although they need to be commissioned separately these services can not be provided in isolation.

Tinnitus Services
Tinnitus is a common condition that in transitory cases can normally be managed in primary care. However, for many people with tinnitus – either because it is troublesome or because it is associated with a significant pathology – more specialist care is required. This care may include amplification (hearing aid provision) when there is an associated hearing loss, therapy, and psychological services. In England, there is a clear pathway defined on the Map of Medicine: http://healthguides.mapofmedicine.com/choices/map/tinnitus1.html

This also references guidelines produced for England on the management of tinnitus in adults, which can be found here: http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093844

There is additional guidance on direct access services for tinnitus following work by NHS Improvement, detailed in the document ‘Pushing the Boundaries’, available here: http://webarchive.nationalarchives.gov.uk/20130221101407/http://improvement.nhs.uk/audiology/resources.html

There is no separate guidance for tinnitus services in Scotland, Wales or Northern Ireland, so services equivalent to those defined in this document would be appropriate.

Requirement for integration with ENT/AVP/social care/voluntary sector/hearing services/tinnitus services/education for children

Balance Services
Dizziness and balance difficulties can be symptoms of many different disorders in a variety of systems including cardiac and vestibular. Audiology services carry out high quality diagnostic testing of the vestibular system as an essential part of differential diagnosis. Where there is a vestibular component to the symptoms – either as part of a multi-factorial problem or in isolation – vestibular rehabilitation is a highly cost-effective intervention. In England, there is a clear pathway available on the Map of Medicine: http://healthguides.mapofmedicine.com/choices/map/dizziness1.html; and there is guidance on service provision available; http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093862

There is further guidance on direct access balance services in the document ‘Pushing the Boundaries’ referenced above.

There is no separate guidance for balance services in Scotland, Wales or Northern Ireland, so services equivalent to those defined in this document would be appropriate.

Requirement for integration with ENT/AVP/social care/voluntary sector/hearing services/balance services/education for children
Diagnostic Services
Audiology services provide a variety of diagnostic tests to support ENT, audiovestibular medicine, paediatrics, other hospital specialists and primary care. There is a wide variety of subjective and objective tests of hearing and balance, from the relatively quick and simple to highly specialised and time-consuming electrophysiology. For accurate and safe diagnostics, it is essential that providers do not compromise quality and therefore adequate facilities are maintained in all localities. This includes soundproof rooms meeting international standards and test facilities of the necessary size and layout for paediatric testing. Whilst there is a drive to provide services closer to home, this should not be at the expense of accurate testing which could pose a risk to patients.

Hearing Implant Services
There are a variety of hearing implants available for people of all ages with certain specific conditions. These range from the relatively common (bone anchored hearing devices, provided by approximately half of the ENT and audiology services in the UK) to the very rare (auditory brainstem implants, provided in a handful of highly specialised units). They are all classed as specialised services, and in England, they are all covered by NHS England service specifications: http://www.england.nhs.uk/wp-content/uploads/2014/01/pss-manual.pdf

In Scotland, Wales and Northern Ireland there are no separate service specifications, so services providing equivalent outcomes to those defined in this document would be appropriate.

Requirement for integration with multiple partners across entire region served
Reference Group:

These guidelines were produced by the Board of the British Academy of Audiology, 2014. Particular input was provided by the following members.

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<th>Organisation</th>
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