

**BRITISH ASSOCIATION OF AUDIOVESTIBULAR  
PHYSICIANS**

# **CLINICAL STANDARDS**

**SETTING STANDARDS  
TO IMPROVE CARE FOR PATIENTS  
WITH HEARING AND BALANCE DISORDERS**

**Published: June 2011**

**To be reviewed: August 2013**

**Produced by the Clinical Standards Group  
British Association of Audiological Physicians**

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## ABBREVIATIONS USED IN THIS REPORT

ABR	Auditory Brainstem Evoked Response
ANSD	Auditory Neuropathy Spectrum Disorder
APD	Auditory Processing Disorder
AVM	Audiovestibular Medicine (previously Audiological Medicine)
AVP	Audiovestibular Physician
BAAP	British Association of Audiovestibular Physicians
BAPA	British Association of Paediatricians in Audiology
cERA	Cortical Evoked Response
CHSWG	Children's Hearing Services Working Group
CCT	Certificate of Completion of Training
DH	Department of Health
E2L	English as a second Language
ECG	Electrocardiogram
EEG	Electro Encephalogram
ENG	Electronystagmogram
ENT	Ear Nose and Throat (Oto Rhino Laryngology)
GMC	General Medical Council
GP	General Practitioner
NDCS	National Deaf Children's Society
NHS	National Health Service
NHSP	Newborn Hearing Screening Programme
NICE	National Institute for Clinical Excellence
NSF	National Service Framework
OAE	Oto Acoustic Emission
OME	Otitis Media with Effusion
OVEMP	Ocular Vestibular Evoked Myogenic Response
PCHI	Permanent congenital hearing impairment
PMETB	Postgraduate Medical Education and Training Board
PTA	Pure Tone Audiogram
QALY	Quality Adjusted Life Year
RCP	Royal College of Physicians
RCPCH	Royal College of Paediatrics & Child Health
RNID	Royal National Institute of the Deaf
SAC	Specialist Advisory Committee in Audiovestibular Medicine
UK	United Kingdom
VNG	Video Nystagmography
VEMP	Vestibular Evoked Myogenic Response
VRA	Visual Reinforcement Audiometry

## **INTRODUCTION**

Audiovestibular Medicine (AVM) is the medical specialty dealing with the investigation, diagnosis and medical management of children and adults with disorders of hearing and balance, and, in some centres, of children with developmental disorders of speech. This document describes the clinical standards that underpin work in the field of audiovestibular medicine and are applicable to physicians practicing in the specialty. The clinical guidelines that are currently available are summarised, including those published by various national bodies, which are relevant to areas of practice in audiovestibular medicine. The clinical standards are derived from these guidelines, and also from standards set by the General Medical Council (GMC), the Royal College of Physicians (RCP) and the Royal College of Paediatrics and Child Health (RCPCH).

It is expected that the audiovestibular physician (AVP) is registered as a specialist in Audiological Medicine on the Specialist Register.

### **CLINICAL PRACTICE**

Audiovestibular physicians follow an holistic approach using evidence based practice and work within multidisciplinary and multiagency teams in order to improve the quality of patients' lives. The aim is to maximise the potential of the individual and their ability to contribute to the wider society and to prevent further morbidity/mortality by identifying any underlying disorder; thus providing a service that is good value for money aimed at improving Quality Adjusted Life Years (QALYs). AVPs aim to improve the health of individuals by focusing on early identification including primary, secondary and tertiary prevention, thus minimising disability and preventing handicap.

AVPs work as part of multidisciplinary teams which can include audiologists, hearing therapists, speech and language therapists, clinical psychologists, teachers of the deaf, hearing therapists, physiotherapists and others. The wider multidisciplinary field includes otolaryngologists, paediatricians, neurologists, radiologists, geriatricians, ophthalmologists and geneticists who often share patient care or advise on specific problems. Multiagency work with teams in the community, particularly those around the child or learning disabled adult, are important in implementing effective medical practice in the field. Some audiovestibular physicians have a predominantly paediatric practice, others mainly an adult practice while some manage both adult and paediatric patients.

### **STANDARD SETTING AND MAINTENANCE**

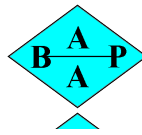
The British Association of Audiovestibular Physicians (BAAP) is active in developing comprehensive evidence-based guidelines which are endorsed by members throughout the UK and by other professional bodies. A number of these national guidelines have been completed and published and form the basis of the clinical standards. Work on developing other guidelines and reviewing existing ones is a continuous process which is coordinated through the audit committee of BAAP. Regular national audits of members' practice assesses adherence to these guidelines and the presentation of findings at regular meetings facilitates development of practice nationally.

In order to provide evidence of maintenance of clinical standards and good practice, every practicing consultant in AVM is expected to be engaged in a programme of professional development that includes local and national audit, measuring outcomes, keeping up to date, critical review and reflection of their own practice leading to a process of continuing improvement in the quality of service. Enrolment in the programme of continuous professional development regulated by the Royal College of Physicians (<http://www.rcplondon.ac.uk>) is strongly recommended. Further, every consultant in AVM is expected to have an annual appraisal.

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The following sections detail the generic standards of practice expected of a consultant in audiovestibular medicine practicing in the UK. These are grouped into 2 main areas:

1. Generic standards which apply to all consultant physicians
  - a. Standards to be maintained when practicing as a doctor
  - b. Standards to be maintained as a consultant practicing in a medical field
2. Generic standards which apply specifically to consultants in audiovestibular medicine
  - a. Generic Core Standard: Working with Children
    - i. Subject Specific Clinical Standards - Children
  - b. Generic Core Standard: Working with Adults
    - i. Subject Specific Clinical Standards - Adults



## **GENERIC STANDARDS**

The following is a list of documents that show generic standards that are expected to be followed, where applicable, by a practicing consultant in audiovestibular medicine in the UK. These standards cover the qualities, principles and generic competences required to practice as a medical consultant in the UK.

### Standards published by the General Medical Council

1. Good Medical Practice<sup>1</sup>
2. Consent: patients and doctors making decisions together<sup>2</sup>
3. Confidentiality<sup>3</sup>

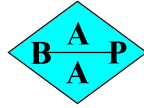
In addition the GMC has published standards for those doctors who are involved in service management "Management for Doctors"<sup>4</sup> and those engaged in research<sup>5</sup>

### Standards and Guidance published by the Royal College of Physicians

1. Understanding doctors: Harnessing professionalism<sup>6</sup>
2. Doctors in Society: Report of a Working Party<sup>7</sup>
3. Consultant physicians working with patients<sup>8</sup>
4. Hearing and balance disorders; Achieving excellence in diagnosis and management<sup>9</sup>

### Standards, Guidance or Information published by the Royal College of Paediatrics & Child Health

1. Advocating for Children<sup>10</sup>
2. A Charter for Paediatricians<sup>11</sup>
3. Child Protection Reader<sup>12</sup>
4. Good Medical Practice in Paediatrics and Child Health: Duties and Responsibilities of Paediatricians<sup>13</sup>
5. Responsibilities of Doctors in Child Protection Cases with regard to Confidentiality<sup>14</sup>
6. Safeguarding Children and Young People: Roles and Competences for Health Care Staff<sup>15</sup>



## CLINICAL STANDARDS

It is expected that those practicing as consultants in audiovestibular medicine will have satisfactorily completed a formal specialist training programme in the UK, or an equivalent training programme abroad, leading to registration as a specialist in Audiological Medicine on the Specialist Register.

### Standards Set by External Bodies

All consultants practising in audiovestibular medicine must be familiar with standards, guidelines and protocols published by various national bodies where these are applicable to their own practice. The following is a non-exclusive list of such bodies:

1. National Institute of Clinical Excellence (NICE) ([www.nice.org.uk](http://www.nice.org.uk))
2. NHS Newborn Hearing Screening Programme (<http://hearing.screening.nhs.uk>)
3. National Deaf Children's Society ([www.ndcs.org.uk](http://www.ndcs.org.uk))
4. Royal National Institute for the Deaf ([www.rnid.org.uk](http://www.rnid.org.uk))
5. British Association of Audiovestibular Physicians ([www.baap.org.uk](http://www.baap.org.uk))
6. British Society of Audiology ([www.thebsa.org.uk](http://www.thebsa.org.uk))
7. British Academy of Audiology ([www.baaudiology.org](http://www.baaudiology.org)).

### General Principles

#### The Physician

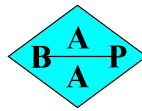
- The physician must have adequate competences in all areas of their clinical practice.
- Some areas of supra-specialist practice require the acquisition of additional competences in areas such as cochlear implant, bone anchored hearing aids, auditory neuropathy spectrum disorder and auditory processing disorder.

#### The Service:

- The AVP works as a member of a multidisciplinary team comprising audiologists, ENT Surgeons, paediatricians, speech and language therapists, psychologists, teachers of the deaf, hearing therapist etc. Time for multidisciplinary team meetings must be incorporated into job plans.
- The number of patients seen in an audiovestibular medicine clinic is dependent on the nature and complexity of the medical problem. Adequate time must be allowed for patient assessment and for the consequent discussions and paperwork.
- Referral criteria for each audiovestibular service should be easily available and set by the local service based on national guidelines.
- Each service must have agreed care pathways with clear protocols detailing when a patient should see a physician. These should be accessible.
- Service quality should be evaluated by the use of validated outcome measures including patient satisfaction questionnaires

- All patients, if they wish, should receive copies of their clinical letters in a timely fashion.
- All facilities should be appropriate to the needs of the service with regard to sound treatment and patient access. All equipment should be regularly calibrated and fit for purpose. The Audiology Department should be accredited via the Quality Enhancement Tool (QET),





## GENERIC CORE STANDARD: WORKING WITH CHILDREN

### Key Standard

***All children should be seen in a child friendly environment by the relevant members of a team of competent and trained professionals who respect the views of the parent/carer\* but put the child's needs above all other.***

### Further Standards

- Those professionals should be knowledgeable, trained and competent in examining/assessing infants, children and young people of all ages to determine the nature of their disease or problem in the light of their well-being and development.
- Investigations must be relevant and interpreted accurately
- The doctor must be prepared and able to listen to the child as well as the parents/carers, recognising that the needs of the parent/carer and child may be different and making the welfare of the child their first concern whilst respecting the views of their parents and maintaining confidentiality.
- The doctor must be able to communicate honestly and effectively with the child and family, sharing information sensitively, to enable them to make informed choices so that consent is underpinned by knowledge in both child and parents.
- The doctor must maintain skills in the basic care of children, including life support and child protection.
- Those practitioners prescribing for children should be familiar with the benefits and potential harms of drugs in the different age groups.
- The doctor must be aware of mental health issues in children and young people and be able to identify the correct pathway for further referral in a timely manner.
- The doctor must recognise the limitations of their knowledge. The doctor must continuously improve knowledge and outcomes, integrating research evidence into practice and participating in local, national and international audit, including patient reported outcome measures. This is particularly relevant to single-handed practitioners where the lack of a critical mass of patients may dictate further referral.
- A multiagency approach ensures integration of the child's needs within the local community.
- The care of infants, children and young people must be complemented by a pathway for the transition of children and young people into adult services.

\* Note that parent(s)/carer(s), family and parent(s) are interchangeable throughout this document

- The doctor must be able to work with managers to provide an effective and timely clinical service for children

### **Patient Focus**

- Relevant professional interpreters must be available for both child and family, recognising that their needs may be different.
- Parents and children over 16 years should receive copies of their clinical letters and transparent, informative and timely appointment letters
- Information about specialist medical and third sector resources must be made available to the child and family.
- Information exchange with other agencies (including education, social care and third sector), where agreed with the child and family, will ensure integration of the child's needs within the community.
- Children must be seen in an environment designed and maintained for them; this extends from the waiting area to the clinic and test rooms. All staff should be paediatric trained. Equipment must be relevant to children and accessible across the age range with provision for those with additional needs (e.g. motor limitations, visual impairment)

### **References**

- National service framework for children, young people and maternity services. Department of Health, 2004.
- 0-18 years: guidance for all doctors. General Medical Council, 2007.
- A framework for competencies for basic specialist training in paediatrics. RCPCH 2004
- A framework of competencies for core higher specialist training in paediatrics RCPCH 2005
- Harrington R. Assessment of child and adolescent psychiatric disorders. *Medicine*, 2004, 11-13.
- Management for doctors. General Medical Council, 2006
- British National Formulary for Children, BMJ Publishing group, RPS Publishing, RCPCH Publications, 2008.
- Tackling the Challenge: promoting race equality in the NHS in England. Healthcare Commission, March 2009.
- Religion or belief: a practical guide for the NHS. Department of Health 2009.
- Creating a disability equality scheme: a practical guide for the NHS. DH 2006
- Sexual orientation: a practical guide for the NHS. DH February 2009-05-10 Human rights in healthcare – a framework for local action. DH, 2008.
- The handbook of the NHS Constitution for England. DH 2009
- Specialty training curriculum for Audiological Medicine 2010



## **GENERIC CORE STANDARD: WORKING WITH ADULTS**

### **Key Standard**

***All adults with audiovestibular problems should be seen in a patient friendly environment by the relevant members of a team of appropriately trained and competent professionals.***

### **Further Standards**

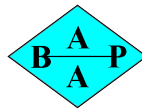
- The physician should be knowledgeable, trained and competent in examining/assessing patients in order to determine the nature of the underlying disease process or problem.
- Professionals should be competent in requesting relevant investigations and must be able to interpret the results accurately.
- The physician should listen to patients concerns, recognising their needs and maintain confidentiality.
- The physician must maintain skills in the care of young adults transferred to the adult services and adults with learning difficulties.
- The physician must recognise their limitations and continuously endeavour to improve knowledge and skills integrating research evidence into practice, participating in local, national and international audit, including patient reported outcome measures. This is particularly relevant to single-handed practitioners where the lack of a critical mass of patients may dictate further referral.
- The physician must be able to communicate honestly and effectively with the patient, sharing information sensitively, to enable them to make informed choices so that consent is underpinned by knowledge.
- The practitioner is expected to have adequate knowledge about prescribing medications and should be familiar with the benefits and potential harmful effects of drugs.
- The physician must be aware of mental health issues and be able to identify the correct pathway for further referral in a timely manner.
- The professional should be aware of other agencies relevant to the patient's care and willing to involve them at the right time to ensure integration within the local community.
- The physician must be able to work with managers to provide an effective and timely clinical service.

**Patient Focus**

- Relevant professional interpreters must be available for the consultation, recognising the different needs of various patient groups.
- Patients should receive informative and timely appointment letters and copies of their clinical letters.
- Information about specialist medical and third sector resources must be made available.
- Information exchange with other agencies (including education, social care and third sector), where agreed with the child and family, will ensure integration of the child's needs within the community.

**References:**

- General Medical Council Good Clinical Practice Guidelines
- Management for doctors. General Medical Council, 2006
- Specialty training curriculum for Audiological Medicine 2010



## **KEY STANDARD 1: MANAGEMENT OF CHILDREN WITH SUSPECTED OR ACTUAL HEARING LOSS**

### **Key standard**

*Children with suspected or actual hearing loss should be seen by professionals trained to recognise the different types of hearing impairment and how they may present in children of all ages.*

*Members of the professional team must be competent at distinguishing these through relevant history, comprehensive clinical examination and investigations so that audiovestibular tests are interpreted in the light of the clinical findings and management and/or treatment is instigated promptly.*

### **Further standards**

- The doctor must be able to recognise pathologies, genetic and developmental conditions and environmental and therapeutic insults associated with hearing loss and be able to recognise deafness in a child with complex needs. Clinical practice must be integrated with other relevant paediatric care pathways
- The doctor must take an holistic approach to management and treatment following current best practice guidelines, maintaining knowledge of relevant tests and investigations (and their limitations) and the changing pattern of disease and need as the child grows older.
- There must be consistent and up to date knowledge of referral pathways and timing for other specialist opinion (e.g. otitis media with effusion (OME), implantable devices, other pathologies, additional needs and genetics)
- There must be access to appropriate aetiological investigations including radiological, audiological and electrophysiological as well as routine hospital laboratories for blood and urine testing, ECG and EEG.
- The doctor must be able to recognise vestibular impairment, tinnitus, hyperacusis, auditory processing disorder (APD) and auditory neuropathy spectrum disorder (ANSO) in a child presenting with hearing difficulties and be able to distinguish non-organic hearing loss and determine its cause.
- The doctor must have a knowledge of antenatal events/conditions which may be associated with hearing loss
- The doctor must be aware of and recognise the wide variety of mental health issues in deaf children and their families, both as part of the diagnosis and as a result of the hearing loss. They must be able to direct the child and family to information and care.

- Care is outpatient based; a minimum of 45 minutes should be allocated for each new patient and at least 30 minutes for a subsequent visit, exclusive of the time required for testing or assessment by other members of the multidisciplinary team. This may be modified by the individual clinician familiar with the patient. Additional time is likely to be needed if there is an English as a second language (E2L) and/or a British Sign Language interpreter.
- The doctor functions as a member (or the leader) of a multidisciplinary team which includes the parents and child so must base practice on carefully integrated and agreed local medical and team pathways, linked to national and international evidence of best practice incorporating clinical networks, where relevant.
- Links should exist between the physician and paediatric medical specialists and their teams such as neurologists, ophthalmologists, rheumatologists, developmental paediatricians and geneticists in order to ensure optimal assessment and advice for the child and its family.
- The child's progress in hearing, well-being, learning, listening and language must be monitored so that any change is addressed through accessible and comprehensive review with explanation to the child and family

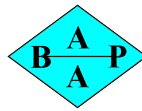
#### **Patient focus**

- Wherever possible, any multidisciplinary appointments, assessments or investigations should be carried out on the same day, allowing for the wellbeing of the child.
- Deaf awareness underpins the clinical service, including a knowledge of and respect for those who use Sign communication.
- There must be knowledge of and respect for cultural beliefs and attitudes to deafness through both ethnicity and religious belief, with particular reference to the local community.
- Options for communication, self-help, education and support will enable families to make informed choices.
- Information should be given in a timely and sensitive manner, preferably with another adult present (breaking bad news, sharing information)

#### **References**

- Hearing and balance disorders: achieving excellence in diagnosis and management, RCP 2008.
- Surgical management of children with otitis media with effusion (OME). National Institute for Health and Clinical Excellence (NICE), 2008
- Cochlear implants for adults and children with severe to profound deafness. NICE, 2009.

- Aetiological investigation into severe to profound permanent hearing loss in children BAAP/BAPA 2008
- Guidelines for investigating infants with congenital hearing loss identified through the newborn hearing screening. BAAP/BAPA, 2008
- Aetiological investigation into mild to moderate hearing loss in children (BAAP/BAPA) 2009
- Aetiological investigation into unilateral hearing loss in children (BAAP/BAPA) 2009
- Guidelines for the investigation and management of progressive hearing loss in children (BAAP/BAPA, in preparation)
- Role of the doctor in the NHSP team. BAAP/BAPA 2008
- Quality standards in the early years: guidelines on working with deaf children under 2 years old and their families (separate publications for England, Wales, Northern Ireland and Scotland). NDCS 2003, modified 2007
  - Genetics and deafness. NDCS modified 2008
  - NDCS policy on informed choice, 2007
  - Quality standards and good practice guidelines: transition from child to adult services. NDCS 2005, modified 2007
  - Quality standards in bone anchored hearing aids for children and young people NDCS, 2003, modified 2005
  - Quality standards: Cochlear implants for children and young people NDCS. 2005, modified 2007
  - Vision care for deaf children and young people NDCS, 2009



## KEY STANDARD 2: MANAGEMENT OF CHILDREN WITH BALANCE PROBLEMS

### Key Standard

*Children with suspected balance problems should be seen within a dedicated child-friendly environment by a team of trained professionals competent in the assessment and management of children with balance disorders.*

### Further Standards

- There must be agreed referral guidelines and care pathways ensuring expedient and appropriate care for all children. Care pathways should include primary care as well as specialist and supra-specialist care input.
- Care should be medically-directed. The complexity of balance disorders in children necessitates medical assessment in all cases.
- The child should be seen by a physician trained to identify the various causes of balance problems in children. Competence includes the ability to differentiate between vestibular, musculo-skeletal, cardiological, neurological, psychological and developmental causes of balance disorder and dizziness.
- The doctor must take an holistic approach to management following current best practice guidelines. Maintenance of knowledge of developments in vestibular medicine (both adult and paediatric) is important.
- The physician must be competent in history taking and in examination of the child with a balance disorder. Examination includes general developmental assessment, ENT, neurological, neuro-otological and eye movement examination.
- The child should be assessed in child friendly facilities. Access to full vestibular assessment must be available – to include ENG/VNG assessment of eye movement, optokinetic and rotational tests of vestibular function, bithermal calorics, posturography and VEMPs/oVEMPs. Assessment also includes access to the full range of audiological assessment including VRA, PTA, tympanometry with acoustic reflex measurement, OAE, evoked response audiometry (including ABR and CERA).



- Clinic bookings should allow an hour to see a new patient exclusive of time to test. Where physicians need to be involved in testing a further 40 minutes is needed per child. Review patients should be allowed 30 minutes.
- There must be access to appropriate aetiological investigations including radiological, audiological and electrophysiological as well as routine hospital laboratories for blood and urine testing, ECG and EEG.
- The child must have access to a multidisciplinary team which should include physiotherapists and/or occupational therapists, clinical psychologists and audiologists. All members of the team should be paediatrically trained and should have a full understanding of the needs of the child with a balance problem.
- Links should exist between the vestibular specialist and other paediatric medical specialists and their teams such as neurologists, ophthalmologists, rheumatologists, developmental paediatricians and geneticists, in order to ensure optimal assessment and advice for the child and its family.
- Good communication is the essence of management. Communication between the physician and the GP, the community paediatrician, the school or college, local physiotherapy or occupational therapy services as well as the parents and child is essential and should be appropriate to the child's needs. Where the balance disorder affects a child's education the school must be informed of steps that should be taken to ensure optimal access to the curriculum.
- **Standards for Practice**
  - Good theoretical understanding of vestibular medicine including eye movement disorders and the central neurological pathways. Such training could be acquired by doing a diploma in audiovestibular medicine or equivalent.
  - Sound knowledge of child development and of child locomotor and neurological pathology.
  - Awareness of the impact of vestibular disorders on the child and family; in particular the effect on education and stress within the family.
  - Competence in the neuro-otological examination of the child; this includes a full neurological examination as well as examination of balance and of eye movements.

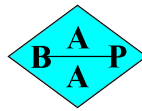
- Competence in interpretation of vestibular test results and integration of these results with clinical history and findings.
- Evidence of continuing professional development in the area of vestibular medicine, in both adults and children.

### **Patient Focus**

- Wherever possible, any multidisciplinary appointments, assessments or investigations should be carried out on the same day, allowing for the wellbeing of the child.
- Because of the high incidence of balance disorders in deaf children, deaf awareness is important in this clinical service, and must include a knowledge of and respect for those who use Sign communication.
- Patients and their parents should have access to appropriate written information about their condition, investigations and management
- Patients and their parents should have timely access to their clinic letters.

### **REFERENCES**

- Hearing and balance disorders: achieving excellence in diagnosis and management, RCP 2008.
- 0-18 years: guidance for all doctors General Medical Council 2007
- Specialty training curriculum for Audiological Medicine 2010
- Harrop-Griffiths K.(2009) 'Setting up a Paediatric Vestibular Service' Aud. Med. 2009 7: 153
- Radomskij P., Raglan E., Veness J. 'Setting up a paediatric vestibular testing laboratory' Aud. Med. 2009 7: 154-167
- Consultant Physicians Working with Patients – Royal College of Physicians 2008 42-58
- Transforming services for children with hearing difficulty and their families: a good practice guide. DH 2008 290545 / 9702



## **KEY STANDARD 3: MANAGEMENT OF A CHILD WITH TINNITUS OR HYPERACUSIS**

### **Key Standard**

*The doctor involved in the management of the child with tinnitus/hyperacusis should take an holistic approach identifying any associated distress as well as investigating the underlying cause. The doctor should also identify contributing factors eg hearing loss, psychological, social or educational problems in order to address these aspects in an integrated multidisciplinary management plan*

### **Further Standards**

- The doctor involved in the management of a child with tinnitus/hyperacusis must have a thorough knowledge of the epidemiology and patho-physiology of tinnitus/hyperacusis in children, the different modes of presentation and the varied impact of tinnitus in the different domains of their life (e.g. home, social, school environment).
- All children with auditory complaints should routinely be asked about tinnitus/ hyperacusis. The doctor must be able to communicate with the child in order to elicit information about the tinnitus/ hyperacusis and its related problems. The doctor should be able to recognise the possible psychological impact of tinnitus/hyperacusis on the child and family and the factors which may contribute to the impact of the tinnitus/ hyperacusis.
- The doctor involved in the management of the child with tinnitus/ hyperacusis should be able to examine the child fully and to select, and interpret, the appropriate audiological and aetiological investigations. The doctor should understand the effect of tinnitus/ hyperacusis on audiometric testing.
- The doctor involved in the management of the child with tinnitus/ hyperacusis should be able to select the optimal management strategy. A multidisciplinary approach is the most effective and may involve a network of professionals with appropriate skills (audiologist, teacher, hearing therapist, psychologist, primary care practitioner, etc) able to provide an integrated holistic management approach to address the impact of the tinnitus/ hyperacusis. There should be clearly established local referral pathways and guidelines.
- Counselling and therapeutic management should be conducted by professionals trained and experienced in working with children and in a manner appropriate to the child's level of understanding.
- The doctor needs to recognise the concerns of those caring for the child presenting with tinnitus and/or hyperacusis as these may differ from those of the child. As counselling for the carers may also be necessary, facilities for this should be available.

**Patient Focus**

- Wherever possible, any multidisciplinary appointments, assessments or investigations should be carried out on the same day, allowing for the wellbeing of the child.
- Because of the high incidence of tinnitus in deaf children, deaf awareness is important in this clinical service, and must include a knowledge of and respect for those who use Sign communication.
- Patients and their parents should have access to appropriate written information about their condition, investigations and management.

**References:**

- 0-18 years: guidance for all doctors General Medical Council 2007
- Hearing and balance disorders Achieving excellence in diagnosis and management Royal College of Physicians Report of a Working Party 2008
- Specialty training curriculum for Audiological Medicine 2010 page 18
- A Framework of Competences for Level 3 Training in Community Child Health, Royal College of Paediatrics and Child Health, 2006 Appendix page 61-62



## KEY STANDARD 4: MANAGEMENT OF ADULTS WITH A HEARING LOSS

### KEY STANDARD

*Adults with hearing difficulties should be seen by a team of trained professionals with adequate knowledge of the pathophysiology and current understanding of diagnostic tests, assessments and management strategies. The diagnosis should be based on specific audiological testing, aetiological investigation and multidisciplinary assessment where indicated. The management must take into consideration the whole individual.*

### FURTHER STANDARDS:

- The Audiovestibular service must have agreed referral guidelines and a care pathway with clear protocols detailing when a patient should see a physician.
- Physicians involved in the management of adults with hearing difficulties must be appropriately trained. They must have a comprehensive knowledge of the various causes of hearing loss, both unilateral and bilateral, congenital and acquired. They must know about the possibility of related pathology, e.g. vestibular, visual, endocrine. The physician must understand the impact of hearing loss on the individual with regard to social, psychological, financial and occupational impact.
- The physician should have good communication skills and be able to take a detailed medical history including audiological, otolaryngological, neurological, cardiological, endocrinological and visual disorders as well as a history of psychological and socio-economic factors from all patients. The physician should be competent at communicating through an interpreter if necessary.
- The physician should be able to perform a detailed examination of the patient and be trained to identify signs indicative of the aetiology of the hearing difficulties.
- The physician should be able to select appropriate audiological and aetiological tests and interpret the results of these tests in the light of the patient's presentation in order to reach a diagnosis and determine a management plan with the patient and the rest of the multidisciplinary team.
- Facilities for aetiological investigations should be available to allow the identification of local/systemic pathologies e.g. phlebotomy and laboratory testing of blood samples, radiology, ECG.

- The physician should work with a multi-disciplinary team to devise an individually tailored management plan. This should be delivered by the multidisciplinary team and the outcome assessed with review of the plan as necessary.
- Established networks with medical, paramedical and non-medical services should be in place to facilitate cross referral and enable effective management.

### **Patient Focus**

- Deaf awareness underpins the clinical service, including a knowledge of and respect for those who use Sign communication.
- There must be knowledge of and respect for cultural beliefs and attitudes to deafness through both ethnicity and religious belief, with particular reference to the local community.
- The service should have close contact with a variety of patient organisations/support groups and be aware of useful patient orientated websites.
- Patients should have access to appropriate written information about their condition, investigations and management.
- Patients should have timely access to their clinic letters.

### **REFERENCES:**

- Simon I. Angeli, Denise Yan , Fred Telischi et al (2005) Aetiological diagnosis of sensorineural hearing loss in adults. Otolaryngology Head and Neck Surgery Volume 132, issue 6, Pages 890-895.
- [Do once and share adult hearing services - adult care pathway](#)s MRC Hearing and Communication Group 2006
- Guidelines for the care of patients with hearing loss, tinnitus and imbalance in the United Kingdom. BAAP 1994
- [Transforming adult hearing services for patients with hearing difficulty : a good practice guide](#) Department of Health 2007.



## KEY STANDARD 5: MANAGEMENT OF ADULTS WITH BALANCE PROBLEMS

### KEY STANDARD

*Adults with balance disorders should be seen by an appropriately trained and competent multidisciplinary team in a unit with equipment for full vestibular and audiological assessment and access to facilities for aetiological investigation. Management should be multidisciplinary and may involve specific rehabilitation and psychological input.*

### FURTHER STANDARDS

- The AVP must have appropriate theoretical, practical and experiential training in vestibular medicine and be competent to investigate and manage patients with balance disorders.
- Due to the complexity of conditions encountered, good professional relationships with colleagues (eg in Otolaryngology, Neurology, Elderly Medicine, Psychiatry, Ophthalmology, Clinical Genetics and Diagnostic Imaging) are important in order to identify and manage non-vestibular and multiple pathologies
- Minimal facilities in the vestibular clinic should include the following:-
  - Standard clinical equipment (including otoscope, a set of tuning forks, ophthalmoscope, stethoscope, sphygmomanometer) necessary for basic otorhinolaryngologic, cardiovascular and neurological assessment. Clinic space should be adequate for gait testing.
  - Vestibular: equipment to study eye movement in the dark (ideally with Video Frenzel's goggles), an articulated and mobile couch that can be raised and lowered, a balance cushion, a rotating office chair which can be raised and lowered and an appropriate visual chart for testing dynamic visual acuity.
  - Audiometric & otological: a sound proofed environment for audiometry and impedance studies including stapedial reflexes and otoacoustic emissions; access to an operating microscope and suction.
  - Specialised vestibular test facilities, including VNG/VNG with calorics and rotating chair are important. There should be access to dynamic posturography and emerging vestibular function tests such as subjective Visual Vertical / Horizontal and vestibular evoked myogenic potentials (VEMPs/oVEMPs) either locally or through referral to another suitable unit.
  - Electrophysiological facilities for ABR testing

- Access to full diagnostic imaging, ECG, EEG, phlebotomy services and full diagnostic pathology services
- Outpatient Appointments: A minimum of 30 minutes should be allocated for each new patient and 15 minutes for each subsequent visit exclusive of the time required for testing. Thus during a 4 hour clinic (1 Programmed Activity) an *experienced* doctor without other commitments could be expected to see 6 new patients or 4 new patients and 4 follow-ups. These numbers might need to be reduced if the clinic is being used for teaching or the patients are particularly complex for example learning disabled
- Wherever possible, audiological and vestibular investigations should be carried out at the initial attendance. This would require co-ordinated input from other professionals within the multi-disciplinary team, facilitating integrated one-stop practice.
- Assessment and management is multidisciplinary; the team consisting of an audiovestibular physician, an audiologist, specialist nurse, physiotherapist offering individually tailored vestibular rehabilitation and a psychologist or counsellor

#### **Patient Focus**

- The physician should maintain knowledge of the variety of patient organisations/support groups and be aware of useful sources of information.
- Patients should have access to appropriate written information about their condition, investigations and management
- Patients should have timely access to their clinic letters where clinically appropriate.

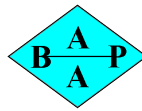
#### **Standards for Practice**

- Good theoretical understanding of vestibular medicine including eye movement disorders and the central neurological pathways. Such training could be acquired by doing a diploma in audiovestibular medicine or equivalent.
- Competence in neuro-otological examination; this includes a full neurological examination as well as examination of balance and of eye movements.
- Competence in interpretation of vestibular test results and integration of these results with clinical history and findings.
- Evidence of continuing professional development in the area of vestibular medicine.



**REFERENCES:**

- Hearing and Balance Disorders: Achieving excellence in Diagnosis and Management. A Working Party Report. Royal College of Physicians, 2008.
- Provision of adult balance services: a good practice guide. DH 2009
- 18 Week Commissioning Pathway - Dizziness. DH 2008
- BSA Recommended Procedures for Caloric and Hallpike positional testing
- General Medical Council Good Clinical Practice Guidelines
- Consultant Physicians Working with Patients – Royal College of Physicians 2008: 42-58



## **KEY STANDARD 6: MANAGEMENT OF ADULTS WITH TINNITUS AND HYPERACUSIS**

### **KEY STANDARD**

*Adults with tinnitus and hyperacusis should be seen by an appropriately trained and competent multidisciplinary team in a unit with equipment for full audiological assessment and access to facilities for aetiological investigation. Management should be multidisciplinary and may involve specific audiological rehabilitation and psychological input.*

### **FURTHER STANDARDS:**

- The audiovestibular service must have agreed referral guidelines and a care pathway with clear protocols detailing when a patient should see a physician.
- Physicians involved in the management of adults with tinnitus and hyperacusis must be appropriately trained. They must have a comprehensive knowledge of the various causes of tinnitus and hyperacusis. The physician must understand the impact of tinnitus and hyperacusis on the individual with regard to social, psychological, financial and occupational impact. The physician also needs to understand the effect of psychological distress on tinnitus and hyperacusis.
- The physician must have good communication skills and be able to take a detailed medical history including audiological, otolaryngological, neurological, cardiac, endocrine and visual disorders as well as a history of psychological and socio-economic factors from all patients. The physician must be competent at communicating through an interpreter if necessary.
- The physician must be able to perform a detailed examination of the patient and identify signs indicative of the aetiology of the auditory difficulties.
- The physician must be able to select appropriate audiological and aetiological tests and interpret the results of these tests in the light of the patient's presentation in order to reach a diagnosis and determine a management plan with the patient and the rest of the multidisciplinary team.
- Facilities for aetiological investigations must be available to allow the identification of local/systemic pathologies for example phlebotomy and laboratory testing of blood samples, radiology, ECG.
- The physician must work with a multi-disciplinary team to devise an individually tailored management plan, the outcome of which should be reviewed as necessary.

- Established networks with medical, paramedical and non-medical services must be in place to facilitate cross referral and enable effective management.

#### **Patient Focus**

- The physician should maintain knowledge of the variety of patient organisations/support groups and be aware of useful sources of information.
- Patients should have access to appropriate written information about their condition, investigations and management.
- Patients should have timely access to their clinic letters where clinically appropriate.

#### **References**

- Crummer, R.W. and Hassan, G.A. (2004) Diagnostic approach to tinnitus. *American Family Physician* **69**(1), 120-126.
- Provision of services for adults with tinnitus: a Good practice guide. DH 2009.
- General Medical Council, Good Medical Practice. 2006 updated 2009
- Mattox DE. (2006) Assessment and management of tinnitus and hearing loss. *Continuum Lifelong Learn Neurol.* **12**(4):135-150.
- Møller A (2003) Pathophysiology of tinnitus. *Otolaryngol Clin North Am.* **36**:249–266.
- Stouffer J, Tyler R. (1990) Characterization of tinnitus by tinnitus patients. *J Speech Hear Dis.* **55**:439–53.



## **KEY STANDARD 7: MANAGEMENT OF HEARING LOSS IN ADULTS WITH LEARNING DIFFICULTIES**

### **KEY STANDARD**

*The clinician providing audiological assessment and rehabilitation to adults with learning difficulties should have knowledge of the variety of specific requirements of this particular patient group. These can include communication difficulties, issues surrounding informed consent, familiarity with the variety of assessment tools available, ability to make use of the rehabilitative care available and the impact of associated medical conditions*

### **FURTHER STANDARDS**

- The physician must be aware of the increased prevalence of hearing loss in adults with learning disability in comparison with the general population. The clinician must also be aware of potential problems accessing appropriate audiological care e.g. hearing difficulty may be mistakenly attributed to low language levels or poor social skills. Dependence on a third party for referral combined with a paucity of specialist audiological services can further hinder access to appropriate care. The clinician would be expected to clarify and facilitate appropriate care pathways.
- The physician must be confident in identifying the communication level, the hearing and communication needs of the adult with learning difficulties as well as any medical problems which may contribute to the aetiology, prognosis or management of the hearing loss.
- The physician must ensure the chosen assessment technique is appropriate to the ability of the individual and performed by staff skilled in testing adults with learning difficulties. The testing environment and the approach of the staff should be calm and non-threatening. Explicit or implicit consent for procedures and treatments should be sought and the clinician should have knowledge of relevant legislation and guidelines in this area.
- The physician must encourage active participation of the individual and his/her carers in the development, and ongoing modification, of the management plan. Liaison with local community support services (social worker, specialist speech and language therapist, GP) should be encouraged to provide a holistic approach centred on the needs of the individual.
- The physician should have training in safeguarding of vulnerable adults and knowledge of the Mental Capacity Act 2005.

### **Patient Focus**

- Wherever possible any multidisciplinary appointments, assessments or investigations should be carried out on the same day.

- The physician should maintain knowledge of the variety of patient organisations/support groups and be aware of useful sources of information.
- Patients should have access to appropriate written information about their condition, investigations and management.
- Patients should have timely access to their clinic letters where clinically appropriate.

#### **REFERENCES:**

- Down's Syndrome Medical Interest Group. Basic medical surveillance for people with Down's Syndrome : hearing impairment. 2000.
- Brady S, Ahmad F, Bissaker S, De L, Pitts J, Dunn L, et al. Partnership for developing quality care pathway initiative for people with learning disabilities. Part iia: Hearing impairment. Journal of Integrated Care Pathways 2002;6:82-5.
- United Kingdom Parliament Mental Capacity Act. UK Parliament, London. 2005
- Department of Health. Consent, a guide for people with learning disabilities. DOH. London, 2001.
- IASSID (Int. Assoc. for the Study of Intellectual Disabilities) Guidelines of Hearing Impairment in ID and Guidelines for Health in ID. [www.iasid.org](http://www.iasid.org)
- Adults with complex needs (Do Once and Share (DOaS) Program) MRC Hearing and Communication Group 2006

## Websites of Interest:

General Medical Council (GMC) [www.gmc-uk.org](http://www.gmc-uk.org)

The Royal College of Physicians (RCP) [www.rcplondon.ac.uk](http://www.rcplondon.ac.uk)

The British Society of Audiology, APD Steering Group [www.thebsa.org.uk/apd/Home.htm](http://www.thebsa.org.uk/apd/Home.htm)

Postgraduate Medical Education and Training Board [www.pmetb.org.uk](http://www.pmetb.org.uk)

## General References

1. Good Medical Practice, General Medical Council. 2006, Updated 2009 ([http://www.gmc-uk.org/guidance/good\\_medical\\_practice.asp](http://www.gmc-uk.org/guidance/good_medical_practice.asp))
2. Consent: patients and doctors making decisions together (2008) ([http://www.gmc-uk.org/guidance/ethical\\_guidance/consent\\_guidance\\_index.asp](http://www.gmc-uk.org/guidance/ethical_guidance/consent_guidance_index.asp))
3. Confidentiality (2009) ([http://www.gmc-uk.org/guidance/ethical\\_guidance/confidentiality.asp](http://www.gmc-uk.org/guidance/ethical_guidance/confidentiality.asp))
4. Management for Doctors (2006) ([http://www.gmc-uk.org/guidance/ethical\\_guidance/management\\_for\\_doctors.asp](http://www.gmc-uk.org/guidance/ethical_guidance/management_for_doctors.asp))
5. Research: The role and responsibility of the doctors (2002) ([www.gmc-uk.org/Research\\_the\\_role\\_and\\_responsibilities\\_of\\_doctors\\_2002.pdf\\_31588009.pdf](http://www.gmc-uk.org/Research_the_role_and_responsibilities_of_doctors_2002.pdf_31588009.pdf))
6. Understanding doctors: Harnessing professionalism (2008) ([www.rcplondon.ac.uk](http://www.rcplondon.ac.uk))
7. Doctors in Society: Report of a Working Party (2005) ([www.rcplondon.ac.uk](http://www.rcplondon.ac.uk))
8. Consultant physicians working with patients, Fourth edition 2008 ([www.rcplondon.ac.uk](http://www.rcplondon.ac.uk))
9. Hearing and balance disorders; Achieving excellence in diagnosis and management (2008) ([www.rcplondon.ac.uk](http://www.rcplondon.ac.uk))
10. Advocating for children (2008) ([http://www.rcpch.ac.uk/sites/default/files/Advocating%20for%20Children\\_0.pdf](http://www.rcpch.ac.uk/sites/default/files/Advocating%20for%20Children_0.pdf))
11. A Charter for Paediatricians (2004) (<http://www.rcpch.ac.uk/sites/default/files/charterforpaeds.pdf>)
12. Child Protection Reader (2007) (<http://www.rcpch.ac.uk/sites/default/files/Child%20Protection%20Reader.pdf>)
13. Good Medical Practice in Paediatrics and Child Health: Duties and Responsibilities of Paediatricians (2002), ([www.rcpch.ac.uk/Publications](http://www.rcpch.ac.uk/Publications))
14. Responsibilities of Doctors in Child Protection Cases with regard to Confidentiality (2004) ([http://www.kenttrustweb.org.uk/UserFiles/KSCB/File/Resources\\_and\\_Library/CPCConfidentiality.pdf](http://www.kenttrustweb.org.uk/UserFiles/KSCB/File/Resources_and_Library/CPCConfidentiality.pdf))

15. Safeguarding Children and Young People: Roles and Competences for Health Care Staff  
(2006) (<http://www.rcpch.ac.uk/sites/default/files/safeguarding%20children.pdf>)

This document was produced by the Clinical Standards Group of the British Association of Audiovestibular Physicians ([www.baap.org.uk](http://www.baap.org.uk))

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