

# Quality Standards for Paediatric Audiology Services



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## Executive Summary

In January 2003, the Public Health Institute of Scotland (PHIS) published a Needs Assessment Report on NHS Audiology Services in Scotland. This report identified a number of areas in which both Adult and Paediatric Audiology services were failing to meet the standards expected by service users and other stakeholders. The modernisation of hearing aid services tried to address these areas as well as modernise the patient journey.

Scotland began the modernisation of its audiology services in 2003 by investing in new Digital Signal Processing (DSP) hearing aid technology, new infrastructure, information systems and training based around the patient care pathway. However, whilst there was clarity around the patient pathway there was no clarity around appropriate quality standards by which the services could be audited or on which services could base a service improvement plan.

One of the recommendations of the PHIS Report was that “NHS Quality Improvement Scotland (QIS) would produce an agreed set of standards for audiology services and conduct an assessment of the service’s ability to meet these standards, taking into account established documents from voluntary bodies and professional organisations.” In its response to this recommendation, NHS QIS indicated that it would not be possible to fulfill this within a timescale that all interested parties could agree to.

It was then suggested that the work be undertaken by a sub-group of the Scottish Government’s Audiology Services Advisory Group following the NHS QIS standards development methodology and that NHS QIS would consequently quality assure the development process. This work covered Adult Hearing Rehabilitation Services.

Around the same time, a multidisciplinary group of professionals working in Paediatric Audiology from England, Scotland and Wales, under the guidance of MRC Hearing and Communication Group, began developing draft quality standards and an accompanying quality rating tool for Paediatric Audiology, also using the NHS QIS methodology. This final document evolved from that original work.

A 6 Paediatric site audit of the modernisation process was carried out by Davis et al 2007, with support from the late Professor Stuart Gatehouse, which used the draft standards to assess services against. In taking that task forward the audit group developed a Quality Rating Tool (QRT) which attempted to directly assess services against those draft standards to establish whether the services

- are responsive to their needs
- empower patients to be good partners in meeting those needs
- make the best use of staff skills and resources.

The draft standards and QRT have been updated in the light of their use, together with comments from stakeholders.



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## **Acknowledgements**

We are indebted to the original multidisciplinary working group, with members from England, Wales and Scotland, who initially developed draft Quality Standards for Paediatric Audiology and acknowledge the considerable work that had been undertaken prior to the further development work in Scotland.

We would like to thank the original group for giving us their permission to take this piece of work forward in Scotland and are grateful to them for their ongoing support and advice.

The membership of the original group was:

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# **Quality Standards for Paediatric Audiology**

## **Context**

In 2005, a multidisciplinary group of professionals working in Paediatric Audiology from England, Scotland and Wales, under the guidance of MRC Hearing and Communication Group, began developing quality standards and an accompanying quality rating tool (QRT) for Paediatric Audiology using the NHS Quality Improvement Scotland (QIS) methodology. This, for a number of reasons, was not completed, although a draft document was produced.

In 2008 the multidisciplinary Paediatric sub-group of the Scottish Audiology Services Advisory Group (ASAG), using the draft document as a starting point, undertook to complete this work resulting in the production of this document.

At the same time, discussions were undertaken within the Welsh Assembly Government to undertake a similar development process for the production of standards and the audit of paediatric services.

Comments and feedback are welcome on the document.

## **1.1 Introduction**

In January 2003 the Public Health Institute of Scotland published a Needs Assessment Report on Audiology Services in Scotland. This report identified a number of areas in which Audiology services were failing to meet the standards expected by service users and stakeholders. Many of the concerns raised were applicable to both adult and paediatric services; some were specific to either adults or paediatrics. Concerns raised included:

- Inadequate facilities at base hospital, peripheral clinics and community sites
- Shortages in qualified staff and appropriately skilled staff leading to compromised service access and quality

- Financial pressures compromising service quality, with an undue emphasis on activity at the expense of outcome
- Poor inter-agency links
- Large variations in services across NHS Boards
- Inferior service quality and outcomes in comparison to elsewhere in the United Kingdom and overseas
- Good working practices often not in place. Developments in Audiology services elsewhere in the United Kingdom largely absent in Scotland
- A lack of well functioning Children’s Hearing Services Working Groups
- A need for audiologists with additional paediatric training and experience to deliver the audiology care for children

As a result of these findings a number of recommendations were made by the Audiology Needs Assessment Group. Among these were the recommendations that “NHS Quality Improvement Scotland (QIS) should produce an agreed set of standards for audiology services, and conduct an assessment of the services’ ability to meet these standards, taking into account established documents from voluntary bodies and professional organisations” and “The Scottish Executive should establish a formal Audiology Services Advisory Group”.

In response, an Audiology Services Advisory Group was established “to monitor the development of NHS audiology services in Scotland and to provide appropriate advice to NHS Boards, the health department and other relevant bodies that will facilitate effective and efficient development.”

When approached, NHS QIS indicated that it would not be possible to undertake the work within a timescale that would be acceptable to the Group. It was then suggested that work be undertaken by a sub-group of the Scottish Government’s Audiology Services Advisory Group (ASAG), following the NHS QIS standards development methodology, to write standards for adult hearing rehabilitation services.

## 1.2 NHS QIS Methodology

### 1.2.1 Basic Principles

Standards developed using the NHS QIS quality assurance process are required to be clear and measurable, based on appropriate evidence, and written to take into account other recognised standards and clinical guidelines. The standards are:

- Written in simple language and available in a variety of formats
- Focussed on clinical issues and include non-clinical factors that impact on the quality of care
- Developed by healthcare professionals and members of the public, and consulted on widely
- Regularly reviewed and revised to make sure they remain relevant and up to date
- Achievable but stretching

### 1.2.2 Process

The way in which standards are developed is a key element of the quality assurance process. Project groups working on standards development are expected to

- Adopt an open and inclusive process involving members of the public, voluntary organisations and health care professionals
- Work within NHS QIS policies and procedures
- Test the measurability of draft standards by undertaking pilot reviews

### 1.2.3 Format of Standards and Definition of Terminology

All standards quality assured using the NHS QIS process follow a similar format:

- Each standard has a title, which summarises the area on which that standard focuses
- This is followed by the **standard statement**, which explains *what* level of performance needs to be achieved

- The **rationale** section provides the reasons *why* the standard is considered important
- The standard statement is expanded in the section headed **criteria**, which states exactly what must be achieved for the standard to be reached and *how* the service will achieve this. Each criterion is expected to be met wherever a service is provided. The criteria are numbered for the sole reason of making the document easier to work with, particularly for the assessment process. The number of the criteria is not a reflection of priority.

#### **1.2.4 Assessment of Performance Against the Standards**

Assessment of the performance of Audiology services against the standards will take place using the attached Quality rating tool. This will include both self assessment by individual services and external assessment by peers. The Audiology Quality Improvement sub-group of the Audiology Services Advisory Group will be responsible for overseeing this assessment procedure.

## **2. Development of the Quality Standards for Paediatric Audiology Services**

### **2.1 Introduction to Paediatric Audiology Services**

The prevalence of permanent childhood hearing impairment, greater than 40dBHL in the better ear, is estimated to be 1.33/1000 live births in children age 5 years and older, possibly rising to 2.05/1000 live births for children aged 9 years and older. The yield from newborn hearing screening programmes is approximately 1/1000 live births.

Childhood conductive hearing impairment is a far commoner condition. It is reported that approximately 80% of children will have had at least one episode of otitis media by the age of 3.

It is well documented that permanent childhood hearing impairment can have a significant negative impact on a child's communication skills, social integration and educational progress.

The impact of fluctuating conductive hearing losses on a child's communication skills and educational progress are less clear. There is evidence that persistent otitis media with effusion associated with a mild to moderate hearing loss can have an adverse effect on early language development and longer term effects on both behaviour and quality of life.

It is important that children with permanent childhood hearing impairment and children with persisting or recurring conductive hearing losses are identified early in order to provide the children and their families with appropriate intervention, support and advice.

The increasing prevalence of permanent hearing impairment throughout childhood, and the fluctuating nature of many conductive hearing losses, means that paediatric audiology services must have the capacity and appropriate skills, not only to identify and manage children referred from the newborn hearing screen, but also to be able to offer timely assessments and appropriate management of confirmed permanent or

temporary hearing deficits whenever there are concerns raised about a child's hearing status.

Paediatric audiology services are generally multidisciplinary and may include:

- audiologists
- scientists
- audiovestibular physicians
- audiological paediatricians
- speech and language therapists
- education staff
- social services and
- voluntary organisations

Across the United Kingdom paediatric audiology services are delivered by many differing combinations of skill mix. This is historically due to different local service models, rapid technological progress and emphasis on consumer led, family friendly services. There are also well recognised difficulties with recruitment and training in some professional groups, and in some geographical areas. Some audiological skills are common to all members of the team, but each discipline brings unique skills and expertise, all of which are necessary if services are to comply with accepted best practice.

It is important that individual paediatric audiology teams, irrespective of their service model, aspire to deliver the best possible audiology care for children and their families. They must also know the minimum acceptable standards of care that children and their families can expect to receive on their journey through paediatric audiology services.

## **2.2 Development and Scope of the Standards**

This document covers all aspects of the paediatric audiology services delivered by health service staff and acknowledges the important role of education, social services and the voluntary sector within the multidisciplinary team; it aims to establish quality assurance throughout all aspects of the paediatric audiology process for children and their families, regardless of where the service is delivered.

Development of these Standards in Paediatric Audiology began in 2005 when a multidisciplinary group of health professionals working in paediatric Audiology, in partnership with the voluntary sector, met to identify key critical areas for clinical standards.

The standards are applicable to children of all ages, from birth to school leaving, and incorporate the audiology services provided at primary, secondary and tertiary level. They are based on the child and family's journey as they move through the paediatric audiology service. For the purposes of this document "parent" is defined as any person who has parental responsibility.

The standards are evidence based and make reference to other recognised standards, clinical guidelines and best practice documents, which must be considered alongside these standards. (see appendix 3)

Paediatric audiology services will regularly self-assess their performance against the standards using the Quality Rating Tool to help identify any possible areas of weakness and highlight strengths and areas of good practice within the local audiology service. In Scotland, overseeing the assessment of performance against the Standards will be the responsibility of the Audiology Services Advisory Group with a clearly defined assessment process and cycle.

The standards will be reviewed by ASAG 2 years post-implementation and thereafter a regular review cycle established. This will take into account ongoing developments in paediatric audiology and the emergence of new evidence to ensure that they remain relevant and up to date.

### **2.3 Context**

These standards are designed to improve service quality issues in clinical areas unique to Audiology within the NHS: elements of service quality such as cleanliness of facilities or workforce development are outside of the scope of this work as they are expected to be addressed by local healthcare governance mechanisms and/or more generic NHS standards.

Although the standards apply to NHS Audiology, the hope is that their implementation will encourage and further develop collaborative working, both with fellow NHS professionals and external agencies.

In addition, awareness of and compliance with statutory requirements, such as the Disability Discrimination Act 2005, is assumed, as is awareness and understanding of consent requirements.

It would be impossible to exhaustively list the many and varied service user groups who access paediatric Audiology services. It is intended that these standards apply to all children and families using the service.

## Standard 1. Accessing the service

Standard Statement	Rationale	Criteria
<p>1a. All children shall have access to the audiological services they require in a timely fashion, with clearly defined referral pathways to audiological services that are widely disseminated and reviewed regularly.</p>	<p>Correct referral information results in more efficient use of available resources.</p> <p>Early identification of permanent hearing problems and subsequent intervention leads to improved outcomes for the child at a later date.</p> <p>Parents support the principle of early identification and intervention.</p> <p>Fluctuating hearing loss can have a disadvantageous effect on the child's development.</p>	<p>1a.1. Clearly defined written referral pathways from all referral sources (eg newborn hearing screening, ENT, speech and language therapists, paediatricians, health visitors, GPs, education services and parents) are in place and monitored regularly.</p> <p>1a.2. Routine referrals are seen within 6 weeks of receipt of referral.</p> <p>1a.3. Urgent referrals are seen at the next available appointment or within 4 weeks of receipt of referral.</p>
<p>1b. Service demand and referral data are accurately monitored, reviewed and reported to guide service planning.</p>	<p>The number of incorrect referrals to the specialist medical route informs the effectiveness/clarity of referral criteria and compliance of referrers to those criteria.</p> <p>Improvements can then be made to ensure that children are correctly referred to appropriate services.</p>	<p>1b.1. The number of inappropriate direct referrals to Audiology is monitored and action plans implemented to address any non-compliance with referral criteria.</p> <p>1b.2. The number of inappropriate referrals to specialist medical services rather than Audiology, eg ENT, is also monitored. Action plans are then implemented to address any non-compliance with the referral criteria for specialist medical services.</p>

	<p>Effective allocation of health resources is reliant upon accurate information on the balance between demand for services and available resources. It is important that waiting times for all stages of the patient pathway are collected and monitored in an effective manner. The use of IT systems to compute information such as demographic data and waiting times will inform allocation of services.</p> <p>Effective allocation of resources relies upon information on actual demand and potential/ projected demand for specific services.</p>	<p>1b.3. Waiting times are monitored within the department based upon robust data collection.</p> <p>1b.4. The following data are collected, reviewed and used in annual service review:</p> <ul style="list-style-type: none"> <li>• demographics of locally served populations, including factors such as ethnic diversity, social deprivation and age, <sup>1</sup></li> <li>• the number of children referred to Audiology services and their associated demographic information,</li> <li>• the uptake of NHS hearing aids in the local population compared with the predictive need for services and</li> <li>• the number and type of surgical interventions required for children referred to Audiology services.</li> </ul>
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<sup>1</sup> This is to establish a benchmark and to gauge the service trends over time.

## Standard 2 Assessment

Standard Statement	Rationale	Criteria
<p>2a. All referred children receive audiological assessment commensurate with their age and stage of development. In some cases this will form part of a multidisciplinary team approach of which parents are key members.</p> <p>The range of audiological assessments available enables definition of degree and nature of hearing loss.</p>	<p>Accurate and complete assessment is required to inform decisions and discussions regarding support and management options. It is important to be able to assess hearing status in children who may have other social, educational and medical difficulties; a multidisciplinary approach will assist with this.</p> <p>Parental involvement in the assessment and habilitation process improves outcomes for the child.</p> <p>The quality of assessment is more likely to be assured if undertaken in accordance with nationally recommended procedures.</p> <p>Measures are compromised if not gathered using equipment calibrated to national and international standards and in a quiet test environment.</p>	<p>2a.1. A comprehensive range of audiological assessments is available<sup>2</sup>, either in the local audiology department or by a pre-arranged referral pathway with an alternative service.</p> <p>2a.2. Local care pathways detailing type, order, timing and multidisciplinary/parental involvement in assessment are available.</p> <p>2a.3. Assessments are carried out in accordance with recognised national standards, where available.</p> <p>2a.4. All audiological procedures use equipment which meets national and international standards.</p> <p>2a.5. All equipment is calibrated at least annually, and documented to international standards.</p> <p>2a.6. Daily checks are carried out and documented to international standards.</p> <p>2a.7. All audiological procedures follow national standards/guidelines, where these exist.<sup>3</sup></p>

<sup>2</sup> See Appendix 2.

<sup>3</sup> For examples see Appendix 3

		2a.8. Assessments are carried out, wherever possible, in acoustical conditions conforming to national standards. <sup>4</sup>
2b. The outcome of the assessment should inform a clearly defined management plan.	<p>Prompt, accurate and complete audiological information informs the amplification process</p> <p>The outcome of assessments should contribute in sufficient detail to establishment of aetiology, prognosis and further management.</p>	<p>2b.1. All assessments are interpreted taking into account the developmental status of the child and any co-existing medical conditions.</p> <p>2b.2. Written local protocols exist which define appropriate management options arising from the assessment (such as decisions to refer, review or discharge).</p>

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<sup>4</sup>To enable the accurate testing of normal air and bone conduction hearing threshold levels down to 0 dB HL, ambient sound pressure levels should not exceed any of the levels shown in Tables 2 and 4 respectively from BS EN ISO 8253-1. However, it is reasonable to relax this requirement for BC testing so as to provide for testing down to 10 dB HL by adding 10 dB to the figures in Table 4.

## Standard 3 Developing an Audiology Individual Management Plan (IMP)

Standard Statement	Rationale	Criteria
<p>3a. An Audiology Individual Management Plan (IMP)<sup>5</sup> is:</p> <ul style="list-style-type: none"> <li>• Developed for each child, initially based on the information gathered at the assessment phase taking into account the child's developmental age, other medical needs and the child and parental views.</li> <li>• Updated on an ongoing basis.</li> <li>• Accessible to the clinical team.</li> </ul>	<p>An Audiology Individual Management Plan is required as each child needs to be treated as an individual case as circumstances, medical condition, audiological status and family needs will vary.</p> <p>There is evidence that families value joint working as it avoids duplication and there is less conflict of information.</p> <p>Parental involvement improves the outcomes for the child.</p>	<p>3a.1. The Audiology Individual Management Plan is agreed at the end of the first appointment and updated at subsequent appointments thereafter.</p> <p>3a.2. The Audiology IMP includes an initial programme of audiological management [including provision of hearing aids where appropriate], and details of ongoing assessment as required.</p> <p>3a.3. The Audiology IMP includes an assessment of current priorities including the level and type of service needed from:</p> <ul style="list-style-type: none"> <li>• audiology,</li> <li>• education,</li> <li>• paediatrics,</li> <li>• speech and language therapy,</li> <li>• social work.</li> </ul> <p>3a.4. The Audiology IMP includes details of service provision from those currently involved with the child and family.</p> <p>3a.5. The Audiology IMP details any requirements families have for information, family support and practical advice.</p> <p>3a.6. The specific goals of the individual elements of the Audiology IMP and their timing are documented and circulated to all members of the team.</p>

<sup>5</sup> Information about the IMP can be found in Appendix 4

## Standard 4 - Implementing an Audiology Individual Management Plan

Standard Statement	Rationale	Criteria
<p>4a. The Audiology Individual Management Plan (IMP) is implemented for each child and reviewed at subsequent appointments.</p>	<p>Planned and coordinated intervention leads to better outcomes.</p> <p>Regular revision allows the management plan to be responsive to the child's changing needs. It also gives the plan the flexibility to incorporate additional information for the benefit of the child's management.</p>	<p>4a.1 The clinical record and IMP includes the details of assessments undertaken and the details, justification and effectiveness of all interventions<sup>6</sup> implemented.</p> <p>4a.2. The Audiology IMP includes a set of achievable objectives which are reviewed and updated regularly.</p>
<p>4b. Where provision of hearing aid(s) is required, the service ensures:</p> <ul style="list-style-type: none"> <li>• hearing aids fitted are functioning correctly,</li> <li>• nationally agreed procedures and protocols are followed at a local level and</li> <li>• performance of hearing aid(s) is carefully matched to individual requirements and settings are recorded.</li> </ul>	<p>Audiologists ensure that the aid is working to specification before fitting it to a child so that the aid does not cause harm.</p> <p>Professional bodies' and national guidelines are followed to ensure provision meets the needs of the child.</p> <p>Evidence suggests that hearing aids are most effective when their performance is carefully matched to the requirements of the child.</p>	<p>4b.1. Prior to issue every hearing aid has its technical performance tested to specification.<sup>7</sup></p> <p>4b.2. Local protocols which comply with the latest professional bodies' and national guidance<sup>8</sup> are in operation concerning selection, fitting and verification of hearing aids.</p> <p>4b.3. Real Ear Measurement (REM) / Real Ear to Coupler Difference (RECD) of hearing aid performance is used to verify at least 95% of hearing aid fittings<sup>9</sup>, unless clinically contraindicated for individual children.</p> <p>4b.4. Where REM / RECD is performed, the acoustical</p>

<sup>6</sup> This will include earmould selection, basic settings/acoustical characteristics of the prescribed hearing aids and advanced features (such as directional microphones, noise reduction algorithms, and multiple programmes).

<sup>7</sup> Electroacoustic performance will be tested directly on a test box or by using REM. The acoustical consequences of any activated feature of the hearing aid(s) (e.g. directional microphones) are also verified where standard procedures exist.

<sup>8</sup> E.g. the BAA, BSA and Scottish National Guidelines

<sup>9</sup> Explained whenever IMPs are completed and recorded in patient held records.

		<p>target is verified at three different input levels (50, 65 and 80 dB) in more than 95% of cases.</p> <p>4b.5. Where REM / RECD is performed, measurements do not deviate from the recommended target at more than one frequency (in 95% of cases) unless clinically indicated</p> <p>4b.6. Where REM / RECD is not possible, current internationally-recognised age-related predicted values are used in hearing aid verification.</p> <p>4b.7. When REM/RECD is not attempted/completed an explanation is recorded in the Audiology IMP.</p>
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## Standard 5 - Outcomes

Standard Statement	Rationale	Criteria
<p>5a. The outcome and effectiveness of the interventions contained within the Audiology Individual Management Plan are evaluated and recorded following an assessment of the impact of intervention.</p>	<p>The management of hearing impairment, within a comprehensive management plan, involves more than a simple technical matter of hearing aid fitting. It involves the provision of a systematic approach, supported by evidence, which addresses not only the hearing impairment, but also the impact on other related activity. This requires a multi-disciplinary approach. Subjective outcome measures, in the form of questionnaires, can assess the impact of a hearing impairment on the child's communication functioning and activity limitation. This can then be used in the evaluation process to measure the effectiveness of the intervention.</p> <p>Audiology IMPs help to record multiple management outcomes such as functional benefit, satisfaction and quality of life. Measurement of outcome is required to shape further progression of Audiology IMPs.</p> <p>Measurement of outcome is required to: -</p> <ul style="list-style-type: none"> <li>• obtain feedback (including a progressive evidence base) on the effectiveness and benefit associated with the service delivered to the patient group and</li> </ul>	<p>5a.1. Appropriate outcome measures<sup>10</sup> are administered to evaluate the outcome of intervention and further develop the Audiology IMP.</p> <p>5a.2. Clinical records are used to facilitate further development and monitoring of children's progress. The records contain information about the extent to which the interventions helped meet the specified goals (outcomes) and document information about how each element of the Audiology IMP has been implemented, including reasons for changes or omissions.</p>

<sup>10</sup> Outcome measures may include; aided speech testing in noise and/or quiet conditions, soundfield aided testing, standardised questionnaires of listening ability as perceived by child, teacher and parent, communication development, compliance of wearing the aids and behavioural observation. (Appendix 5)

	<ul style="list-style-type: none"> <li>• facilitate further development of the Audiology IMP and judge progress on the child's outcomes.</li> </ul>	
<p>5b. All children are offered referral for appropriate aetiological investigations as part of their ongoing management.</p>	<p>The outcome of aetiological investigations, as part of the ongoing management, may lead to a better understanding and management of not only the hearing loss but also the whole child. It may also provide an opportunity to identify co-existing medical conditions and prevent further deterioration of these and the hearing loss in some cases.</p>	<p>5b.1. Local referral guidelines are in place regarding aetiological investigations for children with hearing loss.</p> <p>5b.2. Local guidelines, which reflect national guidelines, are in place regarding aetiological investigations for children with hearing loss.</p> <p>5b.3. Outcomes from investigations are documented in the Audiology IMP and, as appropriate and with the family's permission, shared with other members of the multidisciplinary team.</p>

## Standard 6 Professional Competence

Standard Statement	Rationale	Criteria
<p>6a. Each Audiology service demonstrates that within their team they have the clinical competencies necessary to support the assessments and interventions they undertake.</p>	<p>Children and young people who require ongoing health interventions must have access to high quality evidence based care, delivered by staff who have the right skills for diagnosis, assessment, treatment and ongoing care and support.</p> <p>Audiology departments have a duty of care to children and families and must ensure that assessments and interventions are delivered by appropriately trained, qualified and registered clinicians.</p> <p>Through the clinical governance framework, organisations can manage their accountability for maintaining high standards.</p> <p>Paediatric audiology is a rapidly changing field and clinical competency must, therefore, be maintained through continuing professional development.</p> <p>Peer review provides a useful approach to help ensure clinical competencies are maintained.</p>	<p>6a.1 Audiological assessment and support is undertaken by experienced staff capable of performing and interpreting such testing.</p> <p>6a.2. All professional staff working in Paediatric Audiology hold the necessary qualifications and are registered with the appropriate professional registration body.</p> <p>6a.3. Staff in senior positions are trained to post-graduate level supplemented by suitably assessed practical experience in Paediatric Audiology.</p> <p>6a.4. Competency for all clinical procedures is verified formally by peer review observation at least every 2 years for all clinical staff undertaking such procedures. Ongoing assessments of all clinical staff's competency should also be carried out informally by local Audiology centres.</p> <p>6a.5. All assistant staff are able to demonstrate additional competency training in Paediatric Audiology along with continuing professional development (CPD) in the areas in which they are currently working.</p> <p>6a.6. All staff have basic training in child protection and deaf awareness.</p> <p>6a.7. Where the competencies required by an Audiology IMP</p>

		are not held within a service, clear referral routes to external providers exist.
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## Standard 7 Information Provision and Communication with Children and Families

Standard Statement	Rationale	Criteria
<p>7a. Each service has in place processes and structures to facilitate communication with children and families.</p>	<p>It is important that information is provided in an appropriate format.</p> <p>Effective communication enables children and families to participate in the development of the Individual Management Plan and Multi-Agency Support Plan, to understand information and make informed decisions.</p> <p>Children and families need clear and timely information to facilitate attendance and reduce anxiety.</p>	<p>7a.1. Written information regarding the audiology appointment (directions, maps, parking facilities, appointment duration, procedures, facilities, desirable baby state) is provided as part of the appointment process.</p> <p>7a.2. Children and families receive verbal explanation of the audiological assessment results on the same day that the assessment is carried out.</p> <p>7a.3. Children and families are provided with written information about the outcome of assessments and any supporting literature within 7 working days of the assessment.<sup>11</sup></p> <p>7a.4. Children and families are offered information on local and national voluntary support groups, such as NDCS.</p> <p>7a.5. Children and families have access to information in their preferred language via the provision of translated written material, interpreters, use of language line etc.</p> <p>7a.6. All staff (including reception and admin staff) receive deaf awareness and communication training as part of their induction which is then updated every 3 years. This training is approved by a</p>

<sup>11</sup> NDCS and NHSP provide a number of documents that can be used to support information regarding outcomes of assessments undertaken

		relevant third party such as a voluntary sector organisation.
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## Standard 8 Multi-Agency Working

Standard Statement	Rationale	Criteria
<p>8a. Each Paediatric Audiology service works within a multi-agency team, which includes each child and his/her parents.</p>	<p>Working as a team leads to more effective use of time and resources.</p> <p>There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information.</p>	<p>8a.1. Each Audiology service works within a multi-agency team, including parents, and members with expertise in:</p> <ul style="list-style-type: none"> <li>• Paediatric Audiology,</li> <li>• development of language and speech skills,</li> <li>• medical aspects of audiology and</li> <li>• child development and family support.</li> </ul> <p>8a.2. Each multi-agency team has access to:</p> <ul style="list-style-type: none"> <li>• paediatric otology,</li> <li>• social work services,</li> <li>• education services and</li> <li>• voluntary agencies.</li> </ul> <p>8a.3. Each multi-agency team has:</p> <ul style="list-style-type: none"> <li>• defined written roles including a “key worker” for each case and</li> <li>• an appointed coordinator.</li> </ul>
<p>8b. Each multi-agency team has in place processes and structures to underpin effective collaborative working and communication within the team and with outside agencies and services.</p>	<p>Sharing of information between agencies in a timely manner ensures that all involved are kept informed, enabling them to provide the most appropriate support to the child and family.</p>	<p>8b.1. Results of audiological assessments are reported to the referrer, GP, Child Health department and any other relevant professionals within 7 working days of the assessment.</p> <p>8b.2. Non attendance is reported to the referrer and an appropriate professional e.g. HV, Child Health, in accordance with local guidelines/protocols.</p> <p>8b.3. Systems are in place for</p>

		<p>the referral of families to other agencies and services involved in the management of children with hearing impairment.</p> <p>8b.4. When Audiology refers families to other agencies and services, there is ongoing sharing and exchange of information between Audiology and these services and agencies.</p> <p>8b.5. The Audiology service encourages and facilitates referral of families to appropriate voluntary organisations and parent support groups.</p> <p>8b.6. Systems are in place to manage the transition from Paediatric to Adult Audiology services.<sup>12</sup></p> <p>8b.7. A Children's Hearing Services Working Group<sup>13</sup>, including parent representatives, meets regularly to consider the development and delivery of services for hearing impaired children and their families. The remit will include the extent to which services meet the Standards described in this document.</p>
<p>8c. Each service has a major role in facilitating the development and ongoing review of a Multi-Agency Support Plan (MASP)<sup>14</sup> for each child who has</p>	<p>When a number of different services work with a family, the Multi-Agency Support Plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims</p>	<p>8c.1. The Multi-Agency Support Plan is tailored by the information gathered throughout the multi-agency assessment phase.</p> <p>8c.2. The MASP is in place within 3 months of confirmation</p>

<sup>12</sup> The details of standards around transition from paediatric to adult services is outside the scope of this document. Consideration is being given to developing separate standards around this in the future.

<sup>13</sup> For information describing Children's Hearing Services Working Groups see Appendix 6

<sup>14</sup> An example of a Multi-Agency support Plan can be found in Appendix 7

<p>an ongoing significant<sup>15</sup> hearing loss. The MASP takes into account the individual needs of the child and family, reflects the child and parental views and is clear, coordinated and flexible.</p>	<p>and wishes of the family.</p> <p>Multi-Agency Support Plans encourage:</p> <ul style="list-style-type: none"> <li>• joint holistic discussions of an individual child's needs,</li> <li>• agreement of priorities,</li> <li>• engagement with and involvement of the family and</li> <li>• regular reviews of any support that is being provided, resulting in improved quality of ongoing care.</li> </ul> <p>Regular revision allows the Multi-Agency Support Plan to be responsive to the child's changing needs. It also gives the plan the flexibility to incorporate additional information for the benefit of the child's management.</p>	<p>of a significant hearing loss.</p> <p>8c.3. The MASP includes an assessment of current priorities including the level and type of service needed from:</p> <ul style="list-style-type: none"> <li>• Audiology</li> <li>• Education</li> <li>• Paediatrics</li> <li>• Speech and language therapy</li> <li>• Social work and</li> <li>• Specialist services, e.g. cochlear implant team.</li> </ul> <p>8c.4. The MASP includes details of service provision from those currently involved with the child and family.</p> <p>8c.5. The MASP includes a set of achievable objectives which are reviewed and updated regularly (at least 6 monthly for pre-school children and annually for school age children) and circulated to all members of the team.</p> <p>8c.6. The team has a close working relationship and meets on a regular basis (at least every 6 months for pre-school children and annually for school age children) to ensure that the support plan is being implemented in a coordinated way and in line with the wishes and needs of the family.</p> <p>8c.7. Each agency carries out its own role in the further, more detailed assessments and information gathering necessary to complete the clinical, educational and social picture of the MASP. During this process, information is fed</p>
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<sup>15</sup> "significant" hearing loss is not defined solely by the hearing level, but this must be considered alongside any other medical, developmental or social problems.

		back and shared with all other members of the multi-agency team.
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## Standard 9 Service Effectiveness and Improvement

Standard Statement	Rationale	Criteria
<p>9a Each service has processes in place to measure service quality and improvement.</p>	<p>Measurement of qualitative and quantitative data helps to inform ongoing service improvement.</p>	<p>9a.1. Children and/or families are encouraged to complete surveys on, at least, an annual basis to determine satisfaction with different elements of the service received. These include: -</p> <ul style="list-style-type: none"> <li>• accessibility,</li> <li>• proximity,</li> <li>• information provision,</li> <li>• professionalism of staff,</li> <li>• care and treatment and</li> <li>• overall service received.</li> </ul> <p>9a.2. Participation rates in the survey are checked, annually, to ensure an acceptable proportion of patients have participated and a representative sample of the local population is covered (including gender and ethnicity).</p> <p>9a.3. Sufficient analysis and interpretation of findings from satisfaction surveys are carried out annually by Audiology services.</p> <p>9a.4. Action plans are implemented, when needed, to address areas of concern arising from surveys<sup>16</sup> and QRT data and performance.</p>

<sup>16</sup> An example of a survey satisfaction questionnaire used by audiology services is listed in appendix 8

<p>9b. Each Audiology service actively participates in the local Children's Hearing Services Working Group (CHSWG). Where a CHSWG does not exist, the service is active in the setting up of such a group.</p>	<p>Close working with parents as well as across organisations will lead to improved services for deaf children and their families.</p> <p>Effective recruitment to CHSWGs will ensure appropriate representation for the child and family, and demonstrates a truly inclusive approach.</p> <p>CHWSGs can ensure that children's hearing services remain high on the agenda of those responsible for planning and delivering services at a strategic level. They can offer advice and guidance to ensure high quality services are available.</p>	<p>9b.1. The CHSWG meets regularly to review the multi-agency services for children and their families known to have, or considered to be at risk of having, a hearing impairment.</p> <p>9b.2. The CHSWG helps to develop and improve the services delivered to deaf children and their families through the processes of ongoing support to all agencies involved.</p> <p>9b.3. CHSWGs monitor the extent to which services meet the Standards detailed in this document.</p>
<p>9c Each service has processes in place to regularly consult with children, families and stakeholders.</p>	<p>Paediatric Audiology services that seek, consider and respond to the views of users will be more likely to meet their needs.</p>	<p>9c.1. The Audiology service has a framework in place to ensure regular consultation with children, families and stakeholders.</p> <p>9c.2. Results of satisfaction surveys and service QRT scores are made available and discussed with children and families on an annual basis.</p>

# **Improving quality and outcomes in Paediatric Audiology Services through critical evaluation**

## ***A quality rating tool for service providers***

### **Foreword**

This quality rating tool (QRT) for Paediatric Audiology service providers and their partners has been developed to highlight best practice in Paediatric Audiology service provision in order to ensure local Audiology services meet population requirements and address health inequalities.

The QRT has been developed to assist providers of Paediatric Audiology services in assessing their ability to deliver services to meet the needs of their local population against the Quality Standards in Paediatric Audiology.

It is envisaged that service providers will find the format of the tool helpful in measuring their progress towards meeting and indeed exceeding the quality standards. Beyond use by providers for self assessment, the tool could also be employed within an external (independent) assessment process. The publication of externally verified service quality ratings could also help potential service users make more informed decisions on the services that they choose to access.

The Quality Rating Tool can be implemented in different ways, depending on the medium used, but on-line self assessment can be readily achieved.

### **Using the Quality Rating Tool**

This quality rating tool covers 9 Quality Standards in Paediatric Audiology.

Standards are only part of the cycle within which services are delivered and reviewed/monitored. Assessment against the standards will inform participating stakeholders of areas of good practice and areas in need of development, performance management and consolidation. Assessment should be an ongoing service management function. External quality assurance programmes will reinforce local ratings and contribute additional objectivity and transparency.

Each section contains several quality statements relating to different criteria within the quality standards. Providers can rate their current activity against the scale 1-5 where 1 means that no elements of the quality statement are met/implemented and 5 represents full compliance with good to best practice, with graduations in between. Examples of what a score of 1 and 5 might look like have been given so that users of the tool can make better judgements about where on the scale the service corresponds. The 5 positions are:

1. No elements of the quality statement are met (or not evident\*)
2. Few elements of the quality statement are met
3. Meets around half of the elements of the quality statement

4. Almost fully meets the quality statement
5. Fully compliant with good to best practice as indicated by quality statement criteria

In judging evidence of performance (assigning an overall score for each standard) those completing assessment should consider the following **elements** of compliance:

- All examples of best practice (where there is more than one)
- The population served, (eg, all geographical areas, and all facilities)
- Reflecting practice over the preceding 12 week period as a minimum (prior to the date of the assessment)

NB Evidence must always be provided to support scores.

In addition, a separate field provides suggestions of evidence to assist users of the tool in their rating assessment and direct discussion for any external quality assurance visit. On completion of the Quality Rating Tool, an overall position will indicate those areas that require further development and review.

### **Understanding the score**

The underlying assumption used here is that, when scoring each standard, all quality statements (criteria) are equally important and therefore carry the same score weighting.

Some criteria may have more aspects than others but each criteria should only be scored once. For instance when a criteria achieves 2 out of 4 different standards that the service should meet then appropriate approximate score would be 3 out of 5. A reminder of how to score the standards can be found in the rating scale at the top of each standard. For each standard, a percentage quality score can be calculated and an interpretation given of the meaning of these scores (eg needs urgent attention, needs attention, does not need attention). For instance; if a service scores a total of 32 out of 40 then the service is deemed to have 80% compliance with standard 1.

## **Standard 1 – Access**

- 1a. All children shall have access to the audiological services they require in a timely fashion, with clearly defined referral pathways to audiological services that are widely disseminated and reviewed regularly.
- 1b. Service demand and referral data are accurately monitored, reviewed and reported to guide service planning.

### **Rating Scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)		Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

### Criteria 1a.1 – Referral Pathways

<b>Quality Statement rationale</b> Correct referral information results in more efficient use of available resources.					
<b>1</b> No elements of the quality statement criteria are met (or not evident)	<b>5</b> Fully compliant with good to best practice as indicated by quality statement criteria	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
There are no clear referral pathways and pathways are not disseminated.	Clearly defined written referral pathways from all referral sources (eg newborn hearing screening, ENT, speech and language therapists, paediatricians, health visitors, GPs, education services and parents) are in place and monitored regularly.				
<b>Evidence</b> Written referral pathways, written referral criteria, written policy on communication with referrers and audit, evidence of training in Primary Care					

**Criteria 1a.2–1a.3 – Speed of Access**

<p><b>Quality Statement rationale</b>                      Early identification of permanent hearing problems and subsequent intervention leads to improved outcomes for the child at a later date. Parents support the principle of early identification and intervention. Fluctuating hearing loss can have a disadvantageous effect on the child's development.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p> <p>Routine referrals are not seen within 6 weeks <b>and</b> urgent referrals are not seen at the next available appointment or within 4 weeks receipt of referral.</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p> <p>Routine referrals are seen within 6 weeks of receipt of referral.</p> <p>Urgent referrals are seen at the next available appointment or within 4 weeks of receipt of referral.</p>				
<p><b>Evidence</b>                      Written referral pathways,                      written referral criteria,                      Waiting times data</p>					

**1b.1-1b.2 - Monitoring of Inappropriate Direct and Specialist Service Referrals**

<b>Quality Statement rationale</b>					
The number of incorrect referrals to the specialist medical route informs the effectiveness/clarity of the criteria and compliance of referrers to those criteria. Improvements can then be made to ensure that children are correctly referred to appropriate services.					
<b>1</b> No elements of the quality statement criteria are met (or not evident)	<b>5</b> Fully compliant with good to best practice as indicated by quality statement criteria	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
Inappropriate referrals are not monitored for <b>either</b> direct or specialist medical services.	The number of inappropriate referrals is monitored for <b>both</b> direct referrals to audiology and referrals to specialist medical services.  Action plans are implemented to address any non-compliance with the referral criteria for direct referrals to audiology <b>and</b> referrals to specialist medical services, rather than				

	audiology.							
<b>Evidence</b>								
Audit (ideally over several time points to indicate trend)								

### 1b.3 – Monitoring of Waiting Times

<b>Quality Statement rationale</b> Effective allocation of health resources is reliant upon accurate information on the balance between demand for services and available resources. It is important that waiting times for all stages of the patient pathway are collected and monitored in an effective manner. The use of IT systems to compute information such as demographic data and waiting times will inform allocation of services.					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
Waiting times are not measured at all within the department.	Waiting times are monitored within the department based upon robust data collection.				
<b>Evidence</b> Audit (ideally over several time points to indicate trend) Waiting times data to hand					

### 1b.4 – Service Planning

Quality Statement rationale					
Effective allocation of resources relies upon information on actual demand and potential/ projected demand for specific services.					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
No data is collected, reviewed and used for annual service review.	<p>All the following data is collected, reviewed and used in annual service review:</p> <ul style="list-style-type: none"> <li>demographics of locally served populations, including factors such as ethnic diversity, social deprivation and age,<sup>17</sup></li> <li>the number of children referred to Audiology services and their associated demographic information,</li> <li>the uptake of NHS</li> </ul>				

<sup>17</sup> This is to establish a benchmark and to gauge the service trends over time.

	<p>hearing aids in the local population compared with the predictive need for services and</p> <ul style="list-style-type: none"> <li>the number and type of surgical interventions required for children referred to Audiology services.</li> </ul>			
<p><b>Evidence</b>  Data on hearing aid uptake,  Data on referrals to audiology services,  Data on patient demographic,  Annual service review.</p>				

## **Standard 2 – Assessment**

2a. All referred children receive audiological assessment commensurate with their age and stage of development. In some cases this will form part of a multidisciplinary team approach of which parents are key members. The range of audiological assessments available enables definition of degree and nature hearing loss.

2b. The outcome of the assessment should inform a clearly defined management plan.

### **Rating Scale**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)	Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

**Criteria 2a.1-2a.3 – Comprehensive Assessment**

<b>Quality Statement rationale</b>					
Accurate and complete assessment is required to inform decisions and discussions regarding support and management options. It is important to be able to assess hearing status in children who may have other social, educational and medical difficulties; a multidisciplinary approach will assist with this. Parental involvement in the assessment and habilitation process improves outcomes for the child. The range of audiological assessments available should enable definition of degree and nature of hearing loss.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
The service cannot carry out a full range of audiological assessments,  Local care pathways do not detail type, order, and timing of assessment,  There is no multidisciplinary/	A comprehensive range of audiological assessments is available, either in the local audiology department or by a pre-arranged referral pathway with an alternative service.  Local care pathways detailing type, order, timing and multidisciplinary/parental				

<p>parental involvement in assessment <b>and</b></p> <p>Assessments are not carried out in accordance with recognised national standards - where standards are available.</p>	<p>involvement in assessment are available.</p> <p>Assessments are carried out in accordance with recognised national standards - where available.</p>				
<p><b>Evidence</b></p> <p>Multi-disciplinary team, Written protocols, Case audit,</p>					

**Criteria 2a.4-2a.8 – Assessment Equipment and Conditions**

<b>Quality Statement rationale</b>					
The quality of assessment is more likely to be assured if undertaken in accordance with nationally recommended procedures. Measures are compromised if not gathered using equipment calibrated to national and international standards and in a quiet test environment.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p> <p>Equipment does not meet national and international standards,</p> <p>Equipment is not calibrated annually,</p> <p>Daily checks are not carried out and documented to international standards.</p> <p>Procedures do not follow national standards/guidelines – where they exist <b>and</b></p> <p>Assessments are never carried out in acoustical</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p> <p>All audiological procedures use equipment which meets national and international standards.</p> <p>All equipment is calibrated at least annually, and documented to international standards.</p> <p>Daily checks are carried out and documented to international standards.</p> <p>All audiological procedures follow national standards/guidelines, where these exist.</p>				

conditions conforming to national standards.	Assessments are carried out, where possible, in acoustical conditions conforming to national standards.				
<b>Evidence</b> Written protocols, Calibration and equipment check logs/certificates, Audit					

**Criteria 2b.1-2b.2 – Assessment Outcome**

<p><b>Quality Statement rationale</b>                      Prompt, accurate and complete audiological information informs the amplification process.                      The outcome of assessments should contribute in sufficient detail to establishment of aetiology, prognosis and further management.</p>					
<p><b>1</b>                      No elements of the quality statement criteria are met (or not evident)</p>	<p><b>5</b>                      Fully compliant with good to best practice as indicated by quality statement criteria</p>	<p>Self assessment score based on evidence sources</p>	<p>QA visitor score and comments</p>	<p>Actions / comments</p>	<p>Good practice example</p>
<p>Assessments are never interpreted with the development status of the child or any co-existing medical conditions being taking into account <b>and</b></p> <p>There are no local protocols defining appropriate management options arising from assessment.</p>	<p>All assessments are interpreted taking into account the developmental status of the child and any co-existing medical conditions.</p> <p>Written local protocols exist which define appropriate management options arising from the assessment (such as decisions to refer, review or discharge).</p>				

**Evidence**  
Written protocols,  
Case audit,  
Peer review of cases

### **Standard 3 - Developing an Audiology Individual Management Plan**

3a. An Audiology Individual Management Plan (IMP) is:

- Developed for each child, initially based on the information gathered at the assessment phase taking into account the child's developmental age, other medical needs and the child and parental views.
- Updated on an ongoing basis and
- Accessible to the clinical team.

#### **Rating Scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	No elements of the quality statement criteria are met (or not evident)	Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

**Criteria 3a.1 – Agreement by First Appointment and Updates**

<b>Quality Statement rationale</b>					
An Audiology individual management plan is required as each child needs to be treated as an individual case as circumstances, medical condition, audiological status and family needs will vary.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
The Audiology IMP is not agreed at the end of the first appointment <b>and</b> is not updated at subsequent appointments thereafter.	The Audiology individual management plan is agreed at the end of the first appointment and updated at subsequent appointments thereafter.				
<b>Evidence</b>					
Documented dates of IMP development from patient records. Audit of patient records.					

**Criteria 3a.2 – Programme of Management**

<p><b>Quality Statement rationale</b>                      An individual management plan is required as each child needs to be treated as an individual case as circumstances, medical condition, audiological status and family needs will vary.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The audiology IMP does not include any kind of initial programme of audiological management <b>and</b> does not include details of ongoing assessment when required.</p>	<p>The Audiology IMP includes an initial programme of audiological management [including provision of hearing aids where appropriate], and details of ongoing assessment as required.</p>				
<p><b>Evidence</b>                      Audit of case studies,                      Record of individual management plans,                      Documented plans</p>					

### Criteria 3a.3 – Assessment of Priorities

<b>Quality Statement rationale</b>					
An Audiology individual management plan is required as each child needs to be treated as an individual case as circumstances, medical condition, audiological status and family needs will vary. There is evidence that families value joint working as it avoids duplication and there is less conflict of information.					
<b>1</b> No elements of the quality statement criteria are met (or not evident)	<b>5</b> Fully compliant with good to best practice as indicated by quality statement criteria	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
The Audiology IMP does not include any kind of assessment of current priorities.	The Audiology IMP includes an assessment of current priorities including the level and type of service needed from: <ul style="list-style-type: none"> <li>• Audiology,</li> <li>• Education,</li> <li>• Paediatrics,</li> <li>• Speech and language therapy and</li> <li>• Social work.</li> </ul>				
<b>Evidence</b> Audit of case studies,					

Records of individual management plans,  
Documented plans

**Criteria 3a.4-3a.6 – Further IMP Documentation**

<b>Quality Statement rationale</b> There is evidence that families value joint working as it avoids duplication and there is less conflict of information. Parental involvement improves the outcomes for the child.							
				Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p><b>1</b></p> <p>No elements of the quality statement criteria are met (or not evident)</p>	<p><b>5</b></p> <p>Fully compliant with good to best practice as indicated by quality statement criteria</p>						
<p>The Audiology IMP does not detail any requirements families have for information, family support and practical advice,</p> <p>The audiology IMP does not include details of service provision from those currently involved with the child and family <b>and</b></p> <p>The specific goals of the individual elements of</p>	<p>The Audiology IMP details any requirements families have for information, family support and practical advice.</p> <p>The Audiology IMP includes details of service provision from those currently involved with the child and family.</p> <p>The specific goals of the individual elements of the</p>						

<p>the IMP and their timing are not documented and circulated to any other members of the team.</p>	<p>IMP and their timing are documented and circulated to all members of the team.</p>				
<p><b>Evidence</b>  Audit of case studies,  Records of individual management plans</p>					

## **Standard 4 – Implementing an Audiology Individual Management Plan**

4a. The Audiology Individual Management Plan is implemented for each child and reviewed at subsequent appointments.

4b. Where provision of hearing aid(s) is required, the service ensures:

- hearing aids fitted are functioning correctly,
- nationally agreed procedures and protocols are followed at a local level and
- performance or hearing aid(s) is carefully matched to individual requirements and settings are recorded.

### **Rating Scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)	Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria	

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

**Criteria 4a.1 – Regularly Updated Objectives**

<p><b>Quality Statement rationale</b>                      Regular revision allows the management plan to be responsive to the child’s changing needs. It also gives the plan the flexibility to incorporate additional information for the benefit of the child’s management.                      Planned and coordinated intervention leads to better outcomes.</p>					
<p><b>1</b>                      No elements of the quality statement criteria are met (or not evident)</p>	<p><b>5</b>                      Fully compliant with good to best practice as indicated by quality statement criteria</p>	<p>Self assessment score based on evidence sources</p>	<p>QA visitor score and comments</p>	<p>Actions / comments</p>	<p>Good practice example</p>
<p>The Audiology IMP does not, at any stage, include a set of achievable objectives.</p>	<p>The Audiology IMP includes a set of achievable objectives which are reviewed and updated regularly.</p>				
<p><b>Evidence</b>                      Records from management plan,                      Case Audit</p>					

**Criteria 4b.1-4b.7 - Verification of Hearing Aids**

<p><b>Quality Statement rationale</b>                      Audiologists ensure that the aid is working to specification before fitting it to a child so that the aid does not cause harm. Professional bodies and national guidelines are followed to ensure provision meets the needs of the individual. Evidence suggests that hearing aids are most effective when their performance is carefully matched to the requirements of the individual.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>Hearing aids never have their technical performance tested to specification.</p>	<p>Prior to issue every hearing aid has its technical performance tested to specification.  Local protocols which comply with the latest professional bodies' and national guidance are in operation concerning selection, fitting and verification of hearing aids.</p>				

	<p>Real Ear Measurement (REM) / Real Ear to Coupler Difference (RECD) of hearing aid performance is used to verify at least 95% of hearing aid fittings, unless clinically contraindicated for individual children.</p> <p>Where REM / RECD is performed, the acoustical target is verified at three different input levels (50, 65 and 80 dB) in more than 95% of cases.</p> <p>Where REM / RECD is performed, measurements do not deviate from the recommended target at more than one frequency (in 95% of cases) unless clinically indicated</p> <p>Where REM / RECD is not possible, current internationally-recognised age-related predicted</p>			
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	<p>values are used in hearing aid verification.</p> <p>When REM/RECD is not attempted/ completed an explanation is recorded in the Audiology IMP.</p>				
<p><b>Evidence</b>  Records from management plan,  Case Audit;  Interviews with parents</p>					

## **Standard 5 – Outcomes**

5a. The outcome and effectiveness of the interventions contained within the Audiology Individual Management Plan (IMP) are evaluated and recorded following an assessment of the impact of intervention.

5b. All children are offered referral for appropriate aetiological investigations as part of their ongoing management.

### **Rating Scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)		Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects**

**Criteria 5a.1-5a.2 – Outcome Measures**

<p><b>Quality Statement rationale</b>                      The management of hearing impairment, within a comprehensive management plan, involves more than a simple technical matter of hearing aid fitting. It involves the provision of a systematic approach, supported by evidence, which addresses not only the hearing impairment, but also the impact on other related activity. This requires a multi-disciplinary approach.                      Subjective outcome measures, in the form of questionnaires, can assess the impact of a hearing impairment on the child's communication functioning and activity limitation. This can then be used in the evaluation process to measure the effectiveness of the intervention.                      Audiology IMPs help to record multiple management outcomes such as functional benefit, satisfaction and quality of life. Measurement of outcome is required to shape further progression of Audiology IMPs.                      Measurement of outcome is required to: -</p> <ul style="list-style-type: none"> <li>• obtain feedback (including a progressive evidence base) on the effectiveness and benefit associated with the service delivered to the patient group and</li> <li>• facilitate further development of the Audiology IMP and judge progress on the child's outcomes.</li> </ul>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>No outcome measures are administered <b>and</b>                      The clinical record contains no information about goals and outcomes.</p>	<p>Appropriate outcome measures are administered to evaluate the outcome of intervention and further develop the Audiology IMP.</p>				

	<p>Clinical records are used to facilitate further development and monitoring of children's progress. The records contain information about the extent to which the interventions helped meet the specified goals (outcomes) and document information about how each element of the Audiology IMP has been implemented, including reasons for changes or omissions.</p>			
<p><b>Evidence</b> Case audit, Records from management plan</p>				

**Criteria 5b.1-5b.3 – Aetiological Investigations**

<p><b>Quality Statement rationale</b>                      The outcome of aetiological investigations, as part of the ongoing management, may lead to a better understanding and management of not only the hearing loss but also the whole child. It may also provide an opportunity to identify co-existing medical conditions and prevent further deterioration of these and the hearing loss in some cases.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>There are no local guidelines in place regarding aetiological investigations <b>and</b></p> <p>Outcomes from investigations are not recorded in the child's medical records <b>or</b> outcomes are not shared with any members of the multidisciplinary team.</p>	<p>Local referral guidelines are in place regarding aetiological investigations for children with hearing loss.</p> <p>Local guidelines, which reflect national guidelines, are in place regarding aetiological investigations for children with hearing loss.</p> <p>Outcomes from investigations are</p>				

	<p>documented in the Audiology IMP and, as appropriate and with the family's permission, shared with other members of the multidisciplinary team.</p>				
<p><b>Evidence</b> Local guidelines Medical records</p>					

## **Standard 6 – Professional Competence**

6a. Each audiology service demonstrates that within their team they have the clinical competencies necessary to support the assessments and interventions they undertake.

### **Rating Scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	No elements of the quality statement criteria are met (or not evident)	Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.

**Criteria 6a.1-6a.3 – Experienced, Trained and Qualified Staff**

<b>Quality Statement rationale</b> Children and young people who require ongoing health interventions must have access to high quality evidence based care, delivered by staff who have the right skills for diagnosis, assessment, treatment and ongoing care and support. Audiology departments have a duty of care to children and families and must ensure that assessments and interventions are delivered by appropriately trained, qualified and registered clinicians. Through the clinical governance framework organisations can manage their accountability for maintaining high standards.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
Audiological assessment and support is not undertaken by experienced staff capable of performing and interpreting such testing,  Staff working in paediatric Audiology do not hold the necessary qualifications and are not registered with the appropriate professional registration	Audiological assessment and support is undertaken by experienced staff capable of performing and interpreting such testing.  All professional staff working in Paediatric Audiology hold the necessary qualifications and are registered with				

<p><b>body and</b></p> <p>Staff in senior positions are not trained to post-graduate level and do not have practical experience in paediatric audiology.</p>	<p>the appropriate professional registration body.</p> <p>Staff in senior positions are trained to post-graduate level supplemented by suitably assessed practical experience in Paediatric Audiology.</p>			
<p><b>Evidence</b></p> <p>CPD evidence,  Certificates of attendance at training,  Qualification Certificates</p>				

**Criteria 6a.4-6a.6 – Staff Competency and CPD**

<p><b>Quality Statement rationale</b>                      Paediatric audiology is a rapidly changing field and clinical competency must, therefore, be maintained through continuing professional development.                      Peer review provides a useful approach to help ensure clinical competencies are maintained.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>Competency for all clinical procedures is not verified formally by peer review observation at least every 2 years and local Audiology centres never carry out informal assessments of all clinical staff's competency,</p>	<p>Competency for all clinical procedures is verified formally by peer review observation at least every 2 years for all clinical staff undertaking such procedures. Ongoing assessments of all clinical staff's competency should also be carried out informally by local Audiology centres.</p>				
<p>Assistant staff are not able to demonstrate</p>	<p>All assistant staff are able to demonstrate additional</p>				

<p>additional competency training in paediatric audiology and cannot demonstrate continuing professional development (CPD) in the areas they are currently working <b>and</b>.</p> <p>Staff do not have basic training in child protection and deaf awareness.</p>	<p>competency training in paediatric audiology along with continuing professional development (CPD) in the areas in which they are currently working.</p> <p>All staff have basic training in child protection and deaf awareness.</p>			
<p><b>Evidence</b> Written documentation of peer review assessments CPD evidence,</p>				

**Criteria 6a.7 – Referral Routes to External Providers**

<p><b>Quality Statement rationale</b>                      Departments have a duty of care to children and families and must ensure that assessments and interventions are delivered by appropriately trained, qualified and registered clinicians.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>There are no referral routes to external providers in situations where the competencies required are not held within the service.</p>	<p>Where the competencies required by an Audiology IMP are not held within a service, clear referral routes to external providers exist.</p>				
<p><b>Evidence</b>                      Adequate written documentation on alternative providers for care services not offered.</p>					

## **Standard 7 – Information Provision and Communication with Children and Families**

7a. Each service has in place processes and structures to facilitate communication with children and families.

### **Rating Scale**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)	Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

**Criteria 7a.1 – Written Information to Families Prior to Appointment**

<b>Quality Statement rationale</b> Children and families need clear and timely information to facilitate attendance and reduce anxiety.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
No written information regarding the audiology appointment is provided as part of the appointment process.	Written information regarding the audiology appointment (directions, maps, parking facilities, appointment duration, procedures, facilities, desirable baby state) is provided as part of the appointment process.				
<b>Evidence</b> Written information leaflets or letters, Case audit, Interview with families					

**Criteria 7a.2-7a.5 – Information Given to Parents after Assessment**

<p><b>Quality Statement rationale</b>                      Children and families need clear and timely information to facilitate attendance and reduce anxiety. It is important that information is provided in an appropriate format. Effective communication enables children and families to participate in the development of the individual management plan and multi-agency support plan, to understand information and make informed decisions.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>Children and families do not receive appropriate verbal explanation of the audiological assessment results on the same day that the assessment is carried out.</p> <p>Children and families are not provided with written information about the outcome of assessments and any</p>	<p>Children and families receive verbal explanation of the audiological assessment results on the same day that the assessment is carried out.</p> <p>Children and families are provided with written information about the outcome of assessments and any supporting</p>				

<p>supporting literature within 7 working days of the assessment,</p> <p>Children and families are not offered information on local and national voluntary support groups, such as NDCS and</p> <p>Children and families do not have access to information in their preferred language via the provision of translated written material, interpreters, use of language line etc.</p>	<p>literature within 7 working days of the assessment.</p> <p>Children and families are offered information on local and national voluntary support groups, such as NDCS.</p> <p>Children and families have access to information in their preferred language via the provision of translated written material, interpreters, use of language line etc.</p>			
<p><b>Evidence</b>  Interview with families,  Written information provided to children and families,  Written assessment material available in different languages,  Copies of invoices for use of interpretation services,</p>				

**Criteria 7a.6 – Deaf Awareness and Communication Training**

<p><b>Quality Statement rationale</b>                      It is important that information is provided in an appropriate format. Children and families need clear and timely information to facilitate attendance and reduce anxiety. Effective communication enables children and families to participate in the development of the individual management plan and multi-agency support plan, to understand information and make informed decisions.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>Staff (including reception and admin staff) do not receive deaf awareness and communication training as part of their induction.</p>	<p>All staff (including reception and admin staff) receive deaf awareness and communication training as part of their induction which is then updated every 3 years. This training is approved by a relevant third party such as a voluntary sector organisation.</p>				
<p><b>Evidence</b>                      Written documentation, such as, certificates of attendance at training events.</p>					

## **Standard 8 – Multi-Agency Working**

8a. Each paediatric Audiology service works within a multi-agency team, which includes each child and his/her parents.

8b. Each multi-agency team has in place processes and structures to underpin effective collaborative working and communication within the team and with outside agencies and services.

8c. Each service has a major role in facilitating the development and ongoing review of a multi-agency support plan (MASP) for each child who has an ongoing significant hearing loss. The MASP takes into account the individual needs of the child and family, reflects the child and parental views and is clear, coordinated and flexible.

### **Rating Scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)		Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

**Criteria 8a.1 – Expertise Required in Multi-Agency Team**

<p><b>Quality Statement rationale</b>                      Working as a team leads to more effective use of time and resources.                      There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The service does not include <b>any</b> personnel with experience in:</p> <ul style="list-style-type: none"> <li>• paediatric Audiology,</li> <li>• development of language and speech skills,</li> <li>• medical aspects of audiology or</li> <li>• child development and family support.</li> </ul>	<p>Each Audiology service works within a multi-agency team, including parents, and members with expertise in:</p> <ul style="list-style-type: none"> <li>• paediatric audiology,</li> <li>• development of language and speech skills,</li> <li>• medical aspects of audiology and</li> <li>• child development and family support.</li> </ul>				

**Evidence**

Multidisciplinary team evident in notes from management plan meetings,  
Evidence of expertise in specialist area (course certificates, qualifications, registration)

**Criteria 8a.2 – Access to Other Specialist Services**

<b>Quality Statement rationale</b> Working as a team leads to more effective use of time and resources. There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information.					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
The multidisciplinary team does not have access to any other specialist services.	Each multi-agency team has access to: <ul style="list-style-type: none"> <li>• paediatric otology, social work services, education services and</li> <li>• voluntary agencies.</li> </ul>				
<b>Evidence</b> Documented specialist service contacts, Evidence, at audit, that other specialist services are regularly used when developing MASPs.					

**Criteria 8a.3 - Roles and a Coordinator for the Multi-Agency Team**

<b>Quality Statement rationale</b> Working as a team leads to more effective use of time and resources.					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
The multi-agency team does not define roles for staff working on a child's MASP <b>and</b> they do not have an appointed co-ordinator.	Each multi-agency team has: <ul style="list-style-type: none"> <li>• defined written roles including a "key worker" for each case and</li> <li>• an appointed coordinator.</li> </ul>				
<b>Evidence</b> Notes of MASP meetings, Defined written roles for team members; Identified coordinator; Identified key worker.					

**Criteria 8b.1-8b.2 – Child Information Updates for Referrer and Other Relevant Professionals**

<p><b>Quality Statement rationale</b>                      Sharing of information between agencies in a timely manner ensures that all involved are kept informed, enabling them to provide the most appropriate support to the child and family.</p>					
<p><b>1</b>                      No elements of the quality statement criteria are met (or not evident)</p>	<p><b>5</b>                      Fully compliant with good to best practice as indicated by quality statement criteria</p>	<p>Self assessment score based on evidence sources</p>	<p>QA visitor score and comments</p>	<p>Actions / comments</p>	<p>Good practice example</p>
<p>Results of audiological assessments are not reported to the referrer, GP, Child Health department and any other relevant professionals within 7 working days <b>and</b></p> <p>Non attendance is not reported to the referrer and an appropriate professional e.g. HV, Child Health, in accordance with local guidelines/protocols.</p>	<p>Results of audiological assessments are reported to the referrer, GP, Child Health department and any other relevant professionals within 7 working days of the assessment.</p> <p>Non attendance is reported to the referrer and an appropriate professional e.g. HV, Child Health, in accordance with local guidelines/protocols.</p>				

**Evidence**

Case audit,  
Interviews with key referrers,  
Review of written patient records received and kept by referrers and other professionals.

**Criteria 8b.3-8b.5 – Referral to Other Services**

<p><b>Quality Statement rationale</b>                      There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information. Sharing of information between agencies in a timely manner ensures that all involved are kept informed, enabling them to provide the most appropriate support to the child and family.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p> <p>There are no systems in place to manage the referral of families to other agencies and services involved in the management of children with hearing impairment.</p> <p>There is no communication between Audiology and other services and agencies when a family is referred from Audiology</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p> <p>Systems are in place for the referral of families to other agencies and services involved in the management of children with hearing impairment.</p> <p>When Audiology refers families to other agencies and services, there is ongoing sharing and exchange of information between Audiology and these services and agencies.</p>				

<p>to another service or agency <b>and</b></p> <p>The Audiology service neither encourages nor facilitates referral of families to appropriate voluntary organisations and parent support groups.</p>	<p>The Audiology service encourages and facilitates referral of families to appropriate voluntary organisations and parent support groups.</p>			
<p><b>Evidence</b>  Case audit,  Review of written patient records received and kept by referrers and other professionals,  Interviews with key referrers,  Interview with families.</p>				

**Criteria 8b.6 – Transition from Paediatric to Adult Audiology Service**

<p><b>Quality Statement rationale</b>                      Working as a team leads to more effective use of time and resources.                      There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information.                      Sharing of information between agencies in a timely manner ensures that all involved are kept informed, enabling them to provide the most appropriate support to the child and family.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>There are no systems in place to manage the transition from paediatric to adult Audiology services.</p> <p><b>Evidence</b>                      Written local protocols on the transition from paediatric to adult service.                      Case audit of transitions from paediatric to adult service.                      Interview with recent transitional patients.</p>	<p>Systems are in place to manage the transition from paediatric to adult Audiology services.</p>				

**Criteria 8b.7 – Children’s Hearing Service Working Group (CHSWG)**

<b>Quality Statement rationale</b>					
Working as a team leads to more effective use of time and resources. There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
A Children’s Hearing Services Working Group, including parent representatives does not meet up at all to consider the developments and delivery of services for hearing impaired children and their families.	A Children’s Hearing Services Working Group, including parent representatives, meets regularly to consider the development and delivery of services for hearing impaired children and their families. The remit will include the extent to which services meet the standards described in this document.				
<b>Evidence</b> Minutes from CHSWG meetings.					

**Criteria 8c.1 – MASP Initial Development from Multi-Agency Assessment Phase**

<p><b>Quality Statement rationale</b>                      When a number of different services work with a family, the multi-agency support plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims and wishes of the family.                      Multi-agency support plans encourage:</p> <ul style="list-style-type: none"> <li>• joint holistic discussions of an individual child’s needs,</li> <li>• agreement of priorities,</li> <li>• engagement with and involvement of the family and</li> <li>• regular reviews of any support that is being provided, resulting in improved quality of ongoing care.</li> </ul>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The multi-agency support plan is not informed by the information gathered throughout the multi-agency assessment phase.</p>	<p>The multi-agency support plan (MASP) is tailored by the information gathered throughout the multi-agency assessment phase.</p>				
<p><b>Evidence</b>                      Case audit of MASP to check map across from multi-agency assessment phase.</p>					

**Criteria 8c.2 – Timeframe for Initial MASP Development**

<b>Quality Statement rationale</b>					
When a number of different services work with a family, the multi-agency support plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims and wishes of the family.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
The MASP is not in place within 3 months of confirmation of a significant hearing loss.	The MASP is in place within 3 months of confirmation of a significant hearing loss.				
<b>Evidence</b>					
Written documentation from patient records showing hearing loss confirmation and MASP. Case Audit					

### Criteria 8c.3 – Assessment of Priorities for MASP

<p><b>Quality Statement rationale</b></p> <p>When a number of different services work with a family, the multi-agency support plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims and wishes of the family.</p> <p>Multi-agency support plans encourage:</p> <ul style="list-style-type: none"> <li>• joint holistic discussions of an individual child's needs,</li> <li>• agreement of priorities,</li> <li>• engagement with and involvement of the family and</li> <li>• regular reviews of any support that is being provided, resulting in improved quality of ongoing care.</li> </ul> <p>There is evidence that families value joint working as it avoids duplication and reduces the provision of conflicting information.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The MASP does not include any assessment of priorities.</p>	<p>The MASP includes an assessment of current priorities including the level and type of service needed from:</p> <ul style="list-style-type: none"> <li>• Audiology</li> <li>• Education</li> <li>• Paediatrics</li> <li>• Speech and language therapy</li> </ul>				

	<ul style="list-style-type: none"> <li>• Social work</li> <li>• Specialist services, e.g. cochlear implant team</li> </ul>			
<p><b>Evidence</b>  Audit of case studies,  Records of MASP's,  Documented plans.</p>				

**Criteria 8c.4-8c.5 – MASP Service Provision and Objectives**

<p><b>Quality Statement rationale</b>                      Regular revision allows the multi-agency support plan to be responsive to the child’s changing needs. It also gives the plan the flexibility to incorporate additional information for the benefit of the child’s management.                      When a number of different services work with a family, the multi-agency support plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims and wishes of the family.                      Multi-agency support plans encourage:</p> <ul style="list-style-type: none"> <li>• joint holistic discussions of an individual child’s needs,</li> <li>• agreement of priorities,</li> <li>• engagement with and involvement of the family and</li> <li>• regular reviews of any support that is being provided, resulting in improved quality of ongoing care.</li> </ul>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The MASP does not include details of service provision from those currently involved with the child and family <b>and</b> The MASP does not include a set of achievable objectives.</p>	<p>The MASP includes details of service provision from those currently involved with the child and family.  The MASP includes a set of achievable objectives which are reviewed and</p>				

	updated regularly (at least 6 monthly for pre-school children and annually for school age children) and circulated to all members of the team.				
<b>Evidence</b> Audit of case studies, Records of MASPs, Documented plans.					

**Criteria 8c.6 – The MASP Team: Collective Responsibilities**

<p><b>Quality Statement rationale</b>                      When a number of different services work with a family, the multi-agency support plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims and wishes of the family.                      Multi-agency support plans encourage:</p> <ul style="list-style-type: none"> <li>• joint holistic discussions of an individual child's needs</li> <li>• agreement of priorities</li> <li>• engagement with and involvement of the family</li> <li>• regular reviews of any support that is being provided, resulting in improved quality of ongoing care</li> </ul> <p>Regular revision allows the multi-agency support plan to be responsive to the child's changing needs. It also gives the plan the flexibility to incorporate additional information for the benefit of the child's management.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The team does not have a close working relationship – typified by them not meeting up at least every 6 months for MASPs of pre-school children and not meeting up at least annually for school age</p>	<p>The team has a close working relationship and meets on a regular basis (at least every 6 months for pre-school children and annually for school age children) to ensure that the support plan is being implemented in a</p>				

children.	coordinated way and in line with the wishes and needs of the family.			
<b>Evidence</b> Case Audit, Documented evidence of MASP meetings – such as minutes and written documentation within patient record.				

**Criteria 8c.7 – The MASP Team: Individual Responsibilities**

<p><b>Quality Statement rationale</b>                      When a number of different services work with a family, the multi-agency support plan ensures that individual components of the plan are understood in relation to one another and, more importantly, in relation to the overall aims and wishes of the family.                      Multi-agency support plans encourage:</p> <ul style="list-style-type: none"> <li>• joint holistic discussions of an individual child's needs</li> <li>• agreement of priorities</li> <li>• engagement with and involvement of the family</li> <li>• regular reviews of any support that is being provided, resulting in improved quality of ongoing care</li> </ul> <p>Regular revision allows the multi-agency support plan to be responsive to the child's changing needs. It also gives the plan the flexibility to incorporate additional information for the benefit of the child's management.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p> <p>Each agency does not carry out its own role in the further, more detailed assessments and information gathering necessary to complete the clinical, educational and social picture of the MASP</p>	<p>5</p> <p>Fully compliant with good to best practice as indicated by quality statement criteria</p> <p>Each agency carries out its own role in the further, more detailed assessments and information gathering necessary to complete the clinical, educational and social picture of the MASP. During this</p>				

<p><b>and</b> information is not fed back and shared with all other members of the multi-agency team.</p>	<p>process, information is fed back and shared with all other members of the multi-agency team.</p>				
<p><b>Evidence</b> Case Audit, Written documentation of information shared between the MASP team,</p>					

## **Standard 9 – Service Effectiveness and Improvement**

- 9a. Each service has processes in place to measure service quality and improvement.
- 9b. Each audiology service actively participates in the local Children’s Hearing Service Working Group (CHSWG). Where a CHSWG does not exist, the service is active in the setting up of such a group.
- 9c. Each service has processes in place to regularly consult with children, families and stakeholders.

### **Rating Scale**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
No elements of the quality statement criteria are met (or not evident)	Few elements of the quality statement criteria are met	Meets around half of the elements of the quality statement criteria	Almost fully meets the quality statement criteria	Fully compliant with good to best practice as indicated by quality statement criteria

**Please use the rating scale and examples given in the 1 and 5 columns as an indicator to help you score the self-assessment table below. Each table should only ever have 1 self-assessment score. When you perceive there to be more than 1 aspect of the table that you could give a score for, please use an average of each of the aspects.**

**Criteria 9a.1-9a.4. – Patient Satisfaction Surveys**

<b>Quality Statement rationale</b>					
Measurement of qualitative and quantitative data helps to inform ongoing service improvement.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
Children and/or families are not encouraged to complete any surveys to determine satisfaction with the service.	Children and/or families are encouraged to complete surveys on, at least, an annual basis to determine satisfaction with different elements of the service received. These include: - <ul style="list-style-type: none"> <li>• accessibility,</li> <li>• proximity,</li> <li>• information provision,</li> <li>• professionalism of staff,</li> </ul>				

<sup>18</sup> An example of a survey satisfaction questionnaire used by audiology services is listed in appendix 6

	<ul style="list-style-type: none"> <li>• care and treatment and</li> <li>• overall service received.</li> </ul> <p>Participation rates in the survey are checked, annually, to ensure an acceptable proportion of patients have participated and a representative sample of the local population is covered (including gender and ethnicity).</p> <p>Sufficient analysis and interpretation of findings from satisfaction surveys are carried out annually by audiology services.</p> <p>Action plans are implemented, when needed, to address areas of concern arising from surveys<sup>18</sup> and QRT data and performance.</p>			
<p><b>Evidence</b>  Copies of surveys and responses  Action plans</p>				

**Criteria 9b.1 – CHSWG Review Meetings**

<b>Quality Statement rationale</b> Close working with parents as well as across organisations will lead to improved services for deaf children and their families. Effective recruitment to CHSWGs will ensure appropriate representation for the child and family, and demonstrates a truly inclusive approach. CHSWGs can ensure that children's hearing services remain high on the agenda of those responsible for planning and delivering services at a strategic level. They can offer advice and guidance to ensure high quality services are available.					
<b>1</b> No elements of the quality statement criteria are met (or not evident)	<b>5</b> Fully compliant with good to best practice as indicated by quality statement criteria	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
The CHSWG does not meet regularly to review the multi-agency services for children and their families known to have, or considered to be at risk of having, a hearing impairment.	The CHSWG meets regularly to review the multi-agency services for children and their families known to have, or considered to be at risk of having, a hearing impairment.				
<b>Evidence</b> Written, documented minutes from CHSWG review meetings.					

**Criteria 9b.2 – CHSWG Support**

<p><b>Quality Statement rationale</b>            Close working with parents as well as across organisations will lead to improved services for deaf children and their families. Effective recruitment to CHSWGs will ensure appropriate representation for the child and family, and demonstrates a truly inclusive approach. CHSWGs can ensure that children’s hearing services remain high on the agenda of those responsible for planning and delivering services at a strategic level. They can offer advice and guidance to ensure high quality services are available.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>The CHSWG does not offer support to any agencies involved with hearing loss.</p>	<p>The CHSWG helps to develop and improve the services delivered to deaf children and their families through the processes of ongoing support to all agencies involved.</p>				
<p><b>Evidence</b>            Evidence of contact and correspondence between agencies as a result of CHSWG meetings.            Minutes/action log from CHSWG meetings..</p>					

**Criteria 9b.3 – CHSWG Monitoring**

<p><b>Quality Statement rationale</b>                      Close working with parents as well as across organisations will lead to improved services for deaf children and their families. Effective recruitment to CHSWGs will ensure appropriate representation for the child and family, and demonstrates a truly inclusive approach. CHSWGs can ensure that children’s hearing services remain high on the agenda of those responsible for planning and delivering services at a strategic level. They can offer advice and guidance to ensure high quality services are available.</p>					
1	5	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
<p>No elements of the quality statement criteria are met (or not evident)</p>	<p>Fully compliant with good to best practice as indicated by quality statement criteria</p>				
<p>CHSWG does not monitor the extent to which services meet the standards detailed in this document.</p>	<p>CHSWG monitors the extent to which services meet the standards detailed in this document.</p>				
<p><b>Evidence</b>                      Written documentation of CHSWG monitoring/reporting how well services meet these standards.                      Review of QRT scoring on CHSWG agendas.</p>					

**Criteria 9c.1 – Service Consultation with Children, Families and Stakeholders**

<b>Quality Statement rationale</b>					
Paediatric Audiology services that seek, consider and respond to the views of users will be more likely to meet their needs.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
The audiology service does not have any kind of framework in place to ensure regular consultation with children, families and stakeholders.	The audiology service has a framework in place to ensure regular consultation with children, families and stakeholders.				
<b>Evidence</b> Evidence of feedback questionnaires, Protocols on how to gather feedback, Documentation of consultation mechanisms. Audit					

**Criteria 9c.2 – Dissemination of Satisfaction and QRT Scores**

<b>Quality Statement rationale</b>					
Paediatric Audiology services that seek, consider and respond to the views of users will be more likely to meet their needs.					
<b>1</b>	<b>5</b>	Self assessment score based on evidence sources	QA visitor score and comments	Actions / comments	Good practice example
No elements of the quality statement criteria are met (or not evident)	Fully compliant with good to best practice as indicated by quality statement criteria				
Results of satisfaction surveys and service QRT scores are not publicly made available.	Results of satisfaction surveys and service QRT scores are made available and discussed with children and families on an annual basis.				
<b>Evidence</b>					
Results from service satisfaction/QRT scores physically available at the service. Results from service satisfaction/QRT scores published, disseminated by service. Audit of whether patients are made aware of results from satisfaction/QRT scores.					

## **APPENDIX 1: References and Evidence Base**

### **Introduction**

Public Health Institute of Scotland ( PHIS) Needs Assessment Report on NHS Audiology Services in Scotland 1993

Quality Improvement Scotland, [www.nhshealthquality.org](http://www.nhshealthquality.org)

### **Development of the Quality standards for Paediatric Audiology Services**

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### **Standard 1**

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## **Standard 2**

Transforming Services for Children with Hearing Difficulty and their Families (Department of Health, August 2008)

Modernising Childrens' Hearing Aid Services  
<http://www.psych-sci.manchester.ac.uk/mchas/>

NHS Newborn Hearing Screening Programme. Tympanometry in babies under 6 months : a recommended test protocol 2008 <http://hearing.screening.nhs.uk/getdata.php?id=135>

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Getting it right for every child, [www.scotland.gov.uk/gettingitright/publications](http://www.scotland.gov.uk/gettingitright/publications)

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Department for Children, Schools and Families (DCSF) and Department of Health (DH). A Transition Guide for all Services. Key Information for Professionals about the Transition Process for Disabled Young People. 2007

Early Years and Early Intervention: A joint Scottish Government and COSLA policy statement (2008) Scottish Government

## **Appendix 2 – Range of Audiological Assessments**

Staff must have the appropriate knowledge, practical skills, competencies and experience to perform and interpret the results of all the assessments they undertake.

It is expected that services should provide, or have arrangements in place to access the following assessments:

### Auditory Brainstem Response test (ABR)

- click, tone pip,
- air conduction / bone conduction
- cochlear microphonics
- conducted under sedation or anaesthetic if required

### Auditory Steady State Response

### Cortical evoked potentials

### Transient evoked oto-acoustic emissions

### Distortion products oto-acoustic emissions

### Tympanometry, including high frequency tympanometry

### Stapedial reflexes

### Visual reinforced audiometry

- soundfield
- inserts
- bone conduction

### Performance testing

### Play audiometry

### Toy tests, several modalities

### Speech testing, using several modalities

### Pure tone audiometry

- air conduction
- bone conduction
- with masking as required

### Tertiary centres will also provide

### Specific tests for further investigation of auditory neuropathy / dyssynchrony

### Specific tests for further investigation into auditory processing difficulties

### Assessments for the “difficult to test child”

### Paediatric vestibular assessments

### Paediatric tinnitus assessment

## **Appendix 3 – Examples of Good Practice Guidance, Standards and Protocols**

### **Modernising Children’s Hearing Aid Services**

**(<http://www.psych-sci.manchester.ac.uk/mchas/guidelines/>)**

1. Guidelines for the taking of impressions and provision of ear moulds within a children’s hearing aid service
2. Guidelines for professional links between audiology and education services within a children’s hearing aid service
3. Guidelines for testing digital signal processing hearing aids”in the field” within an integrated children’s hearing aid service
4. Guidelines for fitting, verification and evaluation of digital signal processing hearing aids within a children’s hearing aid service
5. Transition from paediatric to adult audiology services: Guidelines for professionals working with deaf children and young people
6. Procedures for setting up of fm radio systems for use with hearing aids

### **British Society of Audiology Recommended Procedures (<http://www.thebsa.org.uk/>)**

1. Pure tone air and bone conduction threshold audiometry with and without masking and determination of uncomfortable loudness levels
2. Tympanometry
3. Taking an aural impression

### **British Society of Audiology and British Academy of Audiology**

**(<http://www.thebsa.org.uk/docs/RecPro/REM.pdf>)**

1. Guidance on the use of real ear measurements to verify the fitting of digital signal processing hearing aids

### **NHS Newborn Hearing Screening Programme**

**(<http://hearing.screening.nhs.uk/standards>)**

1. Medical management of infants with significant congenital hearing loss identified through the national newborn hearing screening programme – Best practice guidelines
2. Audiology protocols for children referred for audiology assessment from the newborn hearing screen
  - a. Guidelines for the early audiological management and assessment of babies referred from the newborn hearing screen
  - b. ABR bone conduction testing in babies
  - c. ABR tone pip testing in babies
  - d. Air conduction ABR testing in babies using clicks
  - e. TEOAE testing in babies
  - f. Tympanometry in babies under 6 months
  - g. Behavioural observation audiometry testing in babies
  - h. Distraction diagnostic test protocol
  - i. Visual reinforcement audiometry testing in infants
3. Audiological Calibration
  - a. SLM target values for pure tones and ABR stimuli
  - b. Routine (stage A) checks for ABR systems
  - c. ABR calibration specification
4. Auditory Neuropathy/Auditory Dys-synchrony policy documents
5. Guidelines for surveillance following the newborn hearing screen

**National Deaf Children's Society**

**(<http://ndcs.org.uk/>)**

1. Quality Standards in Paediatric Audiology – Guidelines for the early identification and audiological management of children with hearing loss
2. Quality Standards in the Early years: Guidelines on working with deaf children under two and their families
3. Quality Standards and Good practice Guidelines: Transition from Child to Adult Services

## **Appendix 4 – Audiology Individual Management Plan (AIMP)**

### **AN EXPLANATION OF THE AUDIOLOGY INDIVIDUAL MANAGEMENT PLAN**

#### **What is an Audiology Individual Management Plan?**

Individual Management Plans are a set of **agreed** needs and **actions** that are developed with the child and family.

The initial plan may simply note the date and time of appointment and any special requirements, and actions taken if appropriate, that have been identified from the referral information (e.g. arranging an interpreter).

At the first appointment a history, appropriate examination and audiological assessment will be undertaken. Information and results from these are documented in a format agreed locally, and will inform ongoing development of the management plan.

As for some children the assessment period may be lengthy, this is included within the Paediatric AIMP.

#### **Who has an Audiology Individual Management Plan?**

All children referred to the service will have an AIMP.

#### **Who develops the Audiology Individual Management Plan?**

The audiologist, child and family will develop the AIMP together using the information gathered during the assessment and following explanation and discussion about possible care options. When children are being seen within a combined clinic setting, for example with ENT or Paediatric colleagues, then information from the medical clinician must also be considered when developing the plan.

A list of agreed needs and actions will be recorded, a copy of which should be given to the child and family. The format of this information may vary depending on local arrangements. It may be in the form of a letter or completed template sent to the child and family, or a printout from the patient management system for example.

#### **What do Audiology Individual Management Plans look like?**

AIMPs will vary greatly depending on the individual child. They will record assessment information, needs and planned actions. When plans are updated the outcomes of actions undertaken will also be recorded.

The AIMP for a child referred to a Community Audiology clinic for a hearing assessment due to speech and language delay who is found to have normal hearing may be very simple. An AIMP for a pre-term baby referred from the hearing screen with additional needs and subsequently found to have a bilateral sensorineural deafness will be more complicated.

Initial AIMPs will be composed mainly of agreed needs and actions. These will be added to through time and the AIMP will also include completed actions and outcomes, detailing a summary of the effect of actions take.

### **What is meant by ‘agreed needs’?**

Agreed needs are whatever the audiologist and the family have agreed needs to be addressed or managed to ensure that the child has the best possible chance of fulfilling his or her potential. These initial needs will be based on the history, examination, assessment and full discussion with the parent.

### **What is meant by ‘actions’?**

Actions are what the audiologist is going to do, or ask someone else to do, to actually attempt to meet the identified needs. Actions will be specific and directive, probably written in the future tense and attached or relevant to one or more of the needs.

### **What is meant by ‘completed actions’?**

These are actions that the audiologist (or other audiologists / agencies) actually do at each stage (as opposed to plan to do). They will be directly linked to actions and probably written in the past tense.

### **What is meant by ‘outcomes’?**

These will be a summary of the effects of actions and will enable the audiologist to evaluate whether or not the actions have met the needs. Ideally these will be supported by more formal outcome measures.

Outcomes will be linked to needs and may often reference specific actions, They will probably be written in the present tense.

### **When is a management plan completed?**

The management plan is complete when there are no outstanding actions and when outcomes indicate that needs have been met.

Consideration needs to be given as to how you include outcomes or effects of referral to external agencies that may not have been delivered at final follow up appointment.

For children with permanent childhood hearing impairment Paediatric AIMPs will be required until transition to adult services. At that time the adult services will take over the plan.

Information in the Paediatric AIMP will be used to inform the Multi-Agency Support Plan, where one exists.

Audiology Individual Management Plans are not intended to create more work for audiology, but to encourage closer partnership working with children and their families and to provide a means of recording, reviewing, evaluating and updating the agreed needs and actions.

Example 1: 4 year old child with speech and language delay

Referral: Referred by Speech and Language due to speech delay. Wishes to exclude any underlying hearing problem.

History: Family have no concerns about hearing.  
Born at term, good weight, no health problems as a baby or since.  
No concerns about general development other than speech.  
No family history of hearing problems.

Assessment: Tympanic membranes normal  
PTA – responses at normal levels right and left (Audiogram on Auditbase)  
Tympanograms normal  
Automated Kendal Toy Test – 100% at 40dB (minimum presentation)  
NORMAL HEARING

Agreed Needs and Actions: Notify results to referrer, GP and Community Child Health.  
Copy to family  
No further follow up required.  
Discharge.

Example 2: 3 month old baby referred from the hearing screen

Referral: Referred by hearing screening. Refer response on otoacoustic emissions and automated auditory brainstem response bilaterally.

History: Family unsure about hearing.  
Born at 28 weeks, ventilated for 3 weeks, jaundice requiring phototherapy.  
Discharged home at 8 weeks of age. Reported to be making good general progress.

Assessment: Tympanic membranes normal but not clearly visualised  
High frequency tympanograms, good peak  
Transient evoked otoacoustic emissions absent both ears  
Click evoked auditory brainstem response – repeatable wave forms at 90dBnHL right and left ear  
Tone pip ABR, Repeatable responses at 55dBnHL at 500Hz, 70dBnHL at 2000Hz and 95dBnHL at 4000Hz in both ears. Responses repeated on 2 separate occasions 1 week apart.  
Results explained to family, (paediatrician also present).

Agreed Needs:

- Information about hearing loss
- Support
- Fitting of hearing aids

Agreed Actions:

- Family to be given UNHS information leaflet and NDCS Understanding booklet
- Education Services and Health Visitor to be notified of outcome of assessment by phone
- Referral letters to be sent to education, speech and language therapy and social work for the deaf
- Family to be given information about NDCS
- Paediatrician to arrange urgent home visit.

Completed  
Actions

- Impressions to be taken for ear moulds
- Appontment to be given for hearing aid issue.
- Family given NDCS information booklets and contact telephone numbers and emails for the paediatric audiology team
- Educational Audiologist and Health Visitor notified by phone
- Referral letters sent to
  - Education
  - S&LT
  - Social Work for the deaf
  - Local branch of NDCS
- Home visit arranged for .....
- Impressions for ear moulds taken
- Appointment given for hearing aid issue on .....

## **Appendix 5 – Examples of Outcome Measures and Resources for Evaluating Children’s Hearing Aids**

### **1. Speech Test Resources**

- Ling Speech Sounds ([http://www.bionicear.com/UserFiles/File/Ling\\_Six\\_Sound\\_Check-6.pdf](http://www.bionicear.com/UserFiles/File/Ling_Six_Sound_Check-6.pdf))
- McCormick Toy Test
- Parrot (Recorded versions of the McCormick toy test, including English as an additional language (EAL) toytest, Manchester picture test and AB word lists (<http://www.soundbytesolutions.co.uk/products.htm>))
- Phoenix - Automated McCormick toy test with algorithm for establishing thresholds for speech in quiet and speech in noise
- Consonant confusion task (<http://www.chears.co.uk/downloads/sptestinfo.pdf>)
- Auditory Performance test (<http://www.chears.co.uk/downloads/sptestinfo.pdf>)
- AB word lists (<http://www.ihr.mrc.ac.uk/products/index.php?products=15>)
- BKB Sentence lists(<http://www.ihr.mrc.ac.uk/products/index.php?products=15>)
- FAAF test (<http://www.ihr.mrc.ac.uk/products/index.php?products=15>)

### **2. Questionnaires**

- LIFE - to help evaluate a child’s hearing aids in the classroom
- Listening Situations Questionnaire - developed in the UK to provide a means to evaluate a child’s benefit from hearing aids in the real world (<http://www.psych-sci.manchester.ac.uk/mchas/eval/quest/LSQ.pdf>)
- PEACH and TEACH – The NAL website has additional information on these tools ([http://www.nal.gov.au/nal\\_products%20front%20page.htm](http://www.nal.gov.au/nal_products%20front%20page.htm)) PEACH booklet, questionnaire and score sheet can be accessed via <http://www.psych-sci.manchester.ac.uk/mchas/eval/quest/>

## Appendix 6 – Children’s Hearing Services Working Groups

### What are Children’s Hearing Services Working Groups (CHSWG’s)?

(from <http://hearing.screening.nhs.uk>)

- A CHSWG is a multi-disciplinary group, including service users, which takes the lead in integrated service delivery for deaf children and their families.
- The main focus of the group is both to monitor and to develop and improve the services delivered to deaf children and their parents and other family members through the processes of ongoing support.
- A CHSWG should operate on both strategic and practical levels.
- The group should be represented by all organisations that are involved in the services delivered to children and their families, and should include Children’s Services (with health, education and social service input), appropriate Voluntary Sector representation and parents and carers who are service-users.
- The group should be formally organised with a recognised chair. All members of the group, their views and opinions, should be equally respected by all.
- The CHSWG is a formal group which:-
  - functions properly and in harmony with other groups to succeed in its goals and objectives
  - ensures that each member of the group conforms to shared values, attitudes and norms
  - expects its members to be fully committed to the aims of the group
  - is allowed to make decisions on behalf of the services represented; and direct the strategic developments of the services offered to deaf children
- The group should work as a team, all members should have mutual respect for individual roles and the contribution each can make whether that is from professional or user perspectives.
- **CHSWG’s need to continue to plan and be clear in their purpose in order to meet the changing expectations from national initiatives and work closely with service providers to continue to deliver high quality children’s hearing services.**
- The underlying principle of CHSWG’s is that working closer with parents as well as across organisations will lead to improved services for deaf children and their families. Effective recruitment of parents to CHSWG’s will ensure appropriate representation for the child and family, and demonstrates a truly inclusive approach.
- A key role of the group is to ensure that children’s hearing services remain high on the agenda of those responsible for planning and delivering services at a strategic level. It should offer advice, guidance and, where necessary, pressure, to ensure high quality services are available.

### **What a CHSWG is not:**

- A part of other services (e.g. adult audiology, paediatrics, ENT, disability services). The group should aim to maintain a separate identity to improve the profile of Children's Hearing Services and to promote the requirements of the service as well as any successes to all of the relevant stakeholders.
- A 'talking shop'. By being clear about the aims and objectives of the group and by ensuring the best representation of local services the CHSWG should be a forum where services work closely together to continually monitor and improve services offered to deaf children and their families.
- A group that can operate in isolation from service providers, nor can it be managed as a group with no real purpose and no accountability. Therefore a CHSWG needs to have the authority to act with the full knowledge and support from all service providers, at a practitioner, managerial and strategic level.
- A group where one person, irrespective of who they are representing, can use the group for their own or their services' purposes alone. Nor should the group be wholly dominated by any one (or a small number of members) to such an extent where other group members feel they are not included in the group's direction or are unable to have an input to any decisions made. The aim of the group is to address all pertinent issues in a collaborative manner.

Further more detailed information about Children's Hearing Services Working Groups is available at <http://hearing.screening.nhs.uk/cms.php?folder=1955>

**Appendix 7 – Example of a Multi-Agency Support Plan**

**INDIVIDUAL MULTI-AGENCY  
SUPPORT PLAN**

Date of Plan: .....
Present:

**Name:** **D.O.B.**  
**Address:**

**Telephone Number:**

**Parent/Guardian:**

**Professionals Involved - Contact Details**

- Key Worker

Teacher of the Deaf/Educational Audiologist	Speech and Language Therapist
Health Visitor	General Practitioner
Audiologist	Child Health Doctor
Social Worker	Consultant
Placement	Educational Psychologist

**AUDIOLOGICAL INFORMATION (Level of detail to be amended as agreed by the service and needs of the individual child, family and involved professionals)**

Date of confirmation of deafness:

Date of fitting of hearing aids:

Comments on use of hearing aid:

**Date of most recent audiological assessment:**

Type of aids:

Settings:

**HEARING LEVELS**

**Unaided responses**

**Air Conduction - Test Used:**

Hertz	250	500	1000	2000	4000	8000
Right						
Left						

**Bone Conduction**

Hertz		500	1000	2000	4000
Right					
Left					

**Tympanometry:**

**ADDITIONAL INFORMATION:**

**AUDIOLOGY REVIEW ARRANGEMENTS:**

**MEDICAL SUMMARY**

**EDUCATION INFORMATION**

**SPEECH AND LANGUAGE THERAPY INFORMATION**

**ADDITIONAL INFORMATION / POINTS FOR DISCUSSION**

**ASSESSMENTS and SUPPORTS REQUIRED**

<b>Agency</b>	<b>Assessment / Input Required</b>	<b>Ongoing / Support / Review</b>
<b>Audiology</b>		
<b>Hearing Impaired Education Services</b>		
<b>Speech and Language Therapy</b>		
<b>Medical</b>		
<b>Social Services</b>		
<b>Educational Psychology</b>		
<b>Technology</b>		
<b>Voluntary Agencies</b>		

## ACTION PLAN

Action Item	Person Responsible	Date to be completed by
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

**Review Date:**

## **Appendix 8 – Patient Satisfaction Questionnaire**

### **Paediatric Audiology Service Satisfaction Questionnaire**

Please complete the questionnaire below to help us improve Audiology services. Indicate your level of satisfaction for each item with a tick. Please base your responses on all of the appointments you have received over the last few months, and on your and your child's experience.

**Overall, how satisfied are you with:**

	<b>Very satisfied</b>	<b>Satisfied Somewhat</b>	<b>Dissatisfied</b>	<b>Very dissatisfied</b>
<b>Accessibility</b>				
Your experience communicating with the Audiology Service?				
The time you waited for your child's appointments?				
The time you waited at your appointments?				
The location of your appointments? (How accessible from your home)				
The hearing aid repair and battery replacement service?				
<b>Surroundings</b>				
The signage directing you to the Audiology department?				
Your welcome at reception?				
The child-friendliness of the waiting room?				
The child-friendliness of the clinic rooms?				
The comfort of the clinic rooms?				
<b>Information</b>				
The information you received with the appointment letters?				
The written information you received at the appointments?				
The information in the waiting room?				
<b>Staff</b>				
The professionalism of the reception staff?				
The professionalism of the audiologist?				
<b>Care &amp; Treatment</b>				
The opportunities to discuss any problems or difficulties?				
Any explanations you were given?				

The assessment and management of your child's hearing needs?				
The appropriate involvement of other services?				
<b>Overall</b>				
The audiology service you received?				
Please state below one improvement you would make to the Audiology Service or please add any comments?				

**Section below for completion by Audiology staff:**

Clinic \_\_\_\_\_

Date \_\_\_\_\_

Type of Appointment  
\_\_\_\_\_

Comments



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